UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended **December 31, 2019**

☐ 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: **001-36532**

Sphere 3D Corp.

(Exact name of Registrant as specified in its charter)

Ontario, Canada	**98-1220792**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*

895 Don Mills Road, Bldg. 2, Suite 900
Toronto, Ontario, Canada, M3C 1W3
(Address of principal executive offices)

(858) 571-5555
(Registrant's Telephone Number, Including Area Code)

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

Title of Each Class	**Trading Symbol(s)**	**Name of Each Exchange on Which Registered**
Common Shares	ANY	NASDAQ Capital Market

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 x

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

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 x No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes x 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 x
(Do not check if a 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). ☐

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2019 (based on a closing price of $1.57 per share) was approximately $3.6 million. Shares of common stock held by each officer and director and by each person who is known to own 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of May 6, 2020, there were 4,597,405 shares of the registrant’s common stock outstanding.

TABLE OF CONTENTS

		Page
	PART I	
Item 1.	Business	1
Item 1A.	Risk Factors	6
Item 1B.	Unresolved Staff Comments	19
Item 2.	Properties	19
Item 3.	Legal Proceedings	19
Item 4.	Mine Safety Disclosures	20
	PART II	
Item 5.	Market For Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	21
Item 6.	Selected Financial Data	21
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	33
Item 8.	Financial Statements and Supplementary Data	33
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	33
Item 9A.	Controls and Procedures	33
Item 9B.	Other Information	34
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	35
Item 11.	Executive Compensation	38
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	43
Item 13.	Certain Relationship and Related Transactions, and Director Independence	45
Item 14.	Principal Accounting Fees and Services	49
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules	51
Item 16.	Form 10-K Summary	55
SIGNATURES		56

PART I

FORWARD-LOOKING INFORMATION

This Annual Report on Form 10-K contains forward-looking information that involves risks and uncertainties. This forward-looking information includes, but is not limited to, statements with respect to management's expectations regarding the future growth, results of operations, performance and business prospects of Sphere 3D. This forward-looking information relates to, among other things, the Company's future business plans and business planning process, the Company's uses of cash, and may also include other statements that are predictive in nature, or that depend upon or refer to future events or conditions.

The words "could", "expects", "may", "will", "anticipates", "assumes", "intends", "plans", "believes", "estimates", "guidance", and similar expressions are intended to identify statements containing forward-looking information, although not all forward-looking statements include such words. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking information. Statements containing forward-looking information are not historical facts but instead represent management's expectations, estimates and projections regarding future events.

Although forward-looking statements in this Annual Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation those discussed under the heading "Risk Factors" in *Part I, Item 1A* below, as well as those discussed elsewhere in this Annual Report. Readers are urged not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report. We undertake no obligation to revise or update any forward-looking statements in order to reflect any event or circumstance that may arise after the date of this Annual Report. Readers are urged to carefully review and consider the various disclosures made in this Annual Report, which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operations and prospects.

Any reference to the "Company", "Sphere 3D", "Sphere", "we", "our", "us", or similar terms refers to Sphere 3D Corp. and its subsidiaries. Unless otherwise indicated, all dollar amounts are expressed in U.S. dollars and references to "$" are to the lawful currency of the United States ("U.S."). References to "Notes" are Notes included in our Notes to Consolidated Financial Statements.

Item 1. Business

Sphere 3D was incorporated under the *Business Corporations Act (Ontario)* on May 2, 2007 as T.B. Mining Ventures Inc. On March 24, 2015, the Company completed a short-form amalgamation with a wholly-owned subsidiary. In connection with the short-form amalgamation, the Company changed its name to "Sphere 3D Corp."

Sphere 3D provides solutions for stand-alone storage and technologies that converge the traditional silos of compute, storage and network into one integrated hyper-converged or converged solution. We provide enterprise storage management solutions, and the ability to connect to public cloud services such as Microsoft Azure for additional delivery options and hybrid cloud capabilities. Our integrated solutions include a patented portfolio for operating systems for storage, proprietary virtual desktop orchestration software, and proprietary application container software. Our software, combined with commodity x86 servers, or purpose-built appliances, deliver solutions designed to provide application mobility, security, data integrity and simplified management. These solutions can be deployed through a public, private or hybrid cloud and are delivered through a global reseller network and professional services organization. We have a portfolio of brands including SnapServer®, HVE ConneXions ("HVE") and UCX ConneXions ("UCX"), dedicated to helping customers achieve their IT goals. In November 2018, we divested ourselves of Overland Storage, Inc. and its subsidiaries ("Overland") and associated product portfolio for long term archive as well as the RDX® removable disk product portfolio. We undertook this divestiture in order to facilitate the significant reduction of secured debt and to allow us to focus greater resources to our converged and hyper-converged product portfolio.

Discontinued Operations

In February 2018, the Company, Overland, and Silicon Valley Technology Partners, Inc. (formerly Silicon Valley Technology Partners LLC) ("SVTP"), a Delaware corporation established by Eric Kelly, the Company's former Chief Executive Officer and Chairman of the Board of Directors, entered into a share purchase agreement (as amended by that certain First Amendment to Share Purchase Agreement dated August 21, 2018, and as further amended by that certain Second Amendment to Share Purchase Agreement dated November 1, 2018, the "Purchase Agreement"), pursuant to which the Company agreed to sell to SVTP all of the issued and outstanding shares of capital stock of Overland.

On November 13, 2018, pursuant the Purchase Agreement, the Company sold to SVTP all of the issued and outstanding shares of capital stock of Overland in consideration for (i) the issuance to the Company of shares of Series A Preferred Stock of SVTP representing 19.9% of the outstanding shares of capital stock of SVTP as of the closing with a value of $2.1 million, (ii) the release of the Company from outstanding debt obligations totaling $41.7 million assumed by SVTP, and (iii) $1.0 million in cash proceeds from SVTP.

In connection with the closing of the Purchase Agreement, we filed an articles of amendment to our articles of amalgamation setting forth the rights, privileges, restrictions and conditions of a new series of non-voting preferred shares of the Company (the "Series A Preferred Shares") and entered into a Conversion Agreement, by and between the Company and FBC Holdings SARL ("FBC Holdings"), a related party, pursuant to which $6.5 million of the Company's outstanding secured debt was converted into 6,500,000 Series A Preferred Shares.

The full text of the Purchase Agreement is filed as Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 21, 2018, the full text of the First Amendment to Share Purchase Agreement is filed as Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 21, 2018, and the full text of the Second Amendment to Share Purchase Agreement is filed as Exhibit 2.1 to the Company's Current Report on Form 8-K filed on November 2, 2018.

Warrant Exchange Agreement

On March 16, 2018, the Company entered into warrant exchange agreements, in a privately negotiated exchange under Section 4(a)(2) of the Securities Act of 1933, as amended, pursuant to which the Company issued 178,875 common shares in exchange for the surrender and cancellation of the Company's outstanding March 24, 2017 warrants (the "Exchange"). Immediately after the Exchange, the previously issued warrants became null and void. MF Ventures, LLC, a related party, participated in the Exchange by acquiring 37,500 common shares in exchange for a warrant to purchase 34,091 common shares.

Reverse Stock Split

On October 24, 2018, the Board of Directors of the Company authorized a share consolidation (also known as a reverse stock split) of the Company's issued and outstanding common shares at a ratio of 1-for-8, which became effective on November 5, 2018. All share and per share amounts in the accompanying consolidated financial statements and the notes thereto have been restated for all periods to reflect the share consolidation.

Products and Service

Disk Systems

HVE Converged and Hyper-converged Infrastructure

In 2017, we acquired HVE, a technology provider of next generation converged and hyper-converged infrastructure dedicated to creating Manageable, Scalable, Reproducible, and Predictable (“MSRP”) solutions based on virtualization technologies running on high-performance, next generation platforms. HVE solutions are engineered, purpose-built converged and hyper-converged virtual workspace and server solutions that support a distributed architecture, scalable with predictable performances, and come bundled with continuous active monitoring. HVE product can include support for our Desktop Cloud Orchestrator™ (“DCO”) based on customer requirements.

- The HVE-STACK high density server provides the computer and storage appliance for the data center and is ideal for high performance computing, cloud computing and virtual desktop infrastructure (“VDI”). The modular design and swappable components include hard drives and power supplies intended to improve the efficiency of data center deployment.
- The HVE-VELOCITY High Availability Dual Enclosure storage area network (“SAN”) provides data reliability and integrity for optimal data storage, protection and recovery. It also provides a unified network attached storage (“NAS”) and SAN solution with thin provisioning, compression and deduplication. The HVE-VELOCITY platform is designed to eliminate single points of failure. The 12GSAS SSD design allows for faster access to data. It is optimized for mission-critical, enterprise-level storage applications.
- The HVE 3DGFX is a VDI solution that offers hardware and software technologies to provide an appliance that can handle from eight to up to 128 high demand users in a single 2U appliance. The HVE 3DGFX was designed and engineered as a purpose-built solution based upon the MSRP engineering approach.

G-Series Appliance and G-Series Cloud

The G-Series appliance powered by Glassware containerization technology is designed to simplify Windows application migration and to enable access from any device including Macintosh, Windows, iOS, Chrome OS, and Android. The G-Series appliance is optimized for simplicity, flexibility and scalability. Through Glassware, a Microsoft Windows® based container technology, organizations looking to migrate applications to the cloud can quickly deploy a solution for virtualizing 16-bit, 32-bit, or 64-bit applications with their native functionality intact. For the provisioning of a 16-bit application to the G-Series appliance, users will often require advanced technical skills to set-up the application, or can contract professional services from the Company, or one of our certified system integrators. End users can access the containerized applications from cloud-connected devices (iOS, Android or Windows), through a lightweight downloadable app or simply from a browser. The G-Series appliance is designed to eliminate the complex tasks of designing, implementing, and maintaining application hosting environments and provides improved application session density and scale when compared to traditional hypervisor-based virtualization solutions.

G-Series Cloud is an offering available through Microsoft Azure and was developed to provide a virtual appliance that can be deployed from the Azure Marketplace to eliminate the task of designing, implementing, and maintaining localized application-hosting environments and their related hardware. G-Series Cloud is pre-configured, can be deployed in minutes and provides for a billing model based on usage.

Glassware Open Virtual Appliance and Open Virtual Format

Our most recent version of Glassware is compatible with the Open Virtual Appliance (“OVA”) and Open Virtual Format (“OVF”) open standards, supporting deployments of existing VMWare environments. Similar to the G-Series Cloud offering, OVA and OVF versions were developed to provide access to a virtual appliance from within VMWare virtual machines. While Glassware is not open source software, OVA and OVF open standards are supported for deployment. All Glassware products are delivered with a user interface allowing quick application deployments and integration with existing work flows and technologies.

SnapServer® Network Attached Storage Solutions

Our SnapServer® solutions are a platform for primary or nearline storage, and deliver stability and integration with Windows®, UNIX/Linux, and Macintosh environments. For virtual servers and database applications, the SnapServer® family supports iSCSI block-level access with Microsoft VSS and VDS integration to simplify Windows management. For data protection, the SnapServer® family offers RAID protection, and snapshots for point-in-time data recovery. The SnapServer XSR Series™ products support DynamicRAID® and traditional RAID levels 0, 1, 5, 6, and 10. The Snap family of products, SnapCLOUD®, and SnapServer®, have integrated data mobility tools to enable customers to build private clouds for sharing and synchronizing data for anytime, anywhere access.

- The SnapServer® XSR40 is a 1U server that can be configured with up to four SATA III and SSD drives, and can scale to 400 TB of storage capacity by adding up to three SnapExpansion XSR™ enclosures.
- The SnapServer® XSR120 is a 2U server that can be configured with up to 12 SATA III, SAS and SSD drives, and can scale to 960 TB of storage capacity by adding up to seven SnapExpansion XSR™ enclosures.

Our GuardianOS® storage software is designed for the SnapServer® family of enterprise-grade NAS systems and delivers simplified data management and consolidation throughout distributed information technology environments by combining cross-platform file sharing with block-level data access on a single system. The flexibility and scalability of GuardianOS® reduces the total cost of ownership of storage infrastructures for small and medium businesses to large Fortune 500 enterprises. In addition to a unified storage architecture, GuardianOS® offers highly differentiated data integrity and storage scalability through features such as DynamicRAID®, centralized storage management, and a comprehensive suite of data protection tools.

Our Snap Enterprise Data Replicator (“Snap EDR”) provides multi-directional WAN-optimized replication. Administrators can automatically replicate data between SnapServer®, Windows, and Linux systems for data distribution, data consolidation, and disaster recovery.

During 2017, we announced the availability of our SnapServer® Hybrid and All Flash Array solutions, which is designed to allow information technology departments to modernize their data center, as well as provide the small and medium businesses access to the reliability, security, and performance of flash. In addition, we launched our SnapServer® solutions pre-configured and optimized to work with IP video surveillance cameras and create a new standard for simplicity and integration between IP networked video surveillance systems and data storage.

Service

Customer service and support are key elements of our strategy and critical components of our commitment in making enterprise-class support and services available to companies of all sizes. Our technical support staff is trained to assist our customers with deployment and compatibility for any combination of virtual desktop infrastructures, hardware platforms, operating systems and backup, data interchange and storage management software. Our application engineers are trained to assist with more complex customer issues. We maintain global toll-free service and support phone lines. Additionally, we also provide self-service and support through our website support portal and email.

Our service offerings provide for on-site service and installation options, round-the-clock phone access to solution experts, and proof of concept and architectural design offerings. We are able to provide comprehensive technical assistance on a global scale.

Discontinued Operations

The following product lines were part of the Overland divestiture completed in November 2018 and are not included in the above Product and Service disclosures.

- Disk Systems - RDX® Removable Disk Solutions
- Tape Automation Systems - NEO® Tape-Based Backup and Long-Term Archive Solutions
- Tape Drives and Media

Production

A significant number of our components and finished products are manufactured or assembled, in whole or in part, by a limited number of third parties. For certain products, we control the design process internally and then outsource the manufacturing and assembly in order to achieve lower production costs.

We purchase disk drives and chassis from outside suppliers. We carefully select suppliers based on their ability to provide quality parts and components which meet technical specifications and volume requirements. We actively monitor these suppliers but we are subject to substantial risks associated with the performance of our suppliers. For certain components, we qualify only a single source, which magnifies the risk of shortages and may decrease our ability to negotiate with that supplier. For a more detailed description of risks related to suppliers, see *Item 1A. Risk Factors*.

Sales and Distribution

- ***Distribution channel*** - We have distribution partners in North America. We sell through a two-tier distribution model where distributors sell our products to system integrators, value-added resellers ("VARs") or direct market resellers ("DMRs"), who in turn sell to end users. We support these distribution partners through our dedicated sales force and engineers. In 2019, two distribution partners accounted for, in the aggregate, 24.5% of net revenue.
- ***Reseller channel*** - Our worldwide reseller channel includes systems integrators, VARs and DMRs. Our resellers may package our products as part of complete application and desktop virtualization solutions data processing systems or with other storage devices to deliver complete enterprise information technology infrastructure solutions. Our resellers also recommend our products as replacement solutions when systems are upgraded, or bundle our products with storage management software specific to the end user's system. We support the reseller channel through our dedicated sales representatives, engineers and technical support organizations.
- ***Cloud Marketplace*** - Since 2015, we have utilized the Microsoft Azure Cloud Marketplace as an additional channel for our cloud solutions to sell to end-users directly with the pay-per-use model, supported through the Microsoft Azure Cloud.

Patents and Proprietary Rights

We rely on a combination of patents, trademarks, trade secret and copyright laws, as well as contractual restrictions, to protect the proprietary aspects of our products and services. Although every effort is made to protect Sphere 3D's intellectual property, these legal protections may only afford limited protection.

We may continue to file for patents regarding various aspects of our products, services and delivery method at a later date depending on the costs and timing associated with such filings. We may make investments to further strengthen our copyright protection going forward, although no assurances can be given that it will be successful in such patent and trademark protection endeavors. We seek to limit disclosure of our intellectual property by requiring employees, consultants, and partners with access to our proprietary information to execute confidentiality agreements and non-competition agreements (when applicable) and by restricting access to our proprietary information. Due to rapid technological change, we believe that establishing and maintaining an industry and technology advantage in factors such as the expertise and technological and creative skills of our personnel, as well as new services and enhancements to our existing services, are more important to our company's business and profitability than other available legal protections.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our services or to obtain and use information that we regard as proprietary. The laws of many countries do not protect proprietary rights to the same extent as the laws of the U.S. or Canada. Litigation may be necessary in the future to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results and financial condition. There can be no assurance that our means of protecting our proprietary rights will be adequate or that our competitors will not independently develop similar services or products. Any failure by us to adequately protect our intellectual property could have a material adverse effect on our business, operating results and financial condition. See *Item 1A. Risk Factors* under the section *Risks Related to Intellectual Property.*

Competitive Conditions

We believe that our products are unique and innovative and afford us various advantages in the market place; however, the market for information technology is highly competitive. Competitors vary in size from small start-ups to large multi-national corporations which may have substantially greater financial, research and development, and marketing resources. Competitive factors in these markets include performance, functionality, scalability, availability, interoperability, connectivity, time to market enhancements, and total cost of ownership. Barriers to entry vary from low, such as those in traditional disk-based backup products, to high, in virtualization software. The markets for all of our products are characterized by price competition and as such we may face price pressure for our products. For a more detailed description of competitive and other risks related to our business, see *Item 1A. Risk Factors*.

Employees

The Company had 28 full-time employees at December 31, 2019.

Item 1A. Risk Factors

An investment in our Company involves a high degree of risk. Each of the following risk factors in evaluating our business and prospects as well as an investment in our Company should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. If any of the following risks occur, our business and financial results could be harmed and the trading price of our common shares could decline.

Risks Related to our Business

The extent to which the coronavirus (“COVID-19”) outbreak and measures taken in response thereto impact our business, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted.

Global health concerns relating to the coronavirus outbreak have been weighing on the macroeconomic environment, and the outbreak has significantly increased economic uncertainty. Risks related to consumers and businesses lowering or changing spending, which impact domestic and international spend. The outbreak has resulted in authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and business shutdowns. These measures have not only negatively impacted consumer spending and business spending habits, they have also adversely impacted and may further impact our workforce and operations and the operations of our customers, suppliers and business partners. These measures may remain in place for a significant period of time and they are likely to continue to adversely affect our business, results of operations and financial condition.

The spread of the coronavirus has caused us to modify our business practices (including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers and business partners. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus or otherwise be satisfactory to government authorities.

The extent to which the coronavirus outbreak impacts our business, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume. Even after the coronavirus outbreak has subsided, we may continue to experience materially adverse impacts to our business as a result of its global economic impact, including any recession that has occurred or may occur in the future.

There are no comparable recent events which may provide guidance as to the effect of the spread of the coronavirus and a global pandemic, and, as a result, the ultimate impact of the coronavirus outbreak or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of the impacts on our business, our operations or the global economy as a whole. However, the effects could have a material impact on our results of operations, and we will continue to monitor the coronavirus situation closely.

Our cash and other sources of liquidity will not be sufficient to fund our operations beyond August 31, 2020. We may not be successful in raising additional capital necessary to meet expected increases in working capital needs. If we raise additional funding through sales of equity or equity-based securities, your shares will be diluted. If we need additional funding for operations and we are unable to raise it, we may be forced to liquidate assets and/or curtail or cease operations or seek bankruptcy protection or be subject to an involuntary bankruptcy petition.

Management has projected that cash on hand will not be sufficient to allow the Company to continue operations beyond August 31, 2020 if we are unable to raise additional funding for operations. We expect our working capital needs to increase in the future as we continue to expand and enhance our operations. Our ability to raise additional funds through equity or debt financings or other sources may depend on the financial success of our current business and successful implementation of our key strategic initiatives, financial, economic and market conditions and other factors, some of which are beyond our control. No assurance can be given that we will be successful in raising the required capital at reasonable cost and at the required times, or at all. Further equity financings may have a dilutive effect on shareholders and any debt financing, if available, may require restrictions to be placed on our future financing and operating activities. If we require additional capital and are unsuccessful in raising that capital, we may not be able to continue our business operations and advance our growth initiatives, which could adversely impact our business, financial condition and results of operations.

Significant changes from the Company's current forecasts, including but not limited to: (i) failure to comply with the financial covenants in its debt facilities; (ii) shortfalls from projected sales levels; (iii) unexpected increases in product costs; (iv) increases in operating costs; (v) changes in the historical timing of collecting accounts receivable; and (vi) inability to maintain compliance with the requirements of the NASDAQ Capital Market and/or inability to maintain listing with the NASDAQ Capital Market could have a material adverse impact on the Company's ability to access the level of funding necessary to continue its operations at current levels. If any of these events occurs or the Company is unable to generate sufficient cash from operations or financing sources, the Company may be forced to liquidate assets where possible and/or curtail, suspend or cease planned programs or operations generally or seek bankruptcy protection or be subject to an involuntary bankruptcy petition, any of, which would have a material adverse effect on the Company's business, results of operations, financial position and liquidity.

If we raise additional funds by selling additional shares of our capital stock, or securities convertible into shares of our capital stock, the ownership interest of our existing shareholders will be diluted. The amount of dilution could be increased by the issuance of warrants or securities with other dilutive characteristics, such as anti-dilution clauses or price resets.

We urge you to review the additional information about our liquidity and capital resources in *Item 7."Management's Discussion and Analysis of Financial Condition and Results of Operations"* section of this report. If our business ceases to continue as a going concern due to lack of available capital or otherwise, it could have a material adverse effect on our business, results of operations, financial position, and liquidity.

We have granted security interests over certain of our assets in connection with various debt arrangements.

We have granted security interests over certain of our assets in connection with our line of credit, and we may grant additional security interests to secure future borrowings. If we are unable to satisfy our obligations under these arrangements, we could be forced to sell certain assets that secure these loans, which could have a material adverse effect on our ability to operate our business. In the event we are unable to maintain compliance with covenants set forth in these arrangements or if these arrangements are otherwise terminated for any reason, it could have a material adverse effect on our ability to access the level of funding necessary to continue operations at current levels. If any of these events occur, management may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. Any of these actions could materially harm our business, results of operations and future prospects.

We face a selling cycle of variable length to secure new purchase agreements for our products and services, and design wins may not result in purchase orders or new customer relationships.

We face a selling cycle of variable lengths to secure new purchase agreements. Even if we succeed in developing a relationship with a potential new customer and/or obtaining design wins, we may not be successful in securing new sales for our products or services, or new customers. In addition, we cannot accurately predict the timing of entering into purchase agreements with new customers due to the complex purchase decision processes of some large institutional customers, such as healthcare providers or school districts, which often involve high-level management or board approvals. Consequently, we have only a limited ability to predict the timing of specific new customer relationships.

We have a history of net losses. We may not achieve or maintain profitability.

We have limited non-recurring revenues derived from operations. Sphere 3D's near-term focus has been in actively developing reference accounts and building sales, marketing and support capabilities. HVE and UCX, which we acquired in January 2017, also have a history of net losses. We expect to continue to incur net losses and we may not achieve or maintain profitability. We may see continued losses during 2020 and as a result of these and other factors, we may not be able to achieve, sustain or increase profitability in the near future.

Sphere 3D is subject to many risks common to early-stage enterprises, including under-capitalization, cash shortages, limitations with respect to personnel, financial, and other resources, technology, and market acceptance issues. There is no assurance that we will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered considering our stage of operations.

Our plans for growth will place significant demands upon our resources. If we are unsuccessful in achieving our plan for growth, our business could be harmed.

We are actively pursuing a plan to market our products domestically and internationally. The plan will place significant demands upon managerial, financial, and human resources. Our ability to manage future growth will depend in large part upon several factors, including our ability to rapidly:

- build or leverage, as applicable, a network of channel partners to create an expanding presence in the evolving marketplace for our products and services;
- build or leverage, as applicable, a sales team to keep end-users and channel partners informed regarding the technical features, issues and key selling points of our products and services;
- attract and retain qualified technical personnel in order to continue to develop reliable and flexible products and provide services that respond to evolving customer needs;
- develop support capacity for end-users as sales increase, so that we can provide post-sales support without diverting resources from product development efforts; and
- expand our internal management and financial controls significantly, so that we can maintain control over our operations and provide support to other functional areas as the number of personnel and size increases.

Our inability to achieve any of these objectives could harm our business, financial condition and results of operations.

Our market is competitive and dynamic. New competing products and services could be introduced at any time that could result in reduced profit margins and loss of market share.

The technology industry is very dynamic, with new technology and services being introduced by a range of players, from larger established companies to start-ups, on a frequent basis. Our competitors may announce new products, services, or enhancements that better meet the needs of end-users or changing industry standards. Further, new competitors or alliances among competitors could emerge. Increased competition may cause price reductions, reduced gross margins and loss of market share, any of which could have a material adverse effect on our business, financial condition and results of operations.

Furthermore, the worldwide storage market is intensely competitive. A number of manufacturers of disk-based storage solutions compete for a limited number of customers. Barriers to entry are relatively low in these markets, and some of our competitors in this market have substantially greater financial and other resources, larger research and development staffs, and more experience and capabilities in manufacturing, marketing and distributing products. Ongoing pricing pressure could result in significant price erosion, reduced profit margins and loss of market share, any of which could have a material adverse effect on our business, results of operations, financial position and liquidity.

Our success depends on our ability to anticipate technological changes and develop new and enhanced products.

The markets for our products are characterized by rapidly changing technology, evolving industry standards and increasingly sophisticated customer requirements. The introduction of products embodying new technology and the emergence of new industry standards can negatively impact the marketability of our existing products and can exert price pressures on existing products. It is critical to our success that we are able to anticipate and react quickly to changes in technology or in industry standards and to successfully develop, introduce, manufacture and achieve market acceptance of new, enhanced and competitive products on a timely basis and cost-effective basis. We invest substantial resources towards continued innovation; however, there can be no assurance that we will successfully develop new products or enhance and improve our existing products, that new products and enhanced and improved existing products will achieve market acceptance or that the introduction of new products or enhanced existing products by others will not negatively impact us. Our inability to develop products that are competitive in technology and price and that meet end-user needs could have a material adverse effect on our business, financial condition or results of operations.

Development schedules for technology products are inherently uncertain. We may not meet our product development schedules, and development costs could exceed budgeted amounts. Our business, results of operations, financial position and liquidity may be materially and adversely affected if the products or product enhancements that we develop are delayed or not delivered due to developmental problems, quality issues or component shortage problems, or if our products or product enhancements do not achieve market acceptance or are unreliable. We or our competitors will continue to introduce products embodying new technologies, such as new sequential or random access mass storage devices. In addition, new industry standards may emerge. Such events could render our existing products obsolete or not marketable, which would have a material adverse effect on our business, results of operations, financial position and liquidity.

Our business is dependent on the continued market acceptance and usage of disk-based solutions. The impact of recent storage technology trends on our business is uncertain.

The industry in which we operate has experienced significant historical growth due to the continuing increase in the demand for storage by consumers, enterprises and government bodies around the world. While information technology spending has fluctuated periodically due to technology transitions and changing economic and business environments, overall growth in demand for storage has continued. Recent technology trends, such as the emergence of hosted storage, software as a service and mobile data access are driving significant changes in storage architectures and solution requirements. The impact of these trends on overall long-term growth patterns is uncertain. Nevertheless, if the general level of historic industry growth, or if the growth of the specific markets in which we compete, were to decline, our business and results of operations could suffer.

Our management team continually reviews and evaluates our product portfolio, operating structure, and markets to assess the future viability of our existing products and market positions. We may determine that the infrastructure and expenses necessary to sustain an existing product offering are greater than the potential contribution margin that we would realize. As a result, we may determine that it is in our best interest to exit or divest one or more existing product offerings, which could result in costs incurred for exit or disposal activities and/or impairments of long-lived assets. Moreover, if we do not identify other opportunities to replace discontinued products or operations, our revenues would decline, which could lead to further net losses and adversely impact the market price of our common shares.

In addition, we could incur charges for excess and obsolete inventory. The value of our inventory may be adversely affected by factors that affect our ability to sell the products in our inventory. Such factors include changes in technology, introductions of new products by us or our competitors, the current or future economic downturns, or other actions by our competitors. If we do not effectively forecast and manage our inventory, we may need to write off inventory as excess or obsolete, which adversely affects cost of sales and gross profit. Our business has previously experienced, and we may in the future experience, reductions in sales of older generation products as customers delay or defer purchases in anticipation of new products that we or our competitors may introduce. We have established reserves for slow moving or obsolete inventory. These reserves, however, may prove to be inadequate, which would result in additional charges for excess or obsolete inventory.

Our products may contain defects in components or design, and our warranty reserves may not adequately cover our warranty obligations for these products.

Although we employ a vigorous testing and quality assurance program, our products may contain defects or errors, particularly when first introduced or as new versions are released. We may not discover such defects or errors until after a solution has been released to a customer and used by the customer and end-users. Defects and errors in our products could materially and adversely affect our reputation, result in significant costs, delay planned release dates and impair our ability to sell our products in the future. The costs incurred in correcting any solution defects or errors may be substantial and could adversely affect our operating margins. While we plan to continually test our products for defects and errors and work with end-users through our post-sales support services to identify and correct defects and errors, defects or errors in our products may be found in the future.

We have also established reserves for the estimated liability associated with product warranties. However, we could experience unforeseen circumstances where these or future reserves may not adequately cover our warranty obligations. For example, the failure or inadequate performance of product components that we purchase could increase our warranty obligations beyond these reserves.

The failure to attract, hire, retain and motivate key personnel could have a significant adverse impact on our operations.

Our success depends on the retention and maintenance of key personnel, including members of senior management and our technical, sales and marketing teams. Achieving this objective may be difficult due to many factors, including competition for such highly skilled personnel; fluctuations in global economic and industry conditions; changes in our management or leadership; competitors' hiring practices; and the effectiveness of our compensation programs. The loss of any of these key persons could have a material adverse effect on our business, financial condition or results of operations. As an example, in the first quarter of 2019, our financial controller, and certain other members of our finance team, resigned from employment to seek other opportunities, which has required us to retain finance consultants while we search for full-time replacements, and we cannot guaranty that we will be able to retain such consultants or find adequate replacements.

Our success is also dependent on our continuing ability to identify, hire, train, motivate and retain highly qualified management, technical, sales, marketing and finance personnel. Any such new hire may require a significant transition period prior to making a meaningful contribution. Competition for qualified employees is particularly intense in the technology industry, and we have in the past experienced difficulty recruiting qualified employees. Our failure to attract and to retain the necessary qualified personnel could seriously harm our operating results and financial condition. Competition for such personnel can be intense, and no assurance can be provided that we will be able to attract or retain highly qualified technical and managerial personnel in the future, which may have a material adverse effect on our future growth and profitability. We do not have key person insurance.

Our financial results may fluctuate substantially for many reasons, and past results should not be relied on as indications of future performance.

Our revenues and operating results may fluctuate from quarter to quarter and from year to year due to a combination of factors, including, but not limited to:

- varying size, timing and contractual terms of orders for our products, which may delay the recognition of revenue;
- competitive conditions in the industry, including strategic initiatives by us or our competitors, new products or services, product or service announcements and changes in pricing policy by us or our competitors;
- market acceptance of our products and services;
- our ability to maintain existing relationships and to create new relationships with channel partners;
- the discretionary nature of purchase and budget cycles of our customers and end-users;
- the length and variability of the sales cycles for our products;
- general weakening of the economy resulting in a decrease in the overall demand for our products and services or otherwise affecting the capital investment levels of businesses with respect to our products or services;
- timing of product development and new product initiatives;
- changes in customer mix;
- increases in the cost of, or limitations on, the availability of materials;
- fluctuations in average selling prices;
- changes in product mix; and
- increases in costs and expenses associated with the introduction of new products.

Further, the markets that we serve are volatile and subject to market shifts that we may be unable to anticipate. A slowdown in the demand for workstations, mid-range computer systems, networks and servers could have a significant adverse effect on the demand for our products in any given period. In the past, we have experienced delays in the receipt of purchase orders and, on occasion, anticipated purchase orders have been rescheduled or have not materialized due to changes in customer requirements. Our customers may cancel or delay purchase orders for a variety of reasons, including, but not limited to, the rescheduling of new product introductions, changes in our customers' inventory practices or forecasted demand, general economic conditions affecting our customers' markets, changes in our pricing or the pricing of our competitors, new product announcements by us or others, quality or reliability problems related to our products, or selection of competitive products as alternate sources of supply.

Thus, there can be no assurance that we will be able to reach profitability on a quarterly or annual basis. We believe that our revenue and operating results will continue to fluctuate, and that period-to-period comparisons are not necessarily indications of future performance. Our revenue and operating results may fail to meet the expectations of public market analysts or investors, which could have a material adverse effect on the price of our common shares. In addition, portions of our expenses are fixed and difficult to reduce if our revenues do not meet our expectations. These fixed expenses magnify the adverse effect of any revenue shortfall.

Our plans for implementing our business strategy and achieving profitability are based upon the experience, judgment and assumptions of our key management personnel, and available information concerning the communications and technology industries. If management's assumptions prove to be incorrect, it could have a material adverse effect on our business, financial condition or results of operations.

We rely on indirect sales channels to market and sell our branded products. Therefore, the loss of, or deterioration in, our relationship with one or more of our distributors or resellers could negatively affect our operating results.

We have relationships with third party resellers, original equipment manufacturers ("OEMs"), system integrators and enterprise application providers that facilitate our ability to sell and implement our products. These business relationships are important to extend the geographic reach and customer penetration of our sales force and ensure that our products are compatible with customer network infrastructures and with third party products.

We believe that our success depends, in part, on our ability to develop and maintain strategic relationships with resellers, independent software vendors, OEMs, system integrators, and enterprise application providers. Should any of these third parties go out of business, or choose not to work with us, we may be forced to increase the development of those capabilities internally, incurring significant expense and adversely affecting operating margins. Any of these third parties may develop relationships with other companies, including those that develop and sell products that compete with ours. We could lose sales opportunities if we fail to work effectively with these parties or they choose not to work with us. Most of our distributors and resellers also carry competing product lines that they may promote over our products. A distributor or reseller might not continue to purchase our products or market them effectively, and each determines the type and amount of our products that it will purchase from us and the pricing of the products that it sells to end user customers. Further, the long-term success of any of our distributors or resellers is difficult to predict, and we have no purchase commitments or long-term orders from any of them to assure us of any baseline sales through these channels.

Therefore, the loss of, or deterioration in, our relationship with one or more of our distributors or resellers could negatively affect our operating results. Our operating results could also be adversely affected by a number of factors, including, but not limited to:

- a change in competitive strategy that adversely affects a distributor's or reseller's willingness or ability to stock and distribute our products;
- the reduction, delay or cancellation of orders or the return of a significant amount of our products;
- the loss of one or more of our distributors or resellers; and
- any financial difficulties of our distributors or resellers that result in their inability to pay amounts owed to us.

If our suppliers fail to meet our manufacturing needs, it would delay our production and our product shipments to customers and this could negatively affect our operations.

Some of our products have a large number of components and subassemblies produced by outside suppliers. We depend greatly on these suppliers for items that are essential to the manufacturing of our products, including disk drives and chassis. We work closely with our regional, national and international suppliers, which are carefully selected based on their ability to provide quality parts and components that meet both our technical specifications and volume requirements. For certain items, we qualify only a single source, which magnifies the risk of shortages and decreases our ability to negotiate with that supplier on the basis of price. From time to time, we have in the past been unable to obtain as many drives as have needed due to drive shortages or quality issues from certain of our suppliers. If these suppliers fail to meet our manufacturing needs, it would delay our production and our product shipments to customers and negatively affect our operations.

We are subject to laws, regulations and similar requirements, changes to which may adversely affect our business and operations.

We are subject to laws, regulations and similar requirements that affect our business and operations, including, but not limited to, the areas of commerce, intellectual property, income and other taxes, labor, environmental, health and safety, and our compliance in these areas may be costly. While we have implemented policies and procedures to comply with laws and regulations, there can be no assurance that our employees, contractors, suppliers or agents will not violate such laws and regulations or our policies. Any such violation or alleged violation could materially and adversely affect our business. Any changes or potential changes to laws, regulations or similar requirements, or our ability to respond to these changes, may significantly increase our

costs to maintain compliance or result in our decision to limit our business or products, which could materially harm our business, results of operations and future prospects.

The Dodd-Frank Wall Street Reform and Consumer Protection Act includes provisions regarding certain minerals and metals, known as conflict minerals, mined from the Democratic Republic of Congo and adjoining countries. These provisions require companies to undertake due diligence procedures and report on the use of conflict minerals in its products, including products manufactured by third parties. Compliance with these provisions will cause us to incur costs to certify that our supply chain is conflict free and we may face difficulties if our suppliers are unwilling or unable to verify the source of their materials. Our ability to source these minerals and metals may also be adversely impacted. In addition, our customers may require that we provide them with a certification and our inability to do so may disqualify us as a supplier.

We have made a number of acquisitions in the past and we may make acquisitions in the future. Our ability to identify complementary assets, products or businesses for acquisition and successfully integrate them could affect our business, financial condition and operating results.

In the future, we may continue to pursue acquisitions of assets, products or businesses that we believe are complementary to our existing business and/or to enhance our market position or expand our product portfolio. There is a risk that we will not be able to identify suitable acquisition candidates available for sale at reasonable prices, complete any acquisition, or successfully integrate any acquired product or business into our operations. We are likely to face competition for acquisition candidates from other parties including those that have substantially greater available resources. Acquisitions may involve a number of other risks, including:

- diversion of management’s attention;
- disruption to our ongoing business;
- failure to retain key acquired personnel;
- difficulties in integrating acquired operations, technologies, products or personnel;
- unanticipated expenses, events or circumstances;
- assumption of disclosed and undisclosed liabilities; and
- inappropriate valuation of the acquired in-process research and development, or the entire acquired business.

If we do not successfully address these risks or any other problems encountered in connection with an acquisition, the acquisition could have a material adverse effect on our business, results of operations and financial condition. Problems with an acquired business could have a material adverse effect on our performance or our business as a whole. In addition, if we proceed with an acquisition, our available cash may be used to complete the transaction, diminishing our liquidity and capital resources, or shares may be issued which could cause significant dilution to existing shareholders.

We have implemented cost reduction efforts. We may need to implement additional cost reduction efforts, which could materially harm our business.

We have implemented certain cost reduction efforts. There can be no assurance that these cost reduction efforts will be successful. As a result, we may need to implement further cost reduction efforts across our operations, such as further reductions in the cost of our workforce and/or suspending or curtailing planned programs, either of which could materially harm our business, results of operations and future prospects.

Risks Related to Intellectual Property

Our ability to compete depends in part on our ability to protect our intellectual property rights.

Our success depends in part on our ability to protect our rights in our intellectual property. We rely on various intellectual property protections, including copyright, trade-mark and trade secret laws and contractual provisions, to preserve our intellectual property rights. We have filed a number of patent applications and have historically protected our intellectual property through trade secrets and copyrights. As our technology is evolving and rapidly changing, current intellectual property rights may not adequately protect us.

Intellectual property rights may not prevent competitors from developing products that are substantially equivalent or superior to our products. Competitors may independently develop similar products, duplicate our products or, if patents are issued to us, design around these patents. To the extent that we have or obtain patents, such patents may not afford meaningful protection for our technology and products. Others may challenge our patents and, as a result, our patents could be narrowed, invalidated or declared unenforceable. The patents that are material to our business began expiring in November 2015. In addition, our current or future patent applications may not result in the issuance of patents in the U.S. or foreign countries.

Although we believe we have a proprietary platform for our technologies and products, we may in the future become subject to claims for infringement of intellectual property rights owned by others. Further, to protect our own intellectual property rights, we may in the future bring claims for infringement against others.

Our commercial success depends, in part, upon not infringing intellectual property rights owned by others. Although we believe that we have a proprietary platform for our technologies and products, we cannot determine with certainty whether any existing third party patents or the issuance of any third party patents would require us to alter our technology, obtain licenses or cease certain activities. We may become subject to claims by third parties that our technology infringes their intellectual property rights. While we provide our customers with a qualified indemnity against the infringement of third party intellectual property rights, we may become subject to these claims either directly or through indemnities against these claims that we routinely provide to our end-users and channel partners.

Further, our customers may use our products in ways that may infringe the intellectual property rights of third parties and/or require a license from third parties. Although our customers are contractually obligated to use our products only in a manner that does not infringe third party intellectual property rights, we cannot guarantee that such third parties will not seek remedies against us for providing products that may enable our customers to infringe the intellectual property rights of others.

In addition, we may receive in the future, claims from third parties asserting infringement, claims based on indemnities provided by us, and other related claims. Litigation may be necessary to determine the scope, enforceability and validity of third party proprietary or other rights, or to establish our proprietary or other rights. Furthermore, despite precautions, it may be possible for third parties to obtain and use our intellectual property without our authorization. Policing unauthorized use of intellectual property is difficult, and some foreign laws do not protect proprietary rights to the same extent as the laws of Canada or the U.S. To protect our intellectual property, we may become involved in litigation. In addition, other companies may initiate similar proceedings against us. The patent position of information technology firms is highly uncertain, involves complex legal and factual questions, and continues to be the subject of much litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office or the courts regarding the breadth of claims allowed or the degree of protection afforded under information technology patents.

Some of our competitors have, or are affiliated with companies having, substantially greater resources than us and these competitors may be able to sustain the costs of complex intellectual property litigation to a greater degree and for a longer period of time than us. Regardless of their merit, any such claims could:

- divert the attention of our management, cause significant delays, materially disrupt the conduct of our business or materially adversely affect our revenue, financial condition and results of operations;
- be time consuming to evaluate and defend;
- result in costly litigation and substantial expenses;
- cause product shipment delays or stoppages;
- subject us to significant liabilities;
- require us to enter into costly royalty or licensing agreements;
- require us to modify or stop using the infringing technology; or
- result in costs or other consequences that have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Our Public Company Status and Our Common Shares

We have received notification from NASDAQ that if we fall below the NASDAQ Capital Market's continued listing requirement for the minimum value of the Company's stockholders' equity on or before November 1, 2020, the Company will be notified of such non-compliance and will at that time be afforded a hearing before the Panel, which could result in the Company's delisting. If our common shares are delisted from the NASDAQ Capital Market, our business, financial condition, results of operations and share price could be adversely affected, and the liquidity of our common shares and our ability to obtain financing could be impaired.

On November 12, 2018, we received a letter from the Nasdaq Listing Qualifications department of The Nasdaq Stock Market LLC notifying us that we were not in compliance with the requirement of Nasdaq Marketplace Rule 5550(b)(1) for continued inclusion on the NASDAQ Capital Market because the Company's stockholders' equity was below the required minimum of $2.5 million. On May 14, 2019, we received written notification from The NASDAQ Stock Market, LLC notifying us that we had not regained compliance with the minimum value of the Company's stockholders' equity of $2.5 million. The Staff had determined that the Company's common stock would be delisted from Nasdaq unless the Company timely requests a hearing before a Nasdaq Hearings Panel (the "Panel"). Accordingly, we requested a hearing before the Panel, which was held on July 11, 2019, and which was the basis for the Panel's decision.

On July 22, 2019, the Panel issued a decision granting the request of the Company for continued listing of our common stock on The NASDAQ Capital Market pursuant to an extension through September 30, 2019 to demonstrate compliance with the $2.5 million stockholders' equity requirement for continued listing. As required pursuant to the Panel's decision, on August 15, 2019, the Company reported to the Panel that it had completed certain components of its compliance plan. On September 30, 2019, the Company requested an additional extension until October 30, 2019 to complete the final components of its compliance plan, which the Panel granted in a letter to the Company on October 8, 2019.

On November 6, 2019, the Company received notification from the Panel that the Company has regained compliance with the $2.5 million stockholders' equity requirement based on the Company's disclosures contained in its Form 8-K filed with the Securities and Exchange Commission on November 1, 2019. The Panel further advised that if the Company again falls below the $2.5 million stockholders' equity requirement on or before November 1, 2020, the Company will be notified of such non-compliance and will at that time be afforded a hearing before the Panel, which could result in the Company's delisting.

We have received notification from NASDAQ that we are not in compliance with the requirement of Nasdaq Marketplace Rule 5550(a)(2) for continued inclusion on the NASDAQ Capital Market as a result of the closing bid price for the Company's common stock being below $1.00 for 30 consecutive business days. If our common shares are delisted from the NASDAQ Capital Market, our business, financial condition, results of operations and share price could be adversely affected, and the liquidity of our common shares and our ability to obtain financing could be impaired.

On January 3, 2020, the Company received a letter from the Nasdaq Listing Qualifications department of The Nasdaq Stock Market LLC notifying the Company that it was not in compliance with the requirement of Nasdaq Marketplace Rule 5550(a)(2) for continued inclusion on the NASDAQ Capital Market as a result of the closing bid price for the Company's common stock being below $1.00 for 30 consecutive business days. This notification has no effect on the listing of the Company's common shares at this time.

In accordance with the Nasdaq Marketplace Rules, the Company was provided an initial period of 180 calendar days, or until July 1, 2020, to regain compliance, which will require a closing bid price for the Company's common stock above $1.00 for a minimum of 10 consecutive business days. However, due to recent market turmoil, Nasdaq has filed a rule change tolling the compliance periods for price-based listing requirements through June 30, 2020, extending the Company's compliance period until September 14, 2020. If the Company does not comply with Marketplace Rule 5550(a)(2) by September 14, 2020, the Company may be eligible for additional time to demonstrate compliance with the bid price requirement. To qualify, the Company will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the NASDAQ Capital Market, with the exception of the bid price requirement, and will need to provide written notice of its intention to cure the deficiency during the second compliance period, by effecting a reverse stock split, if necessary. If the Company meets these requirements, the Company will be granted an additional 180 days or until March 13, 2021 to become compliant. If the Company does not qualify for the second compliance period or fails to regain compliance during the second 180-day period, then Nasdaq will notify the Company of its determination to delist the Company's common shares, at which point the Company would have an opportunity to appeal the delisting determination to a Hearings Panel.

Sales of common shares issuable upon exercise of outstanding warrants, the conversion of outstanding preferred shares, or the effectiveness of our registration statement may cause the market price of our common shares to decline. Currently outstanding preferred shares could adversely affect the rights of the holders of common shares.

As of December 31, 2019, we have 6,843,778 Series B Preferred Shares and 1,600,000 Series C Preferred Shares outstanding. The conversion of the outstanding Series B and C Preferred Shares will result in substantial dilution to our common shareholders. Pursuant to our articles of amalgamation, the Board has the authority to fix and determine the voting rights, rights of redemption and other rights and preferences of preferred stock.

Pursuant to the articles of amendment governing the rights and preferences of outstanding shares of Series B Preferred Shares, each preferred share (i) subject to prior shareholder approval, are convertible into our common shares, at a conversion rate equal to $1.00 per share, plus accrued and unpaid dividends, divided by an amount equal to 0.85 multiplied by a 15-day volume weighted average price per Common Share prior to the date the conversion notice is provided, subject to a conversion price floor of $0.80, (ii) if the Company receives any cash dividends on its equity investment in Silicon Valley Technology Partners, Inc., in an amount equal to such cash dividend received, cumulative cash dividends at a rate of 8% of the Series B Preferred Shares, (iii) after November 13, 2020, fixed, preferential, cumulative cash dividends at the rate of 8% of the Series B Preferred Shares subscription price per year, and (iv) carry a liquidation preference equal to the subscription price per Series B Preferred Share plus any accrued and unpaid dividends.

Pursuant to the articles of amendment governing the rights and preferences of outstanding shares of Series C Preferred Shares, each preferred share, subject to prior shareholder approval, are convertible into our common shares, at a conversion rate in effect on the date of conversion. Overland, the sole holder of the Series C Preferred Shares, may, at any time, convert all or any part of the Series C Preferred Shares provided that after such conversion the common shares issuable, together with all the common shares held by Overland in the aggregate would not exceed 19.9% of the total number of outstanding common shares of the Company.

Additionally, as of December 31, 2019 we have warrants outstanding for the purchase of up to 205,562 common shares having a weighted-average exercise price of $60.01 per share. The sale of our common shares upon exercise of our outstanding warrants, the conversion of the Preferred Shares into common shares, or the sale of a significant amount of the common shares issued or issuable upon exercise of the warrants in the open market, or the perception that these sales may occur, could cause the market price of our common shares to decline or become highly volatile.

The market price of our common shares is volatile.

The market price for common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market prices and trading volumes of technology stocks;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- future capital raising activities;
- sales of common shares by holders thereof or by us;
- failure of securities analysts to maintain coverage of Sphere 3D, changes in financial estimates by securities analysts who follow Sphere 3D, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;
- market acceptance of our products and technologies;
- announcements by us or our competitors of new products or services;
- the public's reaction to our press releases, other public announcements and filings with the SEC and the applicable Canadian securities regulatory authorities;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our operating results or fluctuations in our operating results;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property or other proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to us and our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- any significant change in our executive officers and other key personnel or Board of Directors;
- general economic conditions and slow or negative growth of our markets;
- release of transfer restrictions on certain outstanding common shares; and
- news reports relating to trends, concerns or competitive developments, regulatory changes and other related issues in our industry or target markets.

Financial markets may experience price and volume fluctuations that affect the market prices of equity securities of companies and that are unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of the common shares may decline even if our operating results, underlying asset values or prospects have not changed. As well, certain institutional investors may base their investment decisions on consideration of our governance and social practices and performance against such institutions' respective investment guidelines and criteria, and failure to meet such criteria may result in a limited or no investment in our common shares by those institutions, which could adversely affect the trading price of our common shares. There can be no assurance that fluctuations in price and volume will not occur due to these and other factors.

In the past, plaintiffs have often initiated securities class action litigation against a company following periods of volatility in the market price of its securities. We may in the future be a target of similar litigation. Securities litigation could result in substantial costs and liabilities and could divert management's attention from day-to-day operations and consume resources, such as cash. In addition, the resolution of those matters may require us to issue additional common shares, which could potentially result in dilution to our existing shareholders. Expenses incurred in connection with these matters (which include fees of lawyers and other professional advisors and potential obligations to indemnify officers and directors who may be parties to such actions) could adversely affect our cash position. See Item 15 "Financial Statements", Note 15 "Commitments and Contingencies".

We must comply with the financial reporting requirements of a public company, as well as other requirements associated with being listed on NASDAQ.

Sphere 3D is subject to reporting and other obligations under applicable Canadian securities laws, SEC rules and the rules of the NASDAQ Capital Market. These reporting and other obligations, including National Instrument 52-102 - Continuous Disclosure Obligations and National Instrument 52-109 - Certification of Disclosure in Issuers' Annual and Interim Filings, place significant demands on our management, administrative, operational and accounting resources. Moreover, any failure to maintain effective internal controls could cause us to fail to meet our reporting obligations or result in material misstatements in our consolidated financial statements. If we cannot provide reliable financial reports or prevent fraud, our reputation and operating results could be materially harmed, which could also cause investors to lose confidence in our reported financial information, which could result in a lower trading price of our common shares.

Management does not expect that our disclosure controls and procedures and internal controls over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that its objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues within a company are detected. The inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by individual acts of some persons, by collusion of two or more people or by management override of the controls. Due to the inherent limitations in a cost-effective control system, misstatements due to error, or fraud may occur and not be detected.

We may be treated as a Passive Foreign Investment Company.

There is also an ongoing risk that Sphere 3D may be treated as a Passive Foreign Investment Company ("PFIC"), for U.S. federal income tax purposes. A non-U.S. corporation generally will be considered to be a PFIC for any taxable year in which 75% or more of its gross income is passive income, or 50% or more of the average value of its assets are considered "passive assets" (generally, assets that generate passive income). This determination is highly factual, and will depend upon, among other things, Sphere 3D's market valuation and future financial performance. Sphere 3D believes that it was classified as a PFIC during the tax year ended December 31, 2013. However, based on current business plans and financial expectations, Sphere 3D expects that it will not be a PFIC for its current tax years ended December 31, 2019 and 2018, as well as current business plans and financial expectations, Sphere 3D expects that it will not be a PFIC for its current tax year ending December 31, 2020 and for the foreseeable future. If Sphere 3D were to be classified as a PFIC for any future taxable year, holders of Sphere 3D common shares who are U.S. taxpayers would be subject to adverse U.S. federal income tax consequences.

Certain of our directors, officers and management could be in a position of conflict of interest.

Certain directors, officers and members of management of Sphere 3D may also serve as directors and/or officers of other companies. We may contract with such directors, officers, members of management and such other companies or with affiliated parties or other companies in which such directors, officers or members of management own or control. These persons may obtain compensation and other benefits in transactions relating to Sphere 3D. Consequently, there exists the possibility for such directors, officers and members of management to be in a position of conflict. Any decision made by any of such directors, officers and members of management involving Sphere 3D are being made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of Sphere 3D.

Future sales of common shares by directors, officers and other shareholders could adversely affect the prevailing market price for common shares.

Subject to compliance with applicable securities laws, officers, directors and other shareholders and their respective affiliates may sell some or all of their common shares in the future. No prediction can be made as to the effect, if any, such future sales will have on the market price of the common shares prevailing from time to time. However, the future sale of a substantial number of common shares by Sphere 3D's officers, directors and other shareholders and their respective affiliates, or the perception that such sales could occur, could adversely affect prevailing market prices for the common shares.

We may issue an unlimited number of common shares. Future sales of common shares will dilute your shares.

Sphere 3D's articles permit the issuance of an unlimited number of common shares, and shareholders will have no pre-emptive rights in connection with such further issuances. The directors of Sphere 3D have the discretion to determine the price and the terms of issue of further issuances of common shares in accordance with applicable laws.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2019, the Company conducts its main operating activities from its office at 100 Executive Court, Waxahachie, Texas. The Company believes that this facility is adequate to meet the Company's needs for the immediate future and that, should it be needed, we will be able to secure additional space to accommodate the expansion of operations.

Item 3. Legal Proceedings

The Company is, from time to time, subject to claims and suits arising in the ordinary course of business. In the opinion of management, the ultimate resolution of such pending proceedings will not have a material effect on the Company's results of operations, financial position or cash flows.

In January 2018, Mr. Vito Lupis filed a statement of claim in the Ontario Court of Justice alleging, among other things, breach of contracts, deceit and negligence against Mr. Giovanni J. Morelli, a former officer of the Company, and vicarious liability against the Company, in connection with stock purchase agreements and other related agreements that would have been entered into between Mr. Lupis and the Company in 2012. In March 2019, the Company and Mr. Lupis entered into a settlement agreement pursuant to which the Company has agreed to pay Mr. Lupis certain consideration, which is included in general and administrative expense, in exchange for a dismissal of the action.

In April 2015, we filed a proof of claim in connection with bankruptcy proceedings of V3 Systems, Inc. (“V3”) based on breaches by V3 of the Asset Purchase Agreement entered into between V3 and the Company dated February 11, 2014 (the “APA”). On October 6, 2015, UD Dissolution Liquidating Trust (“UD Trust”), post-confirmation liquidating trust established by V3’s plan of liquidation, filed a complaint against us and certain of our current and former directors in the U.S. Bankruptcy Court for the District of Utah Central Division objecting to our proof of claim and asserting claims for affirmative relief against us and our directors. This complaint alleges, among other things, that Sphere 3D breached the APA and engaged in certain other actions and/or omissions that caused V3 to be unable to timely sell the Sphere 3D common shares received by V3 pursuant to the APA. The UD Trust seeks, among other things, monetary damages for the loss of the potential earn-out consideration, the value of the common shares held back by us pursuant to the APA and costs and fees.

On December 23, 2015, we filed a motion seeking to dismiss the majority of the claims asserted by the UD Trust. On January 13, 2016, we filed a counterclaim against the UD Trust in which we allege that V3 breached numerous provisions of the APA. On July 22, 2016, we filed a motion seeking to transfer venue of this action to the United States District Court for the District of Delaware. The Utah Bankruptcy Court granted our motion to transfer venue on August 30, 2016, and the case was formally transferred to the Delaware District Court on October 11, 2016. On November 13, 2018, the Delaware District Court referred the case to the Delaware Bankruptcy Court. The Delaware Bankruptcy Court never set a hearing or decided our motion to dismiss.

In March 2018, UD Trust filed a complaint in U.S. District Court for the Northern District of California (“California Complaint”) asserting that two transactions involving the Company constitute fraudulent transfers under federal and state law. First, UD Trust alleges that the consolidation of the Company’s and its subsidiaries’ indebtedness to the Cyrus Group into a debenture between FBC Holdings and the Company in December 2014 constitutes a fraudulent transfer. Second, UD Trust alleges that the Share Purchase Agreement constitutes a fraudulent transfer, and seeks to require that the proceeds of the transaction be placed in escrow until the V3 litigation is resolved. The California Complaint also asserts a claim against the Company’s former CEO for breach of fiduciary duty, and a claim against the Cyrus Group for aiding and abetting breach of fiduciary duty. On July 25, 2018, we filed a motion seeking to dismiss all of the claims asserted against the Company and its former CEO. On the same day, the Cyrus Group filed a motion seeking to dismiss all claims asserted against the Cyrus Group. The UD Trust voluntarily dismissed this case without prejudice on February 5, 2020.

On October 22, 2019, UD Trust filed an amended complaint in the Delaware Bankruptcy Court. The amended complaint includes all of the claims and parties in the original complaint first filed in October 2015 in the Utah Bankruptcy Court as well as the claims and additional parties in the California Complaint. We continue to believe this lawsuit to be without merit and intend to vigorously defend against the action. On February 10, 2020, we filed a renewed motion seeking to dismiss the majority of the claims asserted by the UD Trust in the amended complaint. On that same day, we also filed a counterclaim against the UD Trust in which we allege that V3 breached numerous provisions of the APA. The Company’s current and former officers and directors that were named as defendants in the amended complaint as well as the Cyrus Group all filed motions seeking to dismiss all claims that the UD Trust alleged against them.

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

Our common shares are listed on the NASDAQ Capital Market under the symbol "ANY". The following table sets forth the high and low sales prices per share of our common stock during each quarter of the two most recent fiscal years:

	2019		2018	
	High	**Low**	**High**	**Low**
First Quarter	$4.00	$2.35	$24.32	$7.00
Second Quarter	$3.12	$1.42	$9.12	$2.56
Third Quarter	$2.08	$1.00	$5.76	$1.06
Fourth Quarter	$1.55	$0.66	$8.70	$1.52

On May 6, 2020, the closing sales price of our common stock on the NASDAQ Capital Market was $1.35 per share. As of May 6, 2020, we had approximately 42 shareholders of record and beneficial owners of our common shares.

On October 24, 2018, the Board of Directors of the Company authorized a share consolidation of the Company's issued and outstanding common shares at a ratio of 1-for-8, which became effective on November 5, 2018. All share and per share amounts in the accompanying consolidated financial statements and the notes thereto were restated for all periods to reflect the share consolidations.

Dividends

The Company has not declared or paid any dividends on its common shares to date. The Company's current intention is to retain any future earnings to support the development of the business of Sphere 3D and does not anticipate paying cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the Board of Directors of Sphere 3D after taking into account various factors, including but not limited to the financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that Sphere 3D may be a party to at the time. Accordingly, investors must rely on sales of their Sphere 3D common shares after price appreciation, which may never occur, as the only way to realize a return on their investment.

The Company's outstanding 6,500,000 Series B Preferred Shares begin to accrue dividends at November 13, 2020 at a rate of 8.0% per annum. Dividends on Preferred Shares shall be paid on such date or dates as and when decided by the board of directors out of moneys properly applicable to the payment of such dividends.

Recent Sales of Unregistered Securities

Not applicable.

Item 6. Selected Financial Data

Not applicable.

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

The following discussion and analysis should be read in conjunction with our consolidated financial statements and notes included in the Annual Report on Form 10-K. In addition to historical information, the following discussion contains forward-looking statements that are subject to risks and uncertainties. Actual results may differ substantially from those referred to herein due to a number of factors, including but not limited to risks described in *Part I, Item 1A, Risks Factors*, and elsewhere in this Annual Report. References to "Notes" are Notes included in our Notes to Consolidated Financial Statements.

Overview

Sphere 3D provides solutions for standalone storage and technologies that converge the traditional silos of compute, storage and network into one integrated hyper-converged or converged solution. We provide enterprise storage management solutions, and the ability to connect to public cloud services such as Microsoft Azure for additional delivery options and hybrid cloud capabilities. Our solutions are tightly integrated and include a patented portfolio for operating systems for storage, proprietary virtual desktop orchestration software, and proprietary application container software. Our software, combined with commodity x86 servers, or purpose-built appliances, deliver solutions designed to provide application mobility, security, data integrity and simplified management. These solutions can be deployed through a public, private or hybrid cloud and are delivered through a global reseller network and professional services organization. We have a portfolio of brands including SnapServer®, HVE ConneXions ("HVE") and UCX ConneXions, Inc., dedicated to helping customers achieve their IT goals.

Discontinued Operations

On November 13, 2018, pursuant the Purchase Agreement, we sold to Silicon Valley Technology Partners, Inc. ("SVTP") all of the issued and outstanding shares of capital stock of Overland Storage, Inc. and its subsidiaries ("Overland") in consideration for (i) the issuance to the Company of shares of Series A Preferred Stock of SVTP representing 19.9% of the outstanding shares of capital stock of SVTP as of the closing with a value of $2.1 million, (ii) the release of the Company from outstanding debt obligations totaling $41.7 million assumed by SVTP, and (iii) $1.0 million in cash proceeds from SVTP. In connection with the closing of the Purchase Agreement, the Company entered into a Conversion Agreement with FBC Holdings SARL, a related party ("FBC Holdings"), pursuant to which $6.5 million of the Company's outstanding secured debt was converted into 6,500,000 Series A Preferred Shares. In 2018, the Company recorded a loss on the divestiture of $4.3 million. See *Note 3 - Discontinued Operations* for additional details.

We undertook this divestiture in order to facilitate the elimination of secured debt and to allow us to focus greater resources to our converged and hyper-converged product portfolio. The financial results of Overland are presented as discontinued operations in our consolidated statements of operations for the year ended December 31, 2018.

Nasdaq Listing

On November 12, 2018, we received a letter from the Nasdaq Listing Qualifications department of The Nasdaq Stock Market LLC notifying us that we were not in compliance with the requirement of Nasdaq Marketplace Rule 5550(b)(1) for continued inclusion on the NASDAQ Capital Market because the Company's stockholders' equity of $707,000 reported in the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2018, is below the required minimum of $2.5 million. On May 14, 2019, we received written notification from The NASDAQ Stock Market, LLC notifying us that we had not regained compliance with the minimum value of the Company's stockholders' equity of $2.5 million. The Staff had determined that the Company's common stock would be delisted from Nasdaq unless the Company timely requests a hearing before a Nasdaq Hearings Panel (the "Panel"). Accordingly, we requested a hearing before the Panel, which was held on July 11, 2019, and which was the basis for the Panel's decision.

On July 22, 2019, the Panel issued a decision granting the request of the Company for continued listing of our common stock on the NASDAQ Capital Market pursuant to an extension through September 30, 2019 to demonstrate compliance with the $2.5 million stockholders' equity requirement for continued listing. As required pursuant to the Panel's decision, on August 15, 2019, the Company reported to the Panel that it had completed certain components of its compliance plan. On September 30, 2019, the Company requested an additional extension until October 30, 2019 to complete the final components of its compliance plan, which the Panel granted in a letter to the Company on October 8, 2019.

On November 6, 2019, the Company received notification from the Panel that the Company has regained compliance with the $2.5 million stockholders' equity requirement based on the Company's disclosures contained in its Form 8-K filed with the Securities and Exchange Commission on November 1, 2019. The Panel further advised that if the Company again falls below the $2.5 million stockholders' equity requirement on or before November 1, 2020, the Company will be notified of such non-compliance and will at that time be afforded a hearing before the Panel, which could result in the Company's delisting.

On January 3, 2020, the Company received a letter from the Nasdaq Listing Qualifications department of The Nasdaq Stock Market LLC notifying the Company that it was not in compliance with the requirement of Nasdaq Marketplace Rule 5550(a)(2) for continued inclusion on the NASDAQ Capital Market as a result of the closing bid price for the Company's common stock being below $1.00 for 30 consecutive business days. This notification has no effect on the listing of the Company's common shares at this time.

In accordance with the Nasdaq Marketplace Rules, the Company was provided an initial period of 180 calendar days, or until July 1, 2020, to regain compliance, which will require a closing bid price for the Company's common stock above $1.00 for a minimum of 10 consecutive business days. However, due to recent market turmoil, Nasdaq has filed a rule change tolling the compliance periods for price-based listing requirements through June 30, 2020, extending the Company's compliance period until September 14, 2020. If the Company does not comply with Marketplace Rule 5550(a)(2) by September 14, 2020, the Company may be eligible for additional time to demonstrate compliance with the bid price requirement. To qualify, the Company will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the NASDAQ Capital Market, with the exception of the bid price requirement, and will need to provide written notice of its intention to cure the deficiency during the second compliance period, by effecting a reverse stock split, if necessary. If the Company meets these requirements, the Company will be granted an additional 180 days or until March 13, 2021 to become compliant. If the Company does not qualify for the second compliance period or fails to regain compliance during the second 180-day period, then Nasdaq will notify the Company of its determination to delist the Company's common shares, at which point the Company would have an opportunity to appeal the delisting determination to a Hearings Panel.

2019 and Recent Key Events

- On May 6, 2020, the Company filed of articles of amendment to create a fourth series of preferred shares, being, an unlimited number of Series D Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto. The Series D Preferred Shares are convertible into our common shares, at a conversion price equal to $0.65, subject to certain anti-dilution adjustments. Each shareholder of the Series D Preferred Shares, may, at any time, convert all or any part of the Series D Preferred Shares provided that after such conversion the common shares issuable, together with all the common shares held by the shareholder in the aggregate would not exceed 9.9% of the total number of outstanding common shares of the Company or in the aggregate no more than 800,000 common shares by all holders of Series D Preferred Shares. The Series D Preferred Shares do not have voting rights.
- On April 30, 2020, the Company entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with two investors (the "Purchasers") relating to the issuance and sale, in the aggregate, 1,694,000 shares (the "Shares") of the Company's to be established Series D Convertible Preferred Stock, no par value and warrants to purchase up to 1,694,000 common shares of the Company in a private placement transaction, in exchange for the assignment to the Company by the investors of certain promissory notes receivable held by the investors in an aggregate amount of $1.1 million. The sale of the Shares to the Purchasers closed on May 6, 2020 (the "Closing"). Subject to certain limitations, the warrants will be exercisable commencing on the six month anniversary of the Closing at an exercise price equal to $0.92 per common share, subject to adjustments as provided under the terms of the warrants. This transaction combined with the conversion of the below convertible debentures, which were both completed after the reporting period, have increased the Company's equity balance by adding approximately $1.5 million to the equity balance that was reported as of December 31, 2019.
- Between April 7, 2020 and April 24, 2020, the Company converted $377,000 of convertible debentures and issued 580,580 common shares of the Company, of which 271,040 common shares were issued to related parties.

- On April 21, 2020, two investors, one of which was an investor of the March 23, 2020 Offering, entered into share purchase agreements to acquire 330,000 common shares of the Company. As a result of this transaction, the investor participating in the Offering will hold enough common shares be classified as a related party of the Company. Originally, the common shares were held by a vendor of the Company subject to the October 2019 related party subscription agreement the Company entered into with such vendor and issued 330,000 common shares of the Company at $1.07 per share to the vendor in exchange for the satisfaction of certain accounts payable. In the second quarter of 2020, the aggregate amount of the obligations owed by the Company to the vendor were reduced by $157,000, the actual cash proceeds received by the vendor from the share purchase agreements.
- On April 9, 2020, the Company received loan proceeds in the amount of $667,400 (the "PPP Funds") and entered into a loan agreement with City National Bank pursuant to the CARES Act. The CARES Act was established in order to enable small businesses to pay employees during the economic slowdown caused by COVID-19 by providing forgivable loans to qualifying businesses for up to 2.5 times their average monthly payroll costs. The amount borrowed by the Company under the CARES Act is eligible to be forgiven provided that (a) the Company uses the PPP Funds during the eight week period after receipt thereof, and (b) the PPP Funds are only used to cover payroll costs (including benefits), rent, mortgage interest, and utility costs. The amount of loan forgiveness will be reduced if, among other reasons, the Company does not maintain staffing or payroll levels. Principal and interest payments on any unforgiven portion of the PPP Funds (the "PPP Loan") will be deferred for six months and will accrue interest at a fixed annual rate of 1.0% and carry a two year maturity date. There is no prepayment penalty on the CARES Act Loan.
- On March 23, 2020, the Company entered into subscription agreements by and among the Company and the investors party thereto, including Torrington Financial Services Ltd (the "Advisor"), for the purchase and sale of 725 units (collectively, the "Units" and individually, a "Unit") for aggregate gross proceeds of up to $725,000 (the "Offering"), with each Unit consisting of (a) a 6% convertible debenture in the principal amount of $1,000, which is convertible at $0.6495 per share into 1,540 common shares of the Company, and (b) a warrant to purchase 1,540 common shares of the Company exercisable at any time on or before the third year anniversary date at an exercise price of $0.60 per share. The warrant includes a provision restricting the warrant holder from exercising it if the aggregate number of common shares held by the warrant holder equals or exceeds 5.0% of the issued and outstanding shares of the Company, calculated on a partially converted basis (i.e., assuming the conversion of all rights to receive common shares of the Company held by the warrant holder). In connection with the Offering and as compensation for the Advisor's services, the Company issued to the Advisor convertible debentures equal to $58,000 and convertible into 89,320 common shares and with other terms also substantially the same as the investors. The Company received cash proceeds of $575,000 from the Offering, and a participant of the offering, a related party, paid directly $150,000 to a financial consultant for a prepayment of future services to the Company. The Company intends to use the remaining proceeds from the Offering for general corporate and working capital purposes.
- On October 31, 2019, the Company entered into a conversion agreement by and among the Company, HVE and Overland, a related party, under which Overland agreed to convert the following debt, accrued payables and prepayment of future goods and services into 1,600,000 Series C Preferred Shares of the Company valued at $1.00 per share: (i) principal and accrued interest of $520,000 under the Secured Promissory Note dated November 13, 2018 by and among the Company, HVE and Overland; (ii) accrued fees of $632,000 under the Transition Service Agreement ("TSA") dated November 13, 2018 by and among the Company and Overland; and (iii) prepayment of $448,000 for future goods and services under the TSA.
- On October 30, 2019, the directors of the Company passed a resolution authorizing the filing of articles of amendment to create a third series of preferred shares, being, an unlimited number of Series C Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto. On November 6, 2019, the Company filed Articles of Amendment to create the Series C Preferred Shares.

- On October 30, 2019, the Company entered into a related party subscription agreement and issued 330,000 common shares of the Company at $1.07 per share to a vendor in exchange for the satisfaction of certain accounts payable. The aggregate amount of the obligations shall be reduced by the cash proceeds actually received by the vendor from the sale of the shares by the vendor.
- On October 30, 2019, the Company entered into a letter of intent with O'Melveny & Myers LLP ("OMM") to address the matter of $1.7 million of outstanding invoices, included in accounts payable at December 31, 2019, for legal services previously provided by OMM. The Company intends to issue a secured promissory note at the reduced amount of $1.1 million to OMM in satisfaction of such liabilities. As of December 31, 2019, no such promissory note has been issued.
- On October 9, 2019, the Company entered into a subscription agreement and issued 149,500 common shares of the Company at $1.19 to a vendor in exchange for the satisfaction of certain accounts payable. The aggregate amount of the obligations shall be reduced by the cash proceeds actually received by the vendor from the sale of the shares by the vendor.
- In August 2019, the Company entered into agreements with certain executives of the Company and the Company's Board of Directors to extinguish certain accrued liabilities. The Company wrote off $1.7 million of outstanding liabilities and recorded a gain on forgiveness of liabilities, which is included in other income, net.
- On August 15, 2019, the Company entered into a purchase agreement for a private placement to issue 251,823 common shares of the Company, of which 175,765 common shares have been issued, at a purchase price of $1.29 per share for gross proceeds received of $325,000. The Company used the proceeds from the offering for general corporate and working capital purposes.
- On July 29, 2019, the Company completed a private placement and issued 240,000 common shares of the Company at a purchase price of $2.00 per share for gross proceeds of $480,000. The Company used the proceeds from the offering for general corporate and working capital purposes.
- On July 8, 2019, the directors of the Company passed a resolution authorizing the filing of articles of amendment to create a second series of preferred shares, being, an unlimited number of Series B Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto, and the Company filed Articles of Amendment to create the Series B Preferred Shares. The rights, privileges, restrictions and conditions attaching to the Series B Preferred Shares are substantially the same as the Series A Preferred Shares of the Company, save and except that the requirement for the Company to redeem all of the issued and outstanding Series A Preferred Shares on or before November 13, 2020 has been amended to provide that the Company shall only be required to redeem 1,000,000 Series B Preferred Shares on or before November 13, 2020 and any other outstanding Series B Preferred Shares may be redeemed at any time and from time to time after December 19, 2019 at the option of the Company.
- On July 12, 2019, following the filing of the Articles of Amendment to create the Series B Preferred Shares, the Company entered into a share exchange agreement (the "Share Exchange Agreement") with FBC Holdings to exchange the 6,500,000 Series A Preferred Shares held by FBC Holdings for 6,500,000 Series B Preferred Shares. On October 31, 2019, FBC Holdings, as the sole shareholder of Series B Shares, irrevocably waived its entitlement to the required redemption of 1,000,000 Series B Preferred Shares.
- On July 12, 2019, in connection with the Share Exchange Agreement, the Company entered into an amendment to the Exchange and Buy-Out Agreement by and among the Company, FBC Holdings, SVTP and MF Ventures LLC ("MFV") such that the rights and obligations under the Exchange and Buy-Out Agreement would apply to the Series B Preferred Shares in respect of which the Series A Preferred Shares were exchanged under the Share Exchange Agreement.

Results of Operations

The following table sets forth certain financial data as a percentage of net revenue:

	Year Ended December 31,	
	2019	2018
Revenue	100.0 %	100.0 %
Cost of revenue	66.8	81.4
Gross profit	33.2	18.6
Operating expenses:		
Sales and marketing	32.8	37.4
Research and development	36.8	37.9
General and administrative	70.4	83.0
Impairment of acquired intangible assets	1.3	—
	141.3	158.3
Loss from operations	(108.1)	(139.7)
Interest expense	(6.3)	(0.8)
Other income, net	37.6	0.1
Net loss from continuing operations	(76.8)	(140.4)
Net loss from discontinued operations	—	(149.7)
Net loss	(76.8)%	(290.1)%

A summary of the sales mix by product follows (in thousands):

	Year Ended December 31,		
	2019	2018	Change
Disk systems	$ 3,086	$ 6,108	(49.5)%
Service	2,493	2,922	(14.7)%
Total	$ 5,579	$ 9,030	(38.2)%

We divide our worldwide sales into three geographical regions: Americas; APAC, consisting of Asia Pacific countries; and EMEA consisting of Europe, the Middle East and Africa.

The following table summarizes net revenue by geographic area (in thousands):

	Year Ended December 31,		
	2019	2018	Change
Americas	$ 5,023	$ 8,044	(37.6)%
APAC	356	534	(33.3)%
EMEA	200	452	(55.8)%
Total	$ 5,579	$ 9,030	(38.2)%

Comparison of Years Ended December 31, 2019 and 2018

Revenue

We had revenue of $5.6 million during 2019 compared to $9.0 million during 2018. The $3.4 million decrease in net revenue is primarily a result of a decrease in product revenue of $3.0 million which $2.6 million was due to a decline in sales units for disk systems from the HVE product line, and a $0.4 million decrease in our Snap product line. In addition, there was a $0.4 million decrease in revenue related to service contracts. Overall, the decrease in revenue was primarily due to our limited liquidity which delayed shipments.

Gross Profit

Gross profit and margin were as follows (in thousands, unless otherwise noted):

	Year Ended December 31,		
	2019	2018	Change
Gross profit	$ 1,854	$ 1,679	10.4%
Gross margin	33.2%	18.6%	14.6pt

In 2019, the Company's gross profit for product and margins increased due to the completion of the transition of its divestiture of Overland.

Operating Expenses

Sales and Marketing Expense

Sales and marketing expenses were $1.8 million and $3.4 million for the years ended December 31, 2019 and 2018. The decrease of $1.6 million was primarily due to a decrease of $1.3 million in employee and related expenses associated with a lower average headcount and a $0.4 million decrease in strategic marketing and outside contractor fees; offset by a $0.2 million increase in share-based compensation related to an accelerated vesting of an award.

Research and Development Expense

Research and development expenses were $2.1 million and $3.4 million for the years ended December 31, 2019 and 2018, respectively. The 2019 decrease of $1.3 million was primarily due to a decrease of $0.8 million in employee and related expenses associated with a lower average headcount and a $0.4 million decrease in amortization of intangible assets.

General and Administrative Expense

General and administrative expenses were $3.9 million and $7.5 million for the years ended December 31, 2019 and 2018, respectively. The 2019 decrease of $3.6 million was primarily due to a decrease of $3.1 million in legal and transaction costs primarily related to the share purchase agreement entered into in February 2018 and completed in November 2018, a decrease of $0.4 million in auditor and tax related fees and a decrease of $0.3 million in amortization of intangible assets; offset by a $0.2 million increase in provision for losses on accounts receivable.

Impairment of Acquired Intangible Assets

Impairment of acquired intangible assets were $70,000 and none for the years ended December 31, 2019 and 2018, respectively. In 2019, primarily as a result of the Company's change in revenue projection for its Snap product line, it was determined the carrying value of indefinite-lived intangible assets exceeded its estimated fair value. In measuring fair value, the Company used a relief-from-royalty approach. The Company compared the indicated fair value to the carrying value of its indefinite-lived assets, and as a result of the analysis, an impairment charge of $70,000 was recorded to indefinite-lived trade names for the year ended December 31, 2019.

Non-Operating Expenses

Interest Expense

Interest expense was $0.4 million and $0.1 million for the years ended December 31, 2019 and 2018, respectively. The increase of $0.3 million was primarily related to $0.3 million of preferred share dividends.

Other Income, Net.

Other income, net, in 2019 and 2018 was $2.1 million of income, net, and minimal in 2018. In 2019, the Company entered into agreements with certain executives of the Company and the Company's Board of Directors to extinguish certain accrued liabilities. The Company wrote off $1.7 million of outstanding liabilities and recorded a gain on forgiveness of liabilities. In addition, there was $0.6 million of payables written off.

Discontinued Operations

On November 13, 2018, we closed the Purchase Agreement related to our divestiture of Overland. In 2018, the financial results of Overland have been reflected in our consolidated statements of operations as discontinued operations. The Company's 2018 statement of cash flows is presented on a combined basis, including continuing and discontinued operations.

Liquidity and Capital Resources

We have recurring losses from operations and a net working capital deficiency. Our primary source of cash flow is generated from sales of our disk automation systems. We have financed our operations through proceeds from private sales of equity securities and with borrowings under our line of credit. At December 31, 2019, we had cash from continuing operations of $0.1 million compared to cash of $0.3 million at December 31, 2018. As of December 31, 2019, we had a working capital deficit of $4.7 million, reflecting a decrease in current assets of $1.6 million and a decrease in current liabilities of $3.0 million compared to December 31, 2018. The decrease in current assets and liabilities was primarily related to a $0.8 million decrease in accounts receivable due to a decline in product sales, a $0.5 million reduction in inventory on hand, forgiveness of $2.3 million in liabilities and the conversion of $0.5 million of related party debt to Series C Preferred Shares. Cash management and preservation continue to be a top priority. We expect to incur negative operating cash flows as we work to increase our sales volume and maintain operational efficiencies.

Between April 7, 2020 and April 24, 2020, the Company converted $377,000 of convertible debentures and issued 580,580 common shares of the Company, of which 271,040 common shares were issued to related parties.

On April 9, 2020, the Company received loan proceeds in the amount of $667,400 (the "PPP Funds") and entered into a loan agreement with City National Bank pursuant to the CARES Act. The CARES Act was established in order to enable small businesses to pay employees during the economic slowdown caused by COVID-19 by providing forgivable loans to qualifying businesses for up to 2.5 times their average monthly payroll costs. The amount borrowed by the Company under the CARES Act is eligible to be forgiven provided that (a) the Company uses the PPP Funds during the eight week period after receipt thereof, and (b) the PPP Funds are only used to cover payroll costs (including benefits), rent, mortgage interest, and utility costs. The amount of loan forgiveness will be reduced if, among other reasons, the Company does not maintain staffing or payroll levels. Principal and interest payments on any unforgiven portion of the PPP Funds (the "PPP Loan") will be deferred for six months and will accrue interest at a fixed annual rate of 1.0% and carry a two year maturity date. There is no prepayment penalty on the CARES Act Loan.

On March 23, 2020, the Company entered into subscription agreements by and among the Company and the investors party thereto, including Torrington Financial Services Ltd (the “Advisor”), for the purchase and sale of 725 units (collectively, the “Units” and individually, a “Unit”) for aggregate gross proceeds of up to $725,000 (the “Offering”), with each Unit consisting of (a) a 6% convertible debenture in the principal amount of $1,000, which is convertible at $0.6495 per share into 1,540 common shares of the Company, and (b) a warrant to purchase 1,540 common shares of the Company exercisable at any time on or before the third year anniversary date at an exercise price of $0.60 per share. The warrant includes a provision restricting the warrant holder from exercising it if the aggregate number of common shares held by the warrant holder equals or exceeds 5.0% of the issued and outstanding shares of the Company, calculated on a partially converted basis (i.e., assuming the conversion of all rights to receive common shares of the Company held by the warrant holder). In connection with the Offering and as compensation for the Advisor’s services, the Company issued to the Advisor convertible debentures equal to $58,000 and convertible into 89,320 common shares and with other terms also substantially the same as the investors. The Company received cash proceeds of $575,000 from the Offering, and a participant of the offering, a related party, paid directly $150,000 to a financial consultant for a prepayment of future services to the Company. The Company intends to use the remaining proceeds from the Offering for general corporate and working capital purposes.

Management has projected that cash on hand will not be sufficient to allow the Company to continue operations beyond August 31, 2020 if we are unable to raise additional funding for operations. We expect our working capital needs to increase in the future as we continue to expand and enhance our operations. Our ability to raise additional funds through equity or debt financings or other sources may depend on the financial success of our current business and successful implementation of our key strategic initiatives, financial, economic and market conditions and other factors, some of which are beyond our control. No assurance can be given that we will be successful in raising the required capital at reasonable cost and at the required times, or at all. Further equity financings may have a dilutive effect on shareholders and any debt financing, if available, may require restrictions to be placed on our future financing and operating activities. If we require additional capital and are unsuccessful in raising that capital, we may not be able to continue our business operations and advance our growth initiatives, which could adversely impact our business, financial condition and results of operations.

Significant changes from the Company’s current forecasts, including but not limited to: (i) failure to comply with the terms and financial covenants in its debt facilities; (ii) shortfalls from projected sales levels; (iii) unexpected increases in product costs; (iv) increases in operating costs; (v) changes in the historical timing of collecting accounts receivable; and (vi) inability to maintain compliance with the requirements of the NASDAQ Capital Market and/or inability to maintain listing with the NASDAQ Capital Market could have a material adverse impact on the Company’s ability to access the level of funding necessary to continue its operations at current levels. If any of these events occurs or the Company is unable to generate sufficient cash from operations or financing sources, the Company may be forced to liquidate assets where possible and/or curtail, suspend or cease planned programs or operations generally or seek bankruptcy protection or be subject to an involuntary bankruptcy petition, any of, which would have a material adverse effect on the Company’s business, results of operations, financial position and liquidity.

As a result of our recurring losses from operations and negative cash flows, the report from our independent registered public accounting firm regarding our consolidated financial statements for the year ended December 31, 2019 includes an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern.

The following table shows a summary of our cash flows (used in) provided by operating activities, investing activities and financing activities (in thousands):

	Year Ended December 31,	
	2019	**2018**
Net cash used in operating activities	$ (1,813)	$ (7,621)
Net cash provided by investing activities	$ —	$ 944
Net cash provided by financing activities	$ 1,621	$ 2,444

The use of cash during 2019 was primarily a result of our net loss of $4.3 million offset by $0.1 million in non-cash items, which included $2.3 million in forgiveness of liabilities; off-set by share-based compensation, depreciation and amortization, preferred shares interest expense, provision for losses on accounts receivable, and impairment of acquired intangible assets.

During 2018, net cash provided by investing activities were primarily related proceeds from our divestiture.

During 2019, we received $0.7 million, from the issuance of common shares, $0.5 million from related party notes payable and $0.3 million, net, from our line of credit. During 2018, we received $1.9 million net, from the issuance of common shares, $0.5 million from the issuance of a related party note payable, $0.1 million from our line of credit, and $0.1 million from warrants exercised, offset by $0.2 million in payments to holders of related party debt.

Off-Balance Sheet Information

During the ordinary course of business, we may provide standby letters of credit to third parties as required for certain transactions initiated by us. As of December 31, 2019, we had no standby letters of credit outstanding.

Contractual Obligations

The following schedule summarizes our contractual obligations to make future payments at December 31, 2019 (in thousands):

Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Line of credit	491	491	—	—	—
Purchase obligations[1]	47	47	—	—	—
Total contractual obligations	$ 538	$ 538	$ —	$ —	$ —

(1) Represents purchase orders for inventory and non-inventory items entered into prior to December 31, 2019, with purchase dates extending beyond January 1, 2020. Some of these purchase obligations may be canceled.

Critical Accounting Estimates

The discussion and analysis of our financial position and results of operations are based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. We review our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. Our significant accounting policies are outlined in *Note 2 to the Consolidated Financial Statements* included in this Annual Report on Form 10-K. We believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

The Company accounts for revenue pursuant to ASU 2014-09, *Revenue from Contracts with Customers* and all the related amendments, ("Topic 606"). Under Topic 606, an entity is required to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and contract consideration will be recognized on a "sell-in basis" or when control of the purchased goods or services transfer to the distributor.

The Company generates revenue primarily from: (i) solutions for standalone storage and integrated hyper-converged storage; (ii) professional services; and (iii) warranty and customer services. The Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To determine revenue recognition for contracts with customers the Company performs the following five steps: (i) identify the promised goods or services in the contract; (ii) identify the performance obligations in the contract, including whether they are distinct in the context of the contract; (iii) determine the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies the performance obligations.

Approximately 70% of the Company's revenue is recognized when performance obligations under the terms of a contract with a customer are satisfied at a point in time. These contracts are generally comprised of a single performance obligation to transfer products. Accordingly, the Company recognizes revenue when change of control has been transferred to the customer, generally at the time of shipment of products. The Company sells its products both directly to customers and through distributors generally under agreements with payment terms typically less than 45 days. Revenue on direct product sales, excluding sales to distributors, are not entitled to any specific right of return or price protection, except for any defective product that may be returned under our standard product warranty. Product sales to distribution customers that are subject to certain rights of return, stock rotation privileges and price protections, contain a component of "variable consideration." Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products and is generally based upon a negotiated fixed price and is net of estimates for variable considerations.

For performance obligations related to warranty and customer services, such as extended product warranties, the Company transfers control and recognizes revenue on a time-elapsed basis. The performance obligations are satisfied as services are rendered typically on a stand-ready basis over the contract term, which is generally 12 months.

In limited circumstances where a customer is unable to accept shipment and requests products be delivered to, and stored on, the Company's premises, also known as a "bill-and-hold" arrangement, revenue is recognized when: (i) the customer has requested delayed delivery and storage of the products, (ii) the goods are segregated from the inventory, (iii) the product is complete, ready for shipment and physical transfer to the customer, and (iv) the Company does not have the ability to use the product or direct it to another customer.

The Company also enters into revenue arrangements that may consist of multiple performance obligations of its product and service offerings such as for sales of hardware devices and extended warranty services. The Company allocates contract fees to the performance obligations on a relative stand-alone selling price basis. The Company determines the stand-alone selling price based on its normal pricing and discounting practices for the specific product and/or service when sold separately. When the Company is unable to establish the individual stand-alone price for all elements in an arrangement by reference to sold separately instances, the Company may estimate the stand-alone selling price of each performance obligation using a cost plus a margin approach, by reference to third party evidence of selling price, based on the Company's actual historical selling prices of similar items, or based on a combination of the aforementioned methodologies; whichever management believes provides the most reliable estimate of stand-alone selling price.

Inventories

Inventories are stated at the lower of cost and net realizable value using the first-in-first-out method. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. We assess the value of inventories periodically based upon numerous factors including, among others, expected product or material demand, current market conditions, technological obsolescence, current cost, and net realizable value. If necessary, we write down our inventory for obsolete or unmarketable inventory by an amount equal to the difference between the cost of the inventory and the net realizable value.

Goodwill and Intangible Assets

Goodwill represents the excess of consideration paid over the value assigned to the net tangible and identifiable intangible assets acquired. For intangible assets purchased in a business combination, the estimated fair values of the assets received are used to establish their recorded values. For intangible assets acquired in a non-monetary exchange, the estimated fair values of the assets transferred (or the estimated fair values of the assets received, if more clearly evident) are used to establish their recorded values. Valuation techniques consistent with the market approach, income approach and/or cost approach are used to measure fair value.

Purchased intangible assets are amortized on a straight-line basis over their economic lives of six to 25 years for channel partner relationships, three to nine years for developed technology, three to eight years for capitalized development costs, and two to 25 years for customer relationships as this method most closely reflects the pattern in which the economic benefits of the assets will be consumed.

Impairment of Goodwill and Intangible Assets

Goodwill and intangible assets are tested for impairment on an annual basis at December 31, or more frequently if there are indicators of impairment. Triggering events for impairment reviews may be indicators such as adverse industry or economic trends, restructuring actions, lower projections of profitability, or a sustained decline in our market capitalization. Intangible assets are quantitatively assessed for impairment, if necessary, by comparing their estimated fair values to their carrying values. If the carrying value exceeds the fair value, the difference is recorded as an impairment.

Recent Accounting Pronouncements

On January 1, 2019, we adopted ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), as amended. The update increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and requires disclosing key information about leasing arrangements. The update is effective for reporting periods beginning after December 15, 2018. The Company has no lease assets or liabilities on the balance sheet as of December 31, 2019.

On January 1, 2019, ASU No. 2018-07, *ASU No. 2018-07, Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* (“ASU 2018-07”). The update aligns measurement and classification guidance for share-based payments to nonemployees with the guidance applicable to employees. Under the new guidance, the measurement of equity-classified nonemployee awards will be fixed at the grant date. The update is effective for annual reporting periods, including interim periods, beginning after December 15, 2018, with early adoption permitted. The adoption of the new standard on January 1, 2019 did not have an effect on our financial position, results of operations or cash flows.

See *Note 2 - Significant Accounting Policies* for additional details.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk represents the risk of loss that may impact our financial position, results of operations, or cash flows due to adverse changes in financial and commodity market prices and rates. We have limited exposed to market risk from changes in foreign currency exchange rates as measured against the U.S. dollar. These exposures are directly related to our normal operating and funding activities. Historically, we have not used derivative instruments or engaged in hedging activities.

Credit Risk. Credit risk is the risk that the counterparty to a financial instrument fails to meet its contractual obligations, resulting in a financial loss to us. We sell to a diverse customer base over a global geographic area. We evaluate collectability of specific customer receivables based on a variety of factors including currency risk, geopolitical risk, payment history, customer stability and other economic factors. Collectability of receivables is reviewed on an ongoing basis by management and the allowance for doubtful receivables is adjusted as required. Account balances are charged against the allowance for doubtful receivables when we determine that it is probable that the receivable will not be recovered. We believe that the geographic diversity of the customer base, combined with our established credit approval practices and ongoing monitoring of customer balances, mitigates this counterparty risk.

Liquidity Risk. Liquidity risk is the risk that we will not be able to meet our financial obligations as they come due. We continually monitor our actual and projected cash flows and believe that our internally generated cash flows will not provide us with sufficient funding to meet all working capital and financing needs for at least the next 12 months.

Foreign Currency Risk. We conduct business on a global basis. Our sales in international markets are typically denominated in U.S. dollars. Purchase contracts are typically in U.S. dollars.

Item 8. Financial Statements and Supplemental Data

Our consolidated financial statements and supplementary data required by this item are set forth at the pages indicated in Item 15(a)(1) and 15(a)(2), respectively.

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

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rules 13a-15(e) or 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective to give reasonable assurance that information required to be publicly disclosed is recorded, processed, summarized and reported on a timely basis as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting. In order to evaluate the effectiveness of internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, management has conducted an assessment, including testing, using the criteria in Internal Control-Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Our system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Based on our evaluation under the framework in Internal Control-Integrated Framework, our Chief Executive Officer and Chief Financial Officer concluded that our internal control over financial reporting was effective as of December 31, 2019. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and that the degree of compliance with the policies or procedures may deteriorate.

This annual report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report on internal control over financial reporting was not subject to attestation by our independent registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report in this annual report.

This report on internal control over financial reporting shall not be deemed to be filed for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, and is not incorporated by reference into any of our filings, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Changes in Internal Control over Financial Reporting

In November 2018, the Company discontinued the majority of its operations and disposed of Overland. Along with this change the Company; (i) replaced its chief executive officer, (ii) entered into a transition services agreement with Overland, under which, among other things, the chief financial officer of Overland is providing ongoing service to the Company as its interim chief financial officer, and (iii) engaged an accounting and advisory firm to supplement our internal resources related to preparation and review of our consolidated financial statements. Based on these changes, there were significant changes in our internal control over financial reporting during the year ended December 31, 2019.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the name, age, and position of our directors and executive officers as of May 6, 2020:

Name	Age	Director Since	Positions with our Company
Cheemin Bo-Linn[(1)]	66	April 17, 2017	Director, Chair of Audit Committee
Vivekanand Mahadevan[(1)]	66	December 1, 2014	Director, Chair of Nominating and Governance Committee
Duncan J. McEwan[(1)]	66	May 10, 2017	Director, Chair of Compensation Committee
Peter Tassiopoulos	51	March 7, 2014	Chief Executive Officer and Director
Kurt L. Kalbfleisch[(2)]	54	N/A	Senior Vice President, Chief Financial Officer and Secretary
Joseph L. O'Daniel	49	N/A	President

(1) Member of Audit Committee, Compensation Committee and Nominating and Governance Committee.

(2) Mr. Kalbfleisch has served as Senior Vice President and Chief Financial Officer of the Company since December 1, 2014, and is now serving in these positions in an interim role since the divestiture of Overland Storage, Inc. and its subsidiaries ("Overland") on November 13, 2018 while the Company looks for his replacement. In November 2018, the Company entered into a transition services agreement with Overland, under which Mr. Kalbfleisch is providing ongoing services to the Company as its interim chief financial officer.

Each of the above-listed directors served in such capacities for all of fiscal 2019. There are no family relationships between any of our directors or executive officers, and there are no arrangements or understandings between any of the directors and any other person pursuant to which such director was or is selected as a director.

Dr. Cheemin Bo-Linn is the Chief Executive Officer and President of Peritus Partners Inc., analytics and valuation accelerator company, leading companies to next level growth, merger and acquisition ("M&A") or IPO and has held this position since January 2013. From September 2010 to November 2012, she was Chief Marketing Officer and Chief Revenue Officer at NetLine Corporation, a global on-line multi-channel digital content network and mobile applications company. From July 2006 to August 2010, she was President of Peritus Partners Inc./BL Group. From June 1980 to June 2006, she held a number of senior executive roles including at IBM as Vice-President, and other roles with responsibilities ranging from strategy to finance, across storage, software, consumer products and consulting services. She presently serves as a member of the Board of Directors of BMC Stock Holdings Inc., a public company and leading manufacturer, distributor and e-commerce platform for diversified building materials and solutions. She was previously elected as Board of Director of multiple companies including Audit Chair of two public companies. She holds a Doctorate in Education focused on "Computer-based Management Information Systems and Organizational Change" from the University of Houston.

Vivekanand Mahadevan has been the Chief Executive Officer of Dev Solutions, Inc., a consulting firm that helps technology startups build next-generation market leaders in data analytics, security, storage and cloud markets since March 2012. Mr. Mahadevan was the Chief Strategy Officer for NetApp, Inc., a supplier of enterprise storage and data management software and hardware products and services, from November 2010 until February 2012. Prior to that time served as Vice President of Marketing for LSI Corporation, an electronics company that designs semiconductors and software that accelerate storage and networking, from January 2009 to September 2010. Prior to LSI Corporation, he was Chief Executive Officer of Deeya Energy, Inc., and has also held senior management positions with leading storage and systems management companies including BMC Software, Compaq, Ivita, and Maxxan Systems. Mr. Mahadevan previously served as a member of the Board of Directors of Violin Memory, Inc. Mr. Mahadevan holds an M.B.A. in Marketing and MS in Engineering from the University of Iowa as well a degree in Mechanical Engineering from the Indian Institute of Technology.

Duncan J. McEwan is president of Diligent Inc., a consulting company he founded in 1991 specializing in M&A and strategic advice for technology-based clients. Mr. McEwan was Executive Vice President and Chief Strategy Officer of Call-Net Enterprises Inc., a provider of long-distance telephone services until it merged into Rogers Communication Inc. (2004-2005); President and Chief Operating Officer of Sprint Canada Inc., an integrated, national telecommunications provider (2001-2004); Chief Executive Officer of Northpoint Canada Communications, a provider of high-speed data and Internet (DSL) lines (2000-2001); Vice President of Business Development of Canadian Satellite Communications ("Cancom") (1996-1998); and President and Chief Executive Officer of Cancom (1998-2000). Mr. McEwan has been Chairman of the Board of Geminare, Inc. since 2010, an emerging global leader in business continuity and cloud-based software systems and has previously served on a number of other public and private company boards. Mr. McEwan is a graduate of the University of Toronto.

Peter Tassiopoulos has served as the Chief Executive Officer of the Company since November 14, 2018. Mr. Tassiopoulos served as President of the Company from December 1, 2014 until his appointment to Chief Executive Officer. Mr. Tassiopoulos previously served as the Chief Executive Officer of the Company from March 2013 until December 1, 2014. Mr. Tassiopoulos has extensive experience in information technology business development and global sales as well as leading early-stage technology companies. He was also actively involved as a business consultant prior to his tenure with the Company, including acting as Chief Operating Officer and then Chief Executive Officer of BioSign Technologies Inc. from September 2009 to April 2011 and Chief Executive Officer of IgeaCare Systems Inc. from February 2003 to December 2008.

Kurt L. Kalbfleisch has served as Senior Vice President and Chief Financial Officer of the Company since December 1, 2014, and is now serving in these positions in an interim role since the Overland divestiture on November 13, 2018 while the Company looks for his replacement. In November 2018, the Company entered into a transition services agreement with Overland, under which Mr. Kalbfleisch is providing ongoing services to the Company as its interim chief financial officer. Mr. Kalbfleisch has served as Overland's Senior Vice President since June 2012, Chief Financial Officer since February 2008, and Secretary since October 2009. Prior to that, he served as Overland's Vice President of Finance from July 2007 to June 2012. Mr. Kalbfleisch also serves on the board of Paladin Group.

Joseph L. O'Daniel has served as President of the Company since November 14, 2018. Since January 2017, Mr. O'Daniel, served as a Vice President and President of Virtualization and Professional Services for the Company. He previously served as president and chief executive officer of Unified ConneXions, Inc. from 2001 and as founder of HVE ConneXions, LLC from April 2013 until their acquisitions by the Company in January 2017. Mr. O'Daniel has over 20 years of experience in the virtualization and technology industry and has extensive experience in executive leadership positions.

Code of Ethics

We have adopted a code of ethics that applies to the members of our board of directors, executive officers and all employees. Such code is posted on the Company's website and is available at www.sphere3d.com. If we make any substantive amendments to the Code of Business Conduct and Ethics Policy or grant any waiver from a provision of the code applying to our principal executive officer or our principal financial or accounting officer, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

Audit Committee

We have a standing audit committee as defined in Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended. The members of the Audit Committee are Cheemin Bo-Linn, Duncan J. McEwan and Vivekanand Mahadevan.

In addition to being independent under NASDAQ Marketplace Rule 5605(a)(2), all members of the Audit Committee must meet the additional independence standards for audit committee members set forth in Rule 10A-3(b)(1) of the Exchange Act and NASDAQ Marketplace Rule 5605(c)(2)(A). The Board of Directors has determined that Dr. Bo-Linn qualifies as an audit committee financial expert as defined in Item 407(d)(5) of Regulation S-K under the Exchange Act.

Overland Divestiture

As previously disclosed, in November 2018, the Company sold all of the issued and outstanding shares of capital stock of Overland. The Overland divestiture constituted a change in control as defined in each of the arrangements described under "Executive Compensation" below, and each of our named executive officers remained employed with us through the closing of the transaction. Accordingly, each named executive officer was entitled to the applicable payments and benefits under these arrangements.

Item 11. Executive Compensation

Summary Compensation Table

The following table summarizes the compensation earned during the fiscal years ended December 31, 2019 and 2018 by our current and former principal executive officers, and our other most highly compensated executive officers (referred to as our "named executive officers").

Name and Principal Position	Year	Salary ($)	Share- based Awards ($)	Non-equity Incentive Plan Compensation ($)	All Other Compensation(1) ($)	Total Compensation ($)
Peter Tassiopoulos[2]	2019	233,083	—	—	4,744	237,827
Chief Executive Officer	2018	239,938	—	—	404,831 [3]	644,769
Kurt L. Kalbfleisch[4]	2019	—	—	—	—	—
Senior Vice President and Chief Financial Officer	2018	300,000	—	—	522,828 [5]	822,828
Joseph L. O'Daniel	2019	200,000	—	—	3,351	203,351
President	2018	200,000	181,284 [6]	—	11,856	393,140

(1) The amounts shown in the "All Other Compensation" column reflect amounts we paid on each named executive officers' behalf for health insurance and life insurance premiums and certain out-of-pocket medical expenses, unless otherwise footnoted.

(2) The dollar amounts reported for Mr. Tassiopoulos in the above table are presented after conversion from Canadian dollars to U.S. dollars. For 2019 and 2018, the average U.S. dollar to Canadian dollar conversion rate in effect was 1.33 and 1.29, respectively.

(3) This amount includes accrued severance and change of control benefits in the amount of $400,000 that may be payable to Mr. Tassiopoulos under the compensation arrangements described below as a result of the Overland divestiture. In August 2019, Mr. Tassiopoulos waived his entitlement to receive the change of control payment and agreed to restructure such payment entitlement on the terms set forth in his new employment agreement with the Company described below under "Executive Officer Compensation."

(4) Mr. Kalbfleisch received no compensation from the Company in 2019. Since the Overland divestiture in November 2018, Mr. Kalbfleisch serves as the Company's Senior Vice President and Chief Financial Officer pursuant to a transition services agreement with Overland.

(5) This amount includes certain expenses reimbursed by the Company for a vacation that Mr. Kalbfleisch was required to cancel during 2018 and an additional payment by the Company to cover his tax liabilities with respect to these reimbursed expenses. This amount also includes accrued severance and change of control benefits in the amount of $450,000 that may be payable to Mr. Kalbfleisch under the compensation arrangements described below as a result of the Overland divestiture. In August 2019, Mr. Kalbfleisch agreed to reduce his change of control benefit to $360,000 and agreed to restructure such payment entitlement on the terms set forth under a new change of control agreement with the Company described below under "Executive Officer Compensation."

(6) This is a restricted stock award which was granted on February 20, 2018 and was valued at $18.72 per share on the grant date (the closing market price for a share of our common stock on that date).

Outstanding Equity Awards at 2019 Fiscal Year-End

The following table provides information about the current holdings of option awards by our named executive officers at December 31, 2019. Our named executive officers did not hold any stock awards at December 31, 2019.

		Option-based Awards			
		Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)		
Name	Grant Date	Exercisable	Unexercisable	Option Exercise Price ($)	Option Expiration Date
Peter Tassiopoulos	9/16/2013	500	—	403.01 (1)	9/15/2023
Kurt L. Kalbfleisch	8/26/2015	500	—	542.00	8/26/2021

(1) The exercise price reported for Mr. Tassiopoulos in the table above is presented after conversion from Canadian dollars to U.S. dollars based on an exchange rate of 1.33 Canadian dollars to one U.S. dollar, which is the average conversion rate in effect for 2019.

Executive Officer Compensation

Our executive compensation programs are determined by the Compensation Committee, within the scope of the authority delegated to it by our Board of Directors and subject to applicable law. The goals of our program are to attract and retain highly qualified and experienced executives and to provide compensation opportunities that are linked to corporate and individual performance. Decisions by the Compensation Committee on our executive compensation programs are subjective and the result of its business judgment, which is informed by the experiences of its members. The named executive officers do not have any role in determining their own compensation, although the Compensation Committee does consider the recommendations of the Chief Executive Officer in setting compensation levels for the named executive officers other than himself. The primary components of our executive compensation program are base salary, performance bonuses and long-term equity incentive awards. As described in more detail below, the Board approved certain changes to our executive compensation program in December 2017, including certain severance arrangements. As noted above, the benefits that may be payable under these arrangements in connection with the Overland divestiture have been under negotiation with the named executive officers.

Base Salaries. Base salaries are primarily intended to attract and retain highly qualified executives by providing them with fixed, predictable levels of compensation. The named executive officers' salary levels are specified in their employment agreements (other than for Mr. Tassiopoulos who is not a party to an employment agreement with the Company) and are subject to periodic review and adjustment by the Compensation Committee.

Performance Bonuses. The Compensation Committee did not approve a bonus plan for fiscal 2019.

Long-Term Equity Incentive Awards. Long-term equity incentives are intended to align the named executive officers' interests with those of our shareholders as the ultimate value of these awards depends on the value of the Company's shares. The Company has historically granted equity awards in the form of stock options with an exercise price that is equal to the per-share closing price of our common shares on the grant date. In recent years, restricted stock units have also been granted as provided for under the Company's 2015 Plan. The Compensation Committee believes that stock options are an effective vehicle for aligning the interests of our executives with those of our shareholders as the executive will only realize value on their options if the share price increases during the period between the grant date and the date the stock option is exercised. The stock options and restricted stock units function as a retention incentive for the named executive officers as they typically vest over a multi-year period following the date of grant. Restricted stock units, which are payable in our common shares, also link the interests of the award recipient with those of our shareholders as the potential value of the award is directly linked to the value of our common shares. The named executive officers' outstanding and new equity awards are subject to accelerated vesting in certain circumstances under their agreements

with the Company described below. There were no equity awards paid in fiscal 2019 and all outstanding equity awards are fully vested.

Employment, Severance and Change in Control Agreements

Peter Tassiopoulos. In December 2017, the Board approved certain compensation arrangements for Mr. Tassiopoulos. Pursuant to these arrangements, if Mr. Tassiopoulos' employment continues through a change in control of the Company (or if his employment is terminated by the Company without cause or he resigns for good reason (as such terms are defined in the agreement) prior to the change in control), he will be entitled to receive a lump sum payment of $400,000, and his outstanding and unvested equity-based awards granted by the Company will fully accelerate.

As a result of the Overland divestiture, Mr. Tassiopoulos ceased to be employed as President of the Company on November 13, 2018, and as a result of such change of control transaction, he was entitled to receive payment in the amount of $400,000 from the Company (the "Change of Control Payment"). Mr. Tassiopoulos has served as the Company's Chief Executive Officer since November 14, 2018. In August 2019, Mr. Tassiopoulos waived his entitlement to receive the Change of Control Payment and agreed to restructure such payment entitlement on the terms set forth in a new employment agreement with the Company. In August 2019, we entered into an employment agreement with Mr. Tassiopoulos (the "Employment Agreement"). The Employment Agreement provides for Mr. Tassiopoulos to earn an annual base salary of CAD$310,000, which has been his base salary since his appointment as Chief Executive Officer on November 14, 2018. Mr. Tassiopoulos will also be eligible to receive bonuses and to participate in the Company's various stock and other retention compensation plans as determined by our board of directors. In addition, Mr. Tassiopoulos will be entitled to a financing bonus (the "M&A Payment") equal to 3% of the total value of any transaction relating to the purchase of all of the shares or all or substantially all the assets of the Company that is completed during Mr. Tassiopoulos' tenure with the Company and for a period of six months following his ceasing to be an executive of the Company, unless he is terminated by the Company for cause. The Employment Agreement also provides that if we terminate Mr. Tassiopoulos' employment without cause or for good reason (including a change in control of the Company), then we will be obligated to pay him the Change of Control Payment and the M&A Payment. In addition, the Company shall provide Mr. Tassiopoulos with any pro-rated bonus or other incentives as of the date of termination. These severance benefits shall be paid in a lump sum within 30 days of his termination. If we terminate his employment for good reason, all options or awards issued to Mr. Tassiopoulos shall automatically vest on the date of termination. The Employment Agreement has an indefinite term.

Kurt L. Kalbfleisch. In connection with the Overland divestiture, Mr. Kalbfleisch ceased to be an employee of the Company, but continued to serve as the Company's Chief Financial Officer under a transition services agreement with Overland. As a result of the Overland divestiture, Mr. Kalbfleisch ceased to be employed as Chief Financial Officer of the Company on November 13, 2018, and as a result of such change of control transaction, he was entitled to receive payment in the amount of $360,000 (reduced from the original entitlement of $450,000), from the Company and certain other health benefits (the "COC Payment") pursuant to an employment agreement with the Company in effect at the time of the Overland divestiture. In August 2019, we entered into a change of control agreement with Mr. Kalbfleisch (the "COC Agreement") which provides that if Mr. Kalbfleisch is providing services to the Company at the time of a change of control of the Company, Mr. Kalbfleisch shall be entitled, in his sole discretion, to provide written notice to the Company at any time within 30 days of receiving written notice of such event, to receive the COC Payment. The COC Agreement also provides that if (i) the Company terminates Mr. Kalbfleisch' s services without cause or Mr. Kalbfleisch terminates his services with the Company for good reason or (ii) Mr. Kalbfleisch becomes unable to provide services to the Company, either due to prolonged sickness, permanent disability or death, the Company shall pay Mr. Kalbfleisch the COC Payment.

Joseph L. O'Daniel. Mr. O'Daniel, who became our President in November 2018, is an at-will employee and his employment may be terminated by us for any reason, with or without notice. Mr. O'Daniel currently earns an annual salary of $200,000 per year and is eligible to receive an annual bonus based upon the achievement of financial and management objectives reasonably established by our Board of Directors or an authorized committee of our Board of Directors. As approved by the Board of Directors, his annual bonus target is 100% of the greater of $200,000 or his base salary as of the end of the applicable fiscal quarter or year in which the bonus is earned. Upon his joining us in January 2017, we entered into an offer letter with Mr. O'Daniel that provided for him to be paid a retention bonus in the amount of $700,442 if he continued employment with us through January 12, 2018. In February 2018, Mr. O'Daniel received an award of fully vested shares of our common stock valued at $181,284 in lieu of cash for a portion of the retention bonus. In September 2019, the Company and Mr. O'Daniel entered into a retention agreement (the "Retention Agreement") with respect to the outstanding portion of the retention bonus ("Outstanding Retention Bonus"). Under the Retention Agreement, in the event of a change of control of the Company and provided no payment has been made under (i), (ii) or (iii) below, Mr. O'Daniel shall be entitled, in his sole discretion, to provide written notice to the Company at any time within 30 days of such event, to receive an amount equal to the Outstanding Retention Bonus. The Retention Agreement also provides that Mr. O'Daniel shall be entitled to the Outstanding Retention Bonus if (i) he becomes unable to provide services to the Company, either due to prolonged sickness, permanent disability or death, or (ii) the Company terminates him without cause, or (iii) he resigns his employment for good reason.

2015 Performance Incentive Plan

Employees, officers, directors and consultants that provide services to us or one of our subsidiaries may be selected to receive awards under the 2015 Plan. Our Board of Directors has broad authority to administer the 2015 Plan, including the authority to select participants and determine the types of awards that they are to receive, determine the grants levels, vesting and other terms and conditions of awards, and construe and interpret the terms of the 2015 Plan and any agreements relating to the plan.

A total of 1,255,860 common shares are authorized for issuance with respect to awards granted under the 2015 Plan (not including shares subject to terminated awards under our Second Amended and Restated Stock Option Plan that become available for issuance under the 2015 Plan). In addition, the share limit will automatically increase on the first trading day in January of each calendar year during the term of the 2015 Plan by an amount equal to the lesser of (i) ten percent (10%) of the total number of common shares issued and outstanding on December 31 of the immediately preceding calendar year, or (ii) such number of common shares as may be established by the Board. Awards under the 2015 Plan may be in the form of incentive or nonqualified stock options, stock appreciation rights, stock bonuses, restricted stock, stock units and other forms of awards including cash awards. Awards under the plan generally will not be transferable other than by will or the laws of descent and distribution, except that the plan administrator may authorize certain transfers.

The number and type of shares available under the 2015 Plan and any outstanding awards, as well as the exercise or purchase prices of awards, are subject to customary adjustments in the event of stock splits, stock dividends and certain other corporate transactions. Generally, and subject to limited exceptions set forth in the 2015 Plan, if we dissolve or undergo certain corporate transactions such as a merger, business combination or other reorganization, or a sale of all or substantially all of our assets, all awards then-outstanding under the 2015 Plan will become fully vested or paid, as applicable, and will terminate or be terminated in such circumstances, unless the Board of Directors provides for the assumption, substitution or other continuation of the award. The Board of Directors also has the discretion to establish other change in control provisions with respect to awards granted under the 2015 Plan.

The Board of Directors may amend or terminate the 2015 Plan at any time, but no such action will affect any outstanding award in any manner materially adverse to a participant without the consent of the participant. Plan amendments will be submitted to stockholders for their approval as required by applicable law or deemed advisable by the Board of Directors. If not earlier terminated by the Board of Directors, the 2015 Plan will terminate on May 14, 2025. The 2015 Plan is not exclusive - the Board of Directors may grant stock and performance incentives or other compensation, in stock or cash, under other plans or authority.

Compensation of Directors

The following table provides compensation information for the members of our Board of Directors during 2019 who were not employed by us or any of our subsidiaries (“non-employee directors”). Peter Tassiopoulos is a named executive officer who also served on the Board of Directors during 2019. The 2019 compensation information for Mr. Tassiopoulos is presented in the Summary Compensation Table above and he was not entitled to any additional compensation for his service on the Board during fiscal 2019.

Name	Fees Earned ($)	Stock Awards(1) ($)	All Other Compensation ($)	Total ($)
Cheemin Bo-Linn	50,000	—	—	50,000
Vivekanand Mahadevan	50,000	—	—	50,000
Duncan J. McEwan	40,000	—	—	40,000

(1) At the end of fiscal 2019, our non-employee directors did not have any outstanding equity awards.

The non-employee board members are paid $10,000 per quarter for their service on the Board except that the Chair of the Audit Committee and the Lead Board member are paid $12,500 per quarter for their service on the Board. The Board retains complete discretion to adopt or modify our programs for providing cash and/or equity-based compensation to our non-employee directors as it deems appropriate from time to time.

As of June 30, 2019, the Company owed our non-employee directors, an aggregate amount of $370,000 for directorship services (the “Outstanding Board Fees”). In August 2019, we entered into COC Agreements with each of our non-employee directors. The COC Agreements provide that in the event of a change of control of the Company and provided no payment has been made under (i) or (ii) below, the Board Member shall be entitled, in their sole discretion, to provide written notice to the Company at any time within 30 days of such event, to receive an amount equal to the Outstanding Board Fees due them. The COC Agreements also provide that the Board Member shall be entitled to the Outstanding Board Fees due them if (i) the Board Member becomes unable to serve on the board of directors of the Company, either due to prolonged sickness, permanent disability or death or (ii) is not reappointed as a member of the board at a duly convened meeting of its shareholders.

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

Equity Compensation Plan Information

The following table provides information about our equity compensation plans as of the last day of fiscal 2019, unless otherwise footnoted below. The Company maintains its 2012 Option Plan ("2012 Plan"), 2015 Performance Incentive Plan ("2015 Plan"), and 2015 Employee Stock Purchase Plan ("ESPP"), which have been approved by the Company's shareholders. No new awards may be granted under the 2012 Plan.

Plan Category	(a) Number of Common Shares to be Issued Upon Exercise of Outstanding Options and Rights	(b) Weighted-average Exercise Price of Outstanding Options and Rights[1]	(c) Number of Common Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Shares Reflected in Column (a))
Equity compensation plans approved by our shareholders[2]	2,685	$766.59	233,368
Equity compensation plans not approved by our shareholders[3]	20,713	—	—
Total	23,398		233,368

(1) The weighted-average exercise prices do not reflect shares subject to outstanding awards of restricted stock units.

(2) Of the aggregate number of shares that are to be issued upon exercise of outstanding options and rights as reported in column (c), 195,868 were available under the 2015 Plan and 37,500 were available under the ESPP. The 2015 Plan permits the granting of the following types of incentive awards: stock options, stock appreciation rights, restricted shares, and stock units.

(3) These figures represent stock units (the "Inducement Stock Units") granted to certain employees as an inducement to their commencing employment with us as provided under the Nasdaq listing rules. The Inducement Stock Units are generally subject to the same terms as stock units granted under the 2015 Plan. The Inducement Stock Units vest over three years and are subject to earlier termination in the case of termination of the employee's employment or a change in control of the Company.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common shares as of May 6, 2020 by each shareholder known to us to beneficially own more than 5% of our common shares, each director, and each executive officer named in the Summary Compensation table above, and all directors and executive officers of Sphere 3D as a group:

Beneficial Owner[1]	Number of Shares Beneficially Owned[2]		Percent[3]
Brian K. McWilliams	397,320	(4)	8.2%
105 Harrison Garden Boulevard, Suite GV105			
Toronto, Ontario M2N 0C3			
Peter Tassiopoulos	1,000	(5)	*
Kurt L. Kalbfleisch	18,885	(5)	*
Joseph L. O'Daniel	10,625		*
Cheemin Bo-Linn	4,544		*
Duncan J. McEwan	3,596		*
Vivekanand Mahadevan	3,185		*
Current directors and executive officers as a group (6 persons)	41,835	(6)	*

* Less than 1%

(1) Except as otherwise indicated, the persons named in this table have sole voting and investment power with respect to all common shares shown as beneficially owned by them. Unless otherwise noted, the address for each beneficial owner is: c/o Sphere 3D Corp., 895 Don Mills Road, Bldg.2, Suite 900, Toronto, Ontario, Canada M3C 1W3.

(2) Under the rules of the Securities and Exchange Commission, a person is deemed to be the beneficial owner of shares that can be acquired by such person within 60 days upon the exercise of options or warrants and vesting of stock awards.

(3) Calculated on the basis of 4,597,405 shares of common stock outstanding as of May 6, 2020, provided that any additional shares of common stock that a stockholder has the right to acquire within 60 days after May 6, 2020 are deemed to be outstanding for the purpose of calculating that stockholder’s percentage beneficial ownership.

(4) These shares include 77,000 common shares and the right to acquire 89,320 common shares upon conversion of a debenture held by Torrington Financial Services Limited (“Torrington”) and 97,020 common shares and the right to acquire 133,980 common shares upon conversion of a debenture held by Lallande Poydras Investment Partnership (“Lallande”). Mr. McWilliam is the Chief Executive Officer and a Director of Torrington and a Managing Partner of Lallande and as such has investment and voting power over these shares. These shares do not include the right to acquire 77,000 shares upon the exercise of a warrant held by Torrington or the right to acquire 231,000 shares upon the exercise of a warrant held by Lallande because both warrants include a provision which prevents the warrant holder from exercising the warrant if the number of shares held by the warrant holder after exercise would equal or exceed 5% of the outstanding shares of the Company.

(5) These shares include the right to acquire shares upon exercise of 500 stock options.

(6) These shares include the right to acquire shares upon exercise of 1,000 stock options beneficially owned by our executive officers.

Item 13. Certain Relationships and Related Transactions, and Directors Independence

Share Purchase Agreement. On April 21, 2020, two investors, one of which was an investor of the below Offering, entered into share purchase agreements to acquire 330,000 common shares of the Company. As a result of this transaction, the investor participating in the Offering will hold enough common shares be classified as a related party of the Company. Originally, the common shares were held by a vendor of the Company subject to the October 2019 related party subscription agreement the Company entered into with such vendor and issued 330,000 common shares of the Company at $1.07 per share to the vendor in exchange for the satisfaction of certain accounts payable. In the second quarter of 2020, the aggregate amount of the obligations owed by the Company to the vendor were reduced by $157,000, the actual cash proceeds received by the vendor from the share purchase agreements.

Subscription Agreements. On March 23, 2020, the Company entered into subscription agreements by and among the Company and the investors party thereto, including the Advisor (defined below), for the purchase and sale of 725 units (collectively, the "Units" and individually, a "Unit") for aggregate gross proceeds of up to $725,000 (the "Offering"), with each Unit consisting of (a) a 6% convertible debenture in the principal amount of $1,000, which is convertible at $0.6495 per share into 1,540 common shares of the Company, and (b) a warrant to purchase 1,540 common shares of the Company exercisable at any time on or before the third year anniversary date at an exercise price of $0.60 per share. The warrant includes a provision restricting the warrant holder from exercising it if the aggregate number of common shares held by the warrant holder equals or exceeds 5.0% of the issued and outstanding shares of the Company, calculated on a partially converted basis (i.e., assuming the conversion of all rights to receive common shares of the Company held by the warrant holder).

In connection with the Offering and as compensation for the Advisor's services, the Company issued to the Advisor convertible debentures equal to $58,000 and convertible into 89,320 common shares and with other terms also substantially the same as the investors. The Company received cash proceeds of $575,000 from the Offering, and a participant of the offering, a related party, paid directly $150,000 to a financial consultant for a prepayment of future services to the Company. The Company intends to use the remaining proceeds from the Offering for general corporate and working capital purposes.

Between April 7, 2020 and April 24, 2020, the Company converted $377,000 of convertible debentures and issued 580,580 common shares of the Company, of which 271,040 common shares were issued to related parties.

Business Advisory Agreement. On February 13, 2020, the Company entered into a business advisory agreement with Torrington Financial Services Ltd (the "Advisor"), a financial adviser to the Company and a participant of the investors party thereto below Offering. As a result of the March 23, 2020 transaction, the Advisor and its related entities who participated in the Offering became a related party of the Company.

Related Party Conversion Agreement and Series C Preferred Shares. On October 31, 2019, the Company entered into a conversion agreement by and among the Company, HVE and Overland under which Overland agreed to convert the following debt, accrued payables and prepayment of future goods and services into 1,600,000 Series C Preferred Shares of the Company valued at $1.00 per share: (i) principal and accrued interest of $520,000 under the Secured Promissory Note dated November 13, 2018 by and among the Company, HVE and Overland; (ii) accrued fees of $632,000 under the Transition Service Agreement ("TSA") dated November 13, 2018 by and among the Company and Overland; and (iii) prepayment of $448,000 for future goods and services under the TSA.

As of December 31, 2019, the TSA has a remaining prepaid balance of $345,000. Net expense incurred by the Company related to the TSA was approximately $525,000 and $149,000 for the years ended December 31, 2019 and 2018, respectively, and was included in continuing operations.

Related Party Subscription Agreement. In October 2019, the Company entered into a related party subscription agreement and issued 330,000 common shares of the Company at $1.07 per share to a vendor in exchange for the satisfaction of certain accounts payable. The aggregate amount of the obligations shall be reduced by the cash proceeds actually received by the vendor from the sale of the shares by the vendor.

Related Party Liability Forgiveness. In August 2019, the Company entered into agreements with certain executives of the Company and the Company's Board of Directors to extinguish certain accrued liabilities. The Company wrote off $1.7 million of outstanding liabilities and recorded a gain on forgiveness of liabilities, which is included in other income, net.

Series B Preferred Shares. In July 2019, following the filing of the Articles of Amendment to create the Series B Preferred Shares, the Company entered into a share exchange agreement (the "Share Exchange Agreement") with FBC Holdings SARL ("FBC Holdings"), a related party, to exchange 6,500,000 Series A Preferred Shares held by FBC Holdings for 6,500,000 Series B Preferred Shares. In July 2019, in connection with the Share Exchange Agreement, the Company entered into an amendment to the Exchange and Buy-Out Agreement by and among the Company, FBC Holdings, Silicon Valley Technology Partners, Inc. ("SVTP") and MFV such that the rights and obligations under the Exchange and Buy-Out Agreement would apply to the Series B Preferred Shares in respect of which the Series A Preferred Shares were exchanged under the Share Exchange Agreement. In October 2019, FBC Holdings, as the sole shareholder of Series B Shares, irrevocably waived its entitlement to a mandatory redemption feature of the Series B Preferred Shares.

In August 2019, the Company issued 343,778 Series B Preferred Shares with a fair value of $343,778 to FBC Holdings in satisfaction of accrued dividends at such date. For the years ended December 31, 2019 and 2018, there was related party interest expense of $292,000 and $71,000, respectively, related to Series A Preferred Shares dividends.

The common shares issuable upon the conversion of the Series B Preferred Shares may constitute more than 20% of the common shares of the Company currently outstanding and may result in a change of control of the Company, and therefore the Company will seek shareholder approval for the issuance of all common shares issuable upon conversion of the Series B Preferred Shares; provided, however, that the Company shall not seek shareholder approval unless such approval would occur after the six-month anniversary of the initial issue date of the Preferred Shares. In the event shareholder approval is not obtained, FBC Holdings and its affiliates will not be entitled to convert such Series B Preferred Shares into common shares, but any unaffiliated transferee may convert all or any part of the Series B Preferred Shares held by such transferee into the number of fully paid and non-assessable common shares that is equal to the number of Series B Preferred Shares to be converted multiplied by the Conversion Rate in effect on the date of conversion; provided that, (x) after such conversion, the common shares issuable upon such conversion, together with all common shares held by such third party transferee that are or would be deemed to be aggregated under the rules of the Nasdaq Stock Market, in the aggregate would not exceed 19.9% of the total number of common shares of the Company then outstanding and (y) such conversion and issuance would not otherwise violate or cause the Company to violate the Company's obligations under the rules or regulations of the Nasdaq Stock Market.

Related party note payable. In November 2018, the Company entered into a $500,000 note payable held by SVTP. The note payable bore an interest at a rate of 8.0% per annum. As discussed above, on October 31, 2019, the Company entered into a conversion agreement by and among the Company, HVE and Overland under which Overland agreed to convert the outstanding principal and accrued interest into Series C Preferred Shares of the Company. As of December 31, 2019, the outstanding debt balance was zero.

Related party unsecured notes payable. In January 2019, the Company entered into two unsecured notes payable, for an aggregate of $523,000 with two employees of the Company. Each of the notes payable bore interest at a rate of 2.0% per annum payable annually. For the year ended December 31, 2019, the Company issued 410,158 common shares with a value of $529,000 for the settlement of the outstanding notes and interest payable. At December 31, 2019, the notes payable balances were zero.

Purchase Agreement. In February 2018, the Company, Overland, and SVTP (formerly Silicon Valley Technology Partners LLC), a Delaware corporation established by Eric Kelly, the Company's former Chief Executive Officer and Chairman of the Board of Directors, entered into a share purchase agreement (the "Purchase Agreement"). On November 13, 2018, pursuant the Purchase Agreement, the Company sold to SVTP all of the issued and outstanding shares of capital stock of Overland in consideration for (i) the issuance to the Company from SVTP shares of Series A Preferred Stock ("SVTP Preferred Shares") representing 19.9% of the outstanding shares of capital stock of SVTP as of the closing with a value of $2.1 million, (ii) the release of the Company from outstanding debt obligations totaling $41.7 million assumed by SVTP, and (iii) $1.0 million in cash proceeds from SVTP. In connection with the closing of the Purchase Agreement, the Company entered into a Conversion Agreement, by and between the Company and FBC Holdings, pursuant to which $6.5 million of the Company's outstanding secured debt was converted into 6,500,000 Series A Preferred Shares.

Exchange and Buyout Agreement. In November 2018, in connection with the divestiture of Overland, the Company the entered into an Exchange and Buy-Out Agreement (the "Exchange Agreement"), between the Company, FBC Holdings, SVTP, and MFV. Under the terms of the Exchange Agreement, (i) the Company granted FBC Holdings the right to exchange up to 2,500,000 of the Company's Preferred Shares held by FBC Holdings for up to all of the SVTP Preferred Shares held by the Company (the "Exchange Right"), with such Exchange Right expiring within two years of the November 2018 closing, and (ii) MFV and SVTP have the right to purchase up to 2,120,301 of the SVTP Series A Preferred Shares held by FBC Holdings plus up to 2,500,000 Preferred Shares held by FBC Holdings (or, following exercise of the Exchange Right by FBC Holdings, the SVTP shares held by FBC Holdings) (the "Buy-out Right"), with such Buy-out Right expiring within one year of the November 2018 closing. The Buy-out Right was not exercised before the November 2019 expiration.

In connection with the Exchange Agreement, the Company entered into a security and pledge agreement between the Company and FBC Holdings, pursuant to which, among other things, the Company granted a security interest to FBC Holdings in all the SVTP Preferred Shares held by the Company to secure the Company's obligations under the Exchange Agreement.

Assignment of Credit Agreement. In April 2016, the Company entered into a Credit Agreement with Opus Bank for a term loan. On June 6, 2018, the Credit Agreement was assigned by Opus Bank to Colbeck. On August 16, 2018, the Credit Agreement was assigned by Colbeck to FBC Holdings, a related party. The Credit Agreement had a 13.25% simple annual interest rate. On November 13, 2018, the Company closed the transactions contemplated by the Purchase Agreement and, in connection therewith, SVTP assumed the obligations of the Company under the Credit Agreement, which had an outstanding balance, including accrued interest and debt cost, of $20.4 million at such time. Further, in connection with of the closing of the Purchase Agreement, Overland, Tandberg Data GMBH, SVTP, and FBC Holdings amended and restated the Credit Agreement pursuant to which the Company was a third party beneficiary of certain provisions therein.

For the year ended December 31, 2018, interest expense, including amortization of debt costs, on the credit facilities was $2.8 million, of which $0.5 million was related party interest expense, and is included on in the statement of operation in net loss from discontinued operations.

Registered Direct Offering and Concurrent Private Placement. In March 2018, the Company entered into warrant exchange agreements, in a privately negotiated exchange under Section 4(a)(2) of the Securities Act of 1933, as amended, pursuant to which the Company issued 178,875 common shares in exchange for the surrender and cancellation of the Company's outstanding March 24, 2017 warrants (the "Exchange"). Immediately after the Exchange, the previously issued warrants became null and void. A related party participated in the Exchange by acquiring 37,500 common shares in exchange for the cancellation of a warrant to purchase 34,091 common shares.

Related Party Secured Note. In April 2016, the Company modified its secured note with FBC Holdings, pursuant to which the holder made an additional advance and principal amount under the secured note amount was increased to $24.5 million. The secured note had a 8.0% simple annual interest rate. The obligations under the secured note were secured by substantially all assets of the Company. On November 13, 2018, in connection with the closing of the Purchase Agreement, the Company entered into a Conversion and Royalty Agreement, by and among the Company, SVTP and FBC Holdings pursuant to which, among other things, SVTP assumed the obligations and liabilities of the Company with regard to $19.0 million of the secured note, including accrued interest expense, and effective upon the execution of such Conversion and Royalty Agreement, the Company and its subsidiaries were automatically released as obligors and guarantors under the secured note. Further, in connection with the closing, the Company entered into a Conversion Agreement, by and between the Company and FBC Holdings, pursuant to which the remaining $6.5 million of the Company's secured debt was converted into 6,500,000 Series A Preferred Shares, subsequently converted in 2019 to 6,500,000 Series B Preferred Shares.

For the year ended December 31, 2018, we issued 219,434 common shares for the settlement of fees associated with 2018 amendments to the loan and accrued interest expense. For the year ended December 31, 2018, interest expense, including amortization of debt costs, on the convertible note was $2.5 million and is included on the statements of operations in net loss from discontinued operations.

Related Party Debt. In December 2017, the Company entered into a $2.0 million subordinated promissory note with MFV. The promissory note had a 12.5% simple annual interest rate. On November 13, 2018, pursuant to the Purchase Agreement, the promissory note balance of $2.3 million, including interest paid in kind, was assumed by SVTP. For the year ended December 31, 2018, interest expense, including amortization of debt costs, on the related party promissory note was $0.3 million and is included on the statements of operations in net loss from discontinued operations.

Indemnification of Our Executive Officers and Directors

In accordance with the by-laws of the Company, directors and officers are each indemnified by the Company against all liability and costs arising out of any action or suit against them from the execution of their duties, provided that they have carried out their duties honestly and in good faith with a view to the best interests of the Company and have otherwise complied with the provisions of applicable corporate law.

Director Independence

The Board has determined that the following current directors are independent within the meaning of NI 58-101 and NI 52-110 and NASDAQ Marketplace Rule 5605(a)(2): Cheemin Bo-Linn, Vivekanand Mahadevan and Duncan J. McEwan. The Board has determined that Peter Tassiopoulos is not independent because of his position as Chief Executive Officer of the Company. As a result, the Board is currently comprised of three independent directors and a majority of independent directors.

Item 14. Principal Accounting Fees and Services

The aggregate fees incurred by the Company's current external auditor, Smythe LLP, in each of the last two years for audit and other fees are as follows (in thousands):

	2019	2018
Audit fees[(1)]	$ 23	$ —
Audit related fees[(2)]	—	—
Tax fees[(3)]	—	—
All other fees[(4)]	—	—
	$ 23	$ —

(1) Audit fees consist of fees billed for professional services rendered in connection with the audit of our annual consolidated financial statements, which were provided in connection with statutory and regulatory filings or engagements. In 2019, the primary auditor changed from Moss Adams LLP to Smythe LLP.

(2) Audit-related fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements, and are not reported under audit fees.

(3) Tax fees consist of fees billed for professional services rendered for IRS Section 302 net operating loss limitation study.

(4) All other fees consist of fees for products and services other than the services reported above. There were no such services rendered to us.

The aggregate fees incurred by the Company's predecessor external auditor, Moss Adams LLP, in each of the last two years for audit and other fees are as follows (in thousands):

	2019	2018
Audit fees[(1)]	$ 32	$ 482
Audit related fees[(2)]	1	46
Tax fees[(3)]	—	30
All other fees[(4)]	—	—
	$ 33	$ 558

(1) Audit fees consist of fees billed for professional services rendered in connection with the audit of our annual consolidated financial statements, which were provided in connection with statutory and regulatory filings or engagements. In 2019, the primary auditor changed from Moss Adams LLP to Smythe LLP.

(2) Audit-related fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements, and are not reported under audit fees.

(3) Tax fees consist of fees billed for professional services rendered for IRS Section 302 net operating loss limitation study.

(4) All other fees consist of fees for products and services other than the services reported above. There were no such services rendered to us.

Pre-Approval Policies and Procedures

The Audit Committee has the authority to pre-approve all non-audit services to be provided to the Company by its independent auditor. All services provided by Smythe LLP during the year 2019 and Moss Adams LLP during the years 2019 and 2018, were pre-approved by the Audit Committee.

PART IV

Item 15. Exhibits, Financial Statements Schedules

(a) Documents filed as part of this report.

(1) Financial Statements.

Reports of Independent Registered Public Accounting Firms	F-1
Consolidated Balance Sheets as of December 31, 2019 and 2018	F-5
Consolidated Statements of Operations for the Years Ended December 31, 2019 and 2018	F-6
Consolidated Statements of Comprehensive Loss for the Years Ended December 31, 2019 and 2018	F-7
Consolidated Statements of Cash Flows for the Years Ended December 31, 2019 and 2018	F-8
Consolidated Statements of Shareholders' Equity (Deficit) for the Years Ended December 31, 2019 and 2018	F-10
Notes to Consolidated Financial Statements	F-11

(2) Financial Statement Schedules.

Schedules not listed above have been omitted because they are not applicable or are not required or the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

(3) Exhibits.

List of Exhibits required by Item 601 of Regulation S-K. See part (b) below.

(b) Exhibits.

Exhibit Number	Description	Filed Herewith	Incorporated by Reference		
			Form	File No.	Date Filed
1.1	Underwriting Agreement, dated April 13, 2018 by and among the Company and the several underwriters named in Schedule I thereto		8-K	001-36532	4/17/2018
2.1*	Share Purchase Agreement dated February 20, 2018 between Sphere 3D Corp., Overland Storage, Inc., and Silicon Valley Technology Partners LLC		8-K	001-36532	2/21/2018
2.2	Amendment to Share Purchase Agreement, by and among Sphere 3D Corp., Overland Storage, Inc., and Silicon Valley Technology Partners, Inc., dated as of August 21, 2018		8-K	001-36532	8/21/2018
2.3	Second Amendment to Share Purchase Agreement, by and among Sphere 3D Corp., Overland Storage, Inc., and Silicon Valley Technology Partners, Inc., dated as of November 1, 2018		8-K	001-36532	11/2/2018
3.1	Certificate and Articles of Amalgamation		6-K	001-36532	3/25/2015
3.2	Certificate of Amendment to the Articles of Amalgamation of the Company		6-K	001-36532	7/17/2017
3.3	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	10/2/2018
3.4	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	11/5/2018
3.5	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	11/14/2018
3.6	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	7/12/2019
3.7	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	11/8/2019
3.8	Certificate of Amendment to the Articles of Amalgamation of the Company		8-K	001-36532	5/8/2020
3.9	By-Law No. 1, as Amended		6-K	001-36532	7/17/2017
3.10	By-Law No. 2		6-K	001-36532	5/12/2017
4.1	Specimen certificate evidencing Common Shares		F-3	333-210735	4/13/2016
4.2	Form of Warrant		6-K	001-36532	6/2/2015
4.3	Form of Warrant		6-K	001-36532	8/15/2017
4.4	Form of Warrant		8-K	001-36532	4/17/2018
4.5	Form of Warrant		8-K	001-36532	3/27/2020
4.6	Form of Debenture		8-K	001-36532	3/27/2020
4.7	Form of Warrant		8-K	001-36532	5/4/2020

Exhibit Number	Description	Filed Herewith	Incorporated by Reference		
			Form	File No.	Date Filed
4.8	Registered Securities	X			
10.1	Form of Purchase Agreement		8-K	001-36532	5/14/2019
10.2	Form of Purchase Agreement		8-K	001-36532	8/21/2019
10.3	Form of Subscription Agreement		10-Q	001-36532	11/14/2019
10.4	Conversion Agreement, dated November 13, 2018, by and between Sphere 3D Corp. and FBC Holdings SARL		8-K	001-36532	11/14/2018
10.5	Conversion and Royalty Agreement, dated November 13, 2018, by and among, Sphere 3D Corp., FBC Holdings SARL and Silicon Valley Technology Partners, Inc.		8-K	001-36532	11/14/2018
10.6	Share Exchange and Buy-Out Agreement, dated November 13, 2018, by and among Sphere 3D Corp., FBC Holdings SARL, MF Ventures LLC.		8-K	001-36532	11/14/2018
10.7	Security and Pledge Agreement, dated November 13, 2018, by and between Sphere 3D Corp. and FBC Holdings SARL		8-K	001-36532	11/14/2018
10.8	Form of Conversion of Debt Agreement dated August 15, 2019 between Sphere 3D Corp., Chris Cunningham and Eric Cunningham		10-Q	001-36532	11/14/2019
10.9	Promissory Note and Security Agreement dated December 19, 2018 between HVE Inc., a subsidiary of Sphere 3D Corp., and Citizens National Bank of Texas		10-K	001-36532	4/1/2019
10.10	Debt Modification Agreement dated July 2, 2019 between between HVE Inc., a subsidiary of Sphere 3D Corp., and Citizens National Bank of Texas		10-Q	001-36532	8/14/2019
10.11	Pledge Agreement dated November 13, 2018 by and among Sphere 3D and Overland Storage, Inc.		8-K	001-36532	11/14/2018
10.12	Share Exchange Agreement between FBC Holdings SARL and Sphere 3D Corp. dated July 12, 2019		8-K	001-36532	7/12/2019
10.13	Amendment to the Share Exchange and Buyout Agreement by and among Sphere 3D Corp., FBC Holdings SARL, Silicon Valley Technology Partners Inc. and MF Ventures LLC dated July 12, 2019		8-K	001-36532	7/12/2019
10.14	Transition Services Agreement dated November 13, 2018 between the Company and Overland Storage, Inc.		10-K	001-36532	4/1/2019
10.15	Conversion Agreement between Sphere 3D Corp., HVE Inc. and Overland Storage, Inc. dated October 31, 2019		10-Q	001-36532	11/14/2019
10.16	Plano, Texas Lease Agreement dated March 25, 2016 between Unified ConneXions, Inc. and Prologis TLF (Dallas), LLC		10-K	001-36532	3/21/2018
10.17	Sphere 3D Second Amended and Restated Stock Option Plan		F-4	333-197569	7/23/2014
10.18	Sphere 3D Corp. 2015 Performance Incentive Plan, as amended		10-Q	001-36532	5/15/2019
10.19	Form of Inducement Restricted Stock Unit Agreement		S-8	333-209251	2/1/2016

Exhibit Number	Description	Filed Herewith	Incorporated by Reference		
			Form	File No.	Date Filed
10.20	Form of Executive Inducement Restricted Stock Unit Agreement		S-8	333-209251	2/1/2016
10.21+	Form of Executive Stock Option Agreement		10-K	001-36532	3/21/2018
10.22	Sphere 3D Corp. Employee Stock Purchase Plan, as amended		S-8	333-205236	1/29/2018
10.23+	Amended and Restated Employment Agreement between Sphere 3D Corp. and Kurt Kalbfleisch dated December 18, 2017		10-K	001-36532	3/21/2018
10.24+	Retention Agreement between Sphere 3D Corp. and Peter Tassiopoulos dated December 18, 2017		10-K	001-36532	3/21/2018
10.25+	Offer of Employment Letter between Sphere 3D Corp. and Joseph O'Daniel dated January 25, 2017		10-K	001-36532	4/1/2019
10.26	Form of Officer and Director Indemnity Agreement		10-K	001-36532	4/1/2019
10.27+	Employment Agreement between Sphere 3D Corp. and Peter Tassiopoulos dated August 15, 2019		8-K	001-36532	8/21/2019
10.28+	Amended and Restated Retention Agreement between Sphere 3D Corp. and Joseph O'Daniel dated September 15, 2019		10-Q	001-36532	11/14/2019
10.29+	Form of Change of Control Agreement between Sphere 3D Corp. and Cheemin Bo-Linn, Vic Mahadevan and Duncan McEwan dated August 15, 2019		10-Q	001-36532	11/14/2019
10.30+	Change of Control Agreement between the Company and Kurt Kalbfleisch dated August 15, 2019		10-Q	001-36532	11/14/2019
10.31	Form of Subscription Agreement		8-K	001-36532	3/27/2020
10.32	Extension Letter dated March 3, 2020 between between HVE Inc., a subsidiary of Sphere 3D Corp., and Citizens National Bank of Texas	X			
10.33	Business Advisory Agreement between Sphere 3D Corp. and Torrington Financial Services Ltd. dated February 13, 2020	X			
10.34	Letter dated October 31, 2019 to Sphere 3D Corp. from FBC SARL Regarding Series B Preferred Shares	X			
10.35	U.S. Small Business Administration Note dated April 9, 2020 between the Company and Citizens National Bank of Texas	X			
10.36	Form of Purchase Agreement		8-K	001-36532	5/4/2020
14.1	Code of Business Conduct and Ethics Policy		6-K	001-36532	4/1/2015
16.1	Letter of Moss Adams LLP		8-K	001-36532	7/31/2019
21.1	Subsidiaries of Registrant	X			
23.1	Consent of Independent Registered Public Accounting Firm	X			
23.2	Consent of Independent Registered Public Accounting Firm	X			
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			

Exhibit Number	Description	Filed Herewith	Incorporated by Reference		
			Form	File No.	Date Filed
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
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	X			
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	X			
101.DEF	XBRL Taxonomy Extension Definition Linkbase	X			
101.LAB	XBRL Taxonomy Extension Label Linkbase	X			
101.PRE	XBRL Taxonomy Presentation Linkbase	X			

* All schedules to the Purchase Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company hereby agrees to furnish supplementary a copy of any omitted schedule to the SEC upon request.

+ Management contract or compensation plan or arrangement.

Item 16. Form 10-K Summary

None.

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.

Sphere 3D Corp.

/s/ Peter Tassiopoulos

Peter Tassiopoulos
Chief Executive Officer

Date: May 13, 2020

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Peter Tassiopoulos and Kurt L. Kalbfleisch, jointly and severally, as his attorney-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this annual report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof. Pursuant to the requirements of the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ PETER TASSIOPOULOS **Peter Tassiopoulos**	Chief Executive Officer (Principal Executive Officer)	May 13, 2020
/s/ KURT L. KALBFLEISCH **Kurt L. Kalbfleisch**	Chief Financial Officer (Principal Financial and Accounting Officer)	May 13, 2020
/s/ CHEEMIN BO-LINN **Cheemin Bo-Linn**	Director	May 13, 2020
/s/ VIVEKANAND MAHADEVAN **Vivekanand Mahadevan**	Director	May 13, 2020
/s/ DUNCAN J. MCEWAN **Duncan McEwan**	Director	May 13, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
Sphere 3D Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated financial statements of Sphere 3D Corp. (the “Company”) which comprise the consolidated balance sheet as of December 31, 2019, and the related consolidated statements of operations, comprehensive loss, cash flows, and shareholders’ equity (deficit) for the year 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 at December 31, 2019, and the consolidated results of its operations and its consolidated cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Material Uncertainty Related to Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations, has a net working capital deficiency, and may not be able to amend, refinance, or pay off its debt and credit facilities, that raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Other Matter

The consolidated financial statements of the Company for the year ended December 31, 2018 were audited by another auditor who expressed an unmodified opinion on those consolidated financial statements on March 29, 2019.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases and share-based compensation effective January 1, 2019 due to adoption of Accounting Standards Codification 2016-02 (Topic 842) *Leases* and Accounting Standards Codification 2018-07 (Topic 718) *Compensation - Stock Compensation: Improvement to Nonemployee Share-Based Payment Accounting*.

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 audit. 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 audit 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 audit 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with United States of America generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility for the Consolidated Financial Statements

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States) ("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. Those standards also require that we comply with ethical requirements, including independence. We are required to be independent with respect to the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We are a public accounting firm registered with the PCAOB.

An audit includes performing procedures to assess the risks of material misstatements of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included obtaining and examining, on a test basis, audit evidence regarding the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances.

An audit also includes evaluating the appropriateness of accounting policies and principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a reasonable basis for our audit opinion.

/s/ Smythe LLP

Chartered Professional Accountants

Vancouver, Canada
May 13, 2020

We have served as the Company's auditor since 2019.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of
Sphere 3D Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Sphere 3D Corp. (the "Company") as of December 31, 2018, the related consolidated statement of operations, comprehensive loss, cash flows, and shareholders' deficit for the year 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, 2018, and the consolidated results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations, has a net working capital deficiency, and may not be able to amend, refinance, or pay off its debt and credit facilities, that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, in 2018 the Company changed its method of accounting for revenue recognition due to the adoption of Accounting Standards Codification Topic No. 606.

Emphasis of a Matter

As discussed in Notes 1 and 3 to the consolidated financial statements, on November 13, 2018, the Company completed a transaction resulting in the disposition of its formerly wholly owned subsidiary, Overland Storage, Inc. The operating results for the year ended December 31, 2018, of Overland Storage, Inc. have been presented as discontinued operations in the accompanying consolidated financial statements.

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 audit. 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 audit 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 audit 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

/s/ Moss Adams LLP

San Diego, California
March 29, 2019

We served as the Company's auditor from 2015 to 2019.

Sphere 3D Corp.

Consolidated Balance Sheets
(in thousands of U.S. dollars, except shares)

	December 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 149	$ 341
Accounts receivable, net	369	1,142
Inventories	753	1,230
Other current assets	670	784
Total current assets	1,941	3,497
Investment in affiliate	2,100	2,100
Property and equipment, net	2	6
Intangible assets, net	2,301	3,348
Goodwill	1,385	1,385
Other assets	677	950
Total assets	$ 8,406	$ 11,286
Liabilities and Shareholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 4,113	$ 4,600
Accrued liabilities	475	1,711
Accrued payroll and employee compensation	340	1,717
Deferred revenue	1,069	988
Debt, related party	—	500
Line of credit	491	100
Other current liabilities	158	23
Total current liabilities	6,646	9,639
Series A redeemable preferred shares	—	6,571
Deferred revenue, long-term	485	667
Deferred income taxes	16	16
Other non-current liabilities	19	—
Total liabilities	7,166	16,893
Commitments and contingencies (Note 15)		
Shareholders' equity (deficit):		
Series B preferred shares, no par value, unlimited shares authorized, 6,843,778 and 0 shares issued and outstanding at December 31, 2019 and December 31, 2018, respectively	6,844	—
Series C preferred shares, no par value, unlimited shares authorized, 1,600,000 and 0 shares issued and outstanding at December 31, 2019 and December 31, 2018, respectively	1,600	—
Common shares, no par value; 3,850,105 and 2,219,141 shares issued and outstanding as of December 31, 2019 and 2018, respectively	186,161	183,524
Accumulated other comprehensive loss	(1,769)	(1,816)
Accumulated deficit	(191,596)	(187,315)
Total shareholders' equity (deficit)	1,240	(5,607)
Total liabilities and shareholders' equity (deficit)	$ 8,406	$ 11,286

See accompanying notes to consolidated financial statements.

Sphere 3D Corp.

Consolidated Statements of Operations
(in thousands of U.S. dollars, except share and per share amounts)

	Year Ended December 31,	
	2019	2018
Revenue	$ 5,579	$ 9,030
Cost of revenue	3,725	7,351
Gross profit	1,854	1,679
Operating expenses:		
Sales and marketing	1,831	3,375
Research and development	2,052	3,425
General and administrative	3,925	7,499
Impairment of acquired intangible assets	70	—
	7,878	14,299
Loss from operations	(6,024)	(12,620)
Other income (expense):		
Interest expense, related party	(331)	(76)
Interest expense	(22)	—
Other income, net	2,096	10
Net loss from continuing operations	(4,281)	(12,686)
Net loss from discontinued operations	—	(13,522)
Net loss	$ (4,281)	$ (26,208)
Net loss per share:		
Continuing operations	$ (1.59)	$ (7.65)
Discontinued operations	—	(8.15)
Net loss per share basic and diluted	$ (1.59)	$ (15.80)
Shares used in computing net loss per share:		
Basic and diluted	2,692,510	1,658,862

See accompanying notes to consolidated financial statements.

Sphere 3D Corp.

Consolidated Statements of Comprehensive Loss
(in thousands of U.S. dollars)

	Year Ended December 31,	
	2019	2018
Net loss	$ (4,281)	$ (26,208)
Other comprehensive income:		
Foreign currency translation adjustment	47	34
Foreign currency reclassification to discontinued operations	—	131
Total other comprehensive income	47	165
Comprehensive loss	$ (4,234)	$ (26,043)

See accompanying notes to consolidated financial statements.

Sphere 3D Corp.

Consolidated Statements of Cash Flows
(in thousands of U.S. dollars)

	Year Ended December 31,	
	2019	**2018**
Operating activities:		
Net loss	$ (4,281)	$ (26,208)
Adjustments to reconcile net loss to cash used in operating activities:		
Forgiveness of related party liabilities	(1,745)	—
Forgiveness of liabilities	(551)	—
Loss on disposal of discontinued operations	—	4,281
Impairment of acquired intangible assets	70	—
Depreciation and amortization	1,030	3,857
Share-based compensation	637	1,637
Preferred shares interest expense, related party	291	—
Provision for losses on accounts receivable	187	88
Revaluation of subscription agreements	158	—
Amortization of debt issuance costs	—	1,532
Fair value adjustment of warrants	—	(259)
Payment in-kind interest expense, related party	—	875
Changes in operating assets and liabilities:		
Accounts receivable	773	2,867
Inventories	477	645
Accounts payable and accrued liabilities	317	7,076
Accrued payroll and employee compensation	182	(933)
Deferred revenue	(102)	(1,221)
Other assets and liabilities, net	744	(1,858)
Net cash used in operating activities	(1,813)	(7,621)
Investing activities:		
Proceeds from divestiture	—	1,000
Purchase of property and equipment	—	(56)
Net cash provided by investing activities	—	944
Financing activities:		
Proceeds from issuance of common shares and warrants	707	2,310
Proceeds from debt, related party	523	500
Proceeds from line of credit	391	100
Payment for issuance costs	—	(421)
Payments on debt, related party	—	(192)
Proceeds from exercise of outstanding warrants	—	147
Net cash provided by financing activities	1,621	2,444
Effect of exchange rate changes on cash	—	(24)
Net decrease in cash and cash equivalents	(192)	(4,257)
Cash and cash equivalents, beginning of year	341	4,598
Cash and cash equivalents, end of year	$ 149	$ 341

Sphere 3D Corp.

Consolidated Statements of Cash Flows (continued)
(in thousands of U.S. dollars)

	Year Ended December 31,	
	2019	**2018**
Supplemental disclosures of cash flow information:		
Cash paid for income taxes	$ —	$ 1,102
Cash paid for interest	$ 39	$ 762
Supplemental disclosures of non-cash investing and financing activities:		
Conversion of related party accrued interest to Series B preferred shares	$ 344	$ —
Conversion of related party liabilities to Series C preferred shares	$ 1,152	$ —
Issuance of Series C preferred shares for prepayment of services	$ 448	$ —
Issuance of common shares for settlement of liabilities	$ 764	$ 2,160
Issuance of common shares for related party liabilities	$ 529	$ 1,393
Conversion of secured debt to Series A redeemable preferred shares	$ —	$ 6,500
Costs accrued for issuance of common shares	$ —	$ 174

See accompanying notes to consolidated financial statements.

Sphere 3D Corp.

Consolidated Statements of Shareholders' Equity (Deficit)
(in thousands of U.S. dollars, except shares)

	Common Shares		Preferred Shares		Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balance at January 1, 2018	889,461	$ 173,871	—	$ —	$ (1,981)	$ (161,427)	$ 10,463
Adjustment to beginning retained earnings	—	—	—	—	—	320	320
Issuance of common shares and warrants for cash, net	492,600	2,097	—	—	—	—	2,097
Issuance of common shares for settlement of related party interest expense	219,434	1,393	—	—	—	—	1,393
Exercise of warrants	26,250	147	—	—	—	—	147
Issuance of common shares for warrant exchange	178,875	1,364	—	—	—	—	1,364
Issuance of common shares pursuant to the vesting of restricted stock units	71,579	—	—	—	—	—	—
Issuance of restricted stock awards	340,942	2,160	—	—	—	—	2,160
Share-based compensation	—	2,492	—	—	—	—	2,492
Other comprehensive income	—	—	—	—	165	—	165
Net loss	—	—	—	—	—	(26,208)	(26,208)
Balance at December 31, 2018	2,219,141	183,524	—	—	(1,816)	(187,315)	(5,607)
Issuance of subscription agreements for payment of liabilities	479,500	531	—	—	—	—	531
Issuance of common shares for cash	415,765	707	—	—	—	—	707
Issuance of common shares for settlement of related party debt and interest expense	410,158	529	—	—	—	—	529
Issuance of Series B preferred shares	—	—	6,500,000	6,500	—	—	6,500
Issuance of Series C preferred shares	—	—	1,600,000	1,600	—	—	1,600
Issuance of preferred shares dividends	—	—	343,778	344	—	—	344
Issuance of common shares pursuant to the vesting of restricted stock units	131,541	—	—	—	—	—	—
Issuance of restricted stock awards	194,000	233	—	—	—	—	233
Share-based compensation	—	637	—	—	—	—	637
Other comprehensive income	—	—	—	—	47	—	47
Net loss	—	—	—	—	—	(4,281)	(4,281)
Balance at December 31, 2019	3,850,105	$ 186,161	8,443,778	$ 8,444	$ (1,769)	$ (191,596)	$ 1,240

See accompanying notes to consolidated financial statements.

Sphere 3D Corp.

Notes to Consolidated Financial Statements

1. Organization and Business

Sphere 3D Corp. (the “Company”) was incorporated under the *Business Corporations Act (Ontario)* on May 2, 2007 as T.B. Mining Ventures Inc. On March 24, 2015, the Company completed a short-form amalgamation with a wholly-owned subsidiary. In connection with the short-form amalgamation, the Company changed its name to “Sphere 3D Corp.”

The Company delivers data management and desktop and application virtualization solutions through hybrid cloud, cloud and on premise implementations by its global reseller network. The Company achieves this through a combination of containerized applications, virtual desktops, virtual storage and physical hyper-converged platforms. The Company’s products allow organizations to deploy a combination of public, private or hybrid cloud strategies while backing them up with the latest storage solutions. The Company has a portfolio of brands including SnapCLOUD®, SnapServer®, SnapSync®, HVE, and V3®.

In February 2018, the Company, Overland Storage, Inc., a California corporation and a wholly owned subsidiary of the Company at such time (“Overland”), and Silicon Valley Technology Partners, Inc. (formerly Silicon Valley Technology Partners LLC) (“SVTP”), a Delaware corporation established by Eric Kelly, the Company’s former Chief Executive Officer and Chairman of the Board of Directors, entered into a share purchase agreement (as amended by that certain First Amendment to Share Purchase Agreement dated August 21, 2018, and as further amended by that certain Second Amendment to Share Purchase Agreement dated November 1, 2018, (the “Purchase Agreement”)), pursuant to which the Company agreed to sell to SVTP all of the issued and outstanding shares of capital stock of Overland. In connection with the closing of the Purchase Agreement, the Company filed an amendment to its articles of amalgamation setting forth the rights, privileges, restrictions and conditions of a new series of non-voting preferred shares of the Company being, an unlimited number of Series A Preferred Shares. On November 13, 2018, the Company closed the Purchase Agreement in consideration for (i) the issuance to the Company from SVTP shares of Series A Preferred Stock (“SVTP Preferred Shares”) representing 19.9% of the outstanding shares of capital stock of SVTP as of the closing with a value of $2.1 million, (ii) the release of the Company from outstanding debt obligations totaling $41.7 million assumed by SVTP, and (iii) $1.0 million in cash proceeds from SVTP. The Company entered into a Conversion Agreement between the Company and FBC Holdings SARL (“FBC Holdings”), a related party, pursuant to which $6.5 million of the Company’s outstanding secured debt was converted into 6,500,000 Series A Preferred Shares, which was subsequently converted in July 2019 to Series B Preferred Shares.

In July 2019, the directors of the Company passed a resolution authorizing the filing of articles of amendment to create a second series of preferred shares, being, an unlimited number of Series B Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto.

In October 2019, the directors of the Company passed a resolution authorizing the filing of articles of amendment to create a third series of preferred shares, being, an unlimited number of Series C Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto.

Management has projected that cash on hand will not be sufficient to allow the Company to continue operations beyond August 31, 2020 if we are unable to raise additional funding for operations. We expect our working capital needs to increase in the future as we continue to expand and enhance our operations. Our ability to raise additional funds through equity or debt financings or other sources may depend on the financial success of our current business and successful implementation of our key strategic initiatives, financial, economic and market conditions and other factors, some of which are beyond our control. No assurance can be given that we will be successful in raising the required capital at reasonable cost and at the required times, or at all. Further equity financings may have a dilutive effect on shareholders and any debt financing, if available, may require restrictions to be placed on our future financing and operating activities. If we require additional capital and are unsuccessful in raising that capital, we may not be able to continue our business operations and advance our growth initiatives, which could adversely impact our business, financial condition and results of operations.

Significant changes from the Company’s current forecasts, including but not limited to: (i) failure to comply with the terms and financial covenants in its debt facilities; (ii) shortfalls from projected sales levels; (iii) unexpected increases in product costs; (iv) increases in operating costs; (v) changes in the historical timing of collecting accounts receivable; and (vi) inability to maintain compliance with the requirements of the NASDAQ Capital Market and/or inability to maintain listing with the NASDAQ Capital Market could have a material adverse impact on the Company’s ability to access the level of funding necessary to continue its operations at current levels. If any of these events occurs or the Company is unable to generate sufficient cash from operations or financing sources, the Company may be forced to liquidate assets where possible and/or curtail, suspend or cease planned programs or operations generally or seek bankruptcy protection or be subject to an involuntary bankruptcy petition, any of, which would have a material adverse effect on the Company’s business, results of operations, financial position and liquidity.

The Company incurred losses from operations and negative cash flows from operating activities for the 12 months ended December 31, 2019, and such losses might continue for a period of time. Based upon the Company's current expectations and projections for the next year, the Company believes that it will not have sufficient liquidity necessary to sustain operations beyond August 31, 2020. These factors, among others, raise substantial doubt that the Company will be able to continue as a going concern. The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business.

2. Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements of the Company have been prepared by management in accordance with accounting principles generally accepted in the United States of America (“GAAP”), applied on a basis consistent for all periods. These consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly owned. All intercompany balances and transactions have been appropriately eliminated in consolidation.

In November 2018, the Company closed the Purchase Agreement related to its divestiture of Overland. The 2018 financial results of Overland have been reflected in the Company’s consolidated statements of operations as discontinued operations. The Company’s 2018 statement of cash flows is presented on a combined basis, including continuing and discontinued operations. Unless it is otherwise disclosed, all other disclosures in the consolidated financial statements are related to continuing operations.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period. Significant areas requiring the use of management estimates relate to the determination of provisions for impairment assessments of goodwill, other indefinite-lived intangible assets; deferred revenue; allowance for doubtful receivables; inventory valuation; warranty provisions; equity treatment of preferred shares; and litigation claims. Actual results could differ from these estimates.

Foreign Currency Translation

The financial statements of foreign subsidiaries, for which the functional currency is the local currency, are translated into U.S. dollars using the exchange rate at the consolidated balance sheet date for assets and liabilities and a weighted-average exchange rate during the year for revenue, expenses, gains and losses. Translation adjustments are recorded as other comprehensive income (loss) within shareholders’ equity (deficit). Gains or losses from foreign currency transactions are recognized in the consolidated statements of operations. Such transactions resulted in a loss of $22,000 and $320,000 in 2019 and 2018, respectively.

Cash Equivalents

Highly liquid investments with insignificant interest rate risk and original maturities of three months or less, when purchased, are classified as cash equivalents. Cash equivalents are composed of money market funds. The carrying amounts approximate fair value due to the short maturities of these instruments.

Accounts Receivable

Accounts receivable is recorded at the invoiced amount and is non-interest bearing. We estimate our allowance for doubtful accounts based on an assessment of the collectability of specific accounts and the overall condition of the accounts receivable portfolio. When evaluating the adequacy of the allowance for doubtful accounts, we analyze specific trade and other receivables, historical bad debts, customer credits, customer concentrations, customer credit-worthiness, current economic trends and changes in customers' payment terms and/or patterns. We review the allowance for doubtful accounts on a quarterly basis and record adjustments as considered necessary. Customer accounts are written-off against the allowance for doubtful accounts when an account is considered uncollectable. At both December 31, 2019 and 2018, allowance for doubtful accounts of $0.1 million was recorded.

Inventories

Inventories are stated at the lower of cost and net realizable value using the first-in-first-out method. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. We assess the value of inventories periodically based upon numerous factors including, among others, expected product or material demand, current market conditions, technological obsolescence, current cost, and net realizable value. If necessary, we write down our inventory for obsolete or unmarketable inventory by an amount equal to the difference between the cost of the inventory and the net realizable value.

Investment in Affiliate

The Company holds an investment in equity securities of a nonpublic company for business and strategic purposes. The equity securities do not have a readily determinable fair value and are carried at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The Company reviews its investment on a regular basis to determine if the investment is impaired. For purposes of this assessment, the Company considers the investee's cash position, earnings and revenue outlook, liquidity and management ownership, among other factors, in its review. If management's assessment indicates that an impairment exists, the Company estimates the fair value of the equity investment and recognizes in current earnings an impairment loss that is equal to the difference between the fair value of the equity investment and its carrying amount.

Property and Equipment

Property and equipment are recorded at cost. Depreciation expense is computed using the straight-line method. Leasehold improvements are depreciated over the shorter of the remaining estimated useful life of the asset or the term of the lease.

Expenditures for normal maintenance and repair are charged to expense as incurred, and improvements are capitalized. Upon the sale or retirement of property or equipment, the asset cost and related accumulated depreciation are removed from the respective accounts and any gain or loss is included in the results of operations.

The continuing operations of the Company had a nominal amount of property and equipment at both December 31, 2019 and 2018. Estimated useful lives for computer equipment and software are one to five years.

Goodwill and Intangible Assets

Goodwill represents the excess of consideration paid over the value assigned to the net tangible and identifiable intangible assets acquired. For intangible assets purchased in a business combination, the estimated fair values of the assets received are used to establish their recorded values. For intangible assets acquired in a non-monetary exchange, the estimated fair values of the assets transferred (or the estimated fair values of the assets received, if more clearly evident) are used to establish their recorded values. Valuation techniques consistent with the market approach, income approach and/or cost approach are used to measure fair value.

Purchased intangible assets are amortized on a straight-line basis over their economic lives of six to 25 years for channel partner relationships, three to nine years for developed technology, three to eight years for capitalized development costs, and two to 25 years for customer relationships as this method most closely reflects the pattern in which the economic benefits of the assets will be consumed.

Impairment of Goodwill and Intangible Assets

Goodwill and intangible assets are tested for impairment on an annual basis at December 31, or more frequently if there are indicators of impairment. Triggering events for impairment reviews may be indicators such as adverse industry or economic trends, restructuring actions, lower projections of profitability, or a sustained decline in our market capitalization. Intangible assets are quantitatively assessed for impairment, if necessary, by comparing their estimated fair values to their carrying values. If the carrying value exceeds the fair value, the difference is recorded as an impairment.

Revenue Recognition

The Company accounts for revenue pursuant to ASU 2014-09, *Revenue from Contracts with Customers* and all the related amendments ("Topic 606"). Under Topic 606, an entity is required to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and contract consideration will be recognized on a "sell-in basis" or when control of the purchased goods or services transfer to the distributor. On January 1, 2018, the Company elected to adopt this guidance using the modified retrospective method and it resulted in a cumulative adjustment reducing our accumulated deficit by approximately $0.3 million.

The Company generates revenue primarily from: (i) solutions for standalone storage and integrated hyper-converged storage; (ii) professional services; and (iii) warranty and customer services. The Company recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To determine revenue recognition for contracts with customers the Company performs the following five steps: (i) identify the promised goods or services in the contract; (ii) identify the performance obligations in the contract, including whether they are distinct in the context of the contract; (iii) determine the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies the performance obligations.

Approximately 70% of the Company's revenue is recognized when performance obligations under the terms of a contract with a customer are satisfied at a point in time. These contracts are generally comprised of a single performance obligation to transfer products. Accordingly, the Company recognizes revenue when change of control has been transferred to the customer, generally at the time of shipment of products. The Company sells its products both directly to customers and through distributors generally under agreements with payment terms typically less than 45 days. Revenue on direct product sales, excluding sales to distributors, are not entitled to any specific right of return or price protection, except for any defective product that may be returned under our standard product warranty. Product sales to distribution customers that are subject to certain rights of return, stock rotation privileges and price protections, contain a component of "variable consideration." Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products and is generally based upon a negotiated fixed price and is net of estimates for variable considerations.

For performance obligations related to warranty and customer services, such as extended product warranties, the Company transfers control and recognizes revenue on a time-elapsed basis. The performance obligations are satisfied as services are rendered typically on a stand-ready basis over the contract term, which is generally 12 months.

In limited circumstances where a customer is unable to accept shipment and requests products be delivered to, and stored on, the Company's premises, also known as a "bill-and-hold" arrangement, revenue is recognized when: (i) the customer has requested delayed delivery and storage of the products, (ii) the goods are segregated from the inventory, (iii) the product is complete, ready for shipment and physical transfer to the customer, and (iv) the Company does not have the ability to use the product or direct it to another customer.

The Company also enters into revenue arrangements that may consist of multiple performance obligations of its product and service offerings such as for sales of hardware devices and extended warranty services. The Company allocates contract fees to the performance obligations on a relative stand-alone selling price basis. The Company determines the stand-alone selling price based on its normal pricing and discounting practices for the specific product and/or service when sold separately. When the Company is unable to establish the individual stand-alone price for all elements in an arrangement by reference to sold separately instances, the Company may estimate the stand-alone selling price of each performance obligation using a cost plus a margin

approach, by reference to third party evidence of selling price, based on the Company's actual historical selling prices of similar items, or based on a combination of the aforementioned methodologies; whichever management believes provides the most reliable estimate of stand-alone selling price.

Warranty and Extended Warranty

The Company records a provision for standard warranties provided with all products. If future actual costs to repair were to differ significantly from estimates, the impact of these unforeseen costs or cost reductions would be recorded in subsequent periods.

Separately priced extended on-site warranties and service contracts are offered for sale to customers on all product lines. The Company contracts with third party service providers to provide service relating to on-site warranties and service contracts. Extended warranty and service contract revenue and amounts paid in advance to outside service organizations are deferred and recognized as service revenue and cost of service, respectively, over the period of the service agreement. The Company will typically apply the practical expedient to agreements wherein the period between transfer of any good or service in the contract and when the customer pays for that good or service is one year or less. Advanced payments for long-term maintenance and warranty contracts do not give rise to a significant financing component. Rather, such payments are required by the Company primarily for reasons other than the provision of finance to the entity.

Shipping and Handling

Amounts billed to customers for shipping and handling are included in revenue, and costs incurred related to shipping and handling are included in cost of product revenue.

Advertising Costs

Advertising costs are expensed as incurred. Advertising expenses were $16,000 and $134,000 for the years ended December 31, 2019 and 2018.

Research and Development Costs

Research and development expenses include payroll, employee benefits, share-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs and in 2018, the amortization of internally developed software costs.

Segment Information

We report segment data based on the management approach. The management approach designates the internal reporting that is used by management for making operating and investment decisions and evaluating performance as the source of our reportable segments. We use one measurement of profitability and do not disaggregate our business for internal reporting. We operate in one segment providing data management, and desktop and application virtualization solutions for small and medium businesses and distributed enterprises. We disclose information about products and services, geographic areas, and major customers.

Income Taxes

We provide for income taxes utilizing the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. The provision for income taxes generally represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax basis of our assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recorded to reduce deferred tax assets when a judgment is made that it is considered more likely than not that a tax benefit will not be realized. A decision to record a valuation allowance results in an increase in income tax expense or a decrease in income tax benefit. If the valuation allowance is released in a future period, income tax expense will be reduced accordingly.

The calculation of tax liabilities involves evaluating uncertainties in the application of complex global tax regulations. The impact of an uncertain income tax position is recognized at the largest amount that is “more likely than not” to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. If the estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result.

Comprehensive Loss

Comprehensive loss and its components encompass all changes in equity other than those arising from transactions with shareholders, including net loss and foreign currency translation adjustments, and is disclosed in a separate consolidated statement of comprehensive loss.

Concentration of Credit Risks

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of trade accounts receivable, which are generally not collateralized. To reduce credit risk, we perform ongoing credit evaluations of its customers and maintain allowances for potential credit losses for estimated bad debt losses.

At December 31, 2019 and 2018, there were four customers that made up 50.3% and 71.0%, respectively, of accounts receivable. There were two customers that made up in the aggregate 24.5% and 25.4% of net revenue for the years ended December 31, 2019 and 2018, respectively.

Share-based Compensation

We account for share-based awards, and similar equity instruments, granted to employees, non-employee directors, and consultants under the fair value method. Share-based compensation award types include stock options and restricted stock. We use the Black-Scholes option pricing model to estimate the fair value of option awards on the measurement date, which generally is the date of grant. The expense is recognized over the requisite service period (usually the vesting period) for the estimated number of instruments for which service is expected to be rendered. The fair value of restricted stock units (“RSUs”) is estimated based on the market value of the Company’s common shares on the date of grant. The fair value of options granted to non-employees is estimated at the measurement date, which generally is the date of grant, using the Black-Scholes option pricing model.

Share-based compensation expense for options with graded vesting is recognized pursuant to an accelerated method. Share-based compensation expense for RSUs is recognized over the vesting period using the straight-line method. Share-based compensation expense for an award with performance conditions is recognized when the achievement of such performance conditions are determined to be probable. If the outcome of such performance condition is not determined to be probable or is not met, no compensation expense is recognized and any previously recognized compensation expense is reversed. Forfeitures are recognized in share-based compensation expense as they occur.

We have not recognized, and do not expect to recognize in the near future, any tax benefit related to share-based compensation cost as a result of the full valuation allowance of our net deferred tax assets and its net operating loss carryforward.

Recently Issued Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (“FASB”) that are adopted by the Company as of the specified effective date. If not discussed, the Company believes that the impact of recently issued standards, which are not yet effective, will not have a material impact on the Company’s consolidated financial statements upon adoption.

In August 2018, the FASB issued Accounting Standards Update (“ASU”) No. 2018-13, *Fair Value Measurement (Topic 820)* (“ASU 2018-13”). The new guidance removes, modifies and adds to certain disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement. The update is effective for annual reporting periods, including interim periods, beginning after December 15, 2019, with early adoption permitted. We do not expect the adoption of ASU 2018-13 to have a material effect on our consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). The update simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. An entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, if applicable. The loss recognized should not exceed the total amount of goodwill allocated to the reporting unit. The same impairment test also applies to any reporting unit with a zero or negative carrying amount. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. The update is effective for annual reporting periods, including interim periods, beginning after December 15, 2019, on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed after January 1, 2017. We do not expect the adoption of ASU 2017-04 to have a material effect on our consolidated financial statements and related disclosures.

Recently Adopted Accounting Pronouncements

On January 1, 2019, we adopted ASU 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), as amended. The update increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and requires disclosing key information about leasing arrangements. The update is effective for reporting periods beginning after December 15, 2018. The Company has no lease assets or liabilities on the balance sheet as of December 31, 2019.

On January 1, 2019, we adopted ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"). The update aligns measurement and classification guidance for share-based payments to nonemployees with the guidance applicable to employees. Under the new guidance, the measurement of equity-classified nonemployee awards will be fixed at the grant date. The update is effective for annual reporting periods, including interim periods, beginning after December 15, 2018. The adoption of the new standard did not have an effect on our financial position, results of operations or cash flows.

3. Discontinued Operations

In May 2018, the shareholders approved the divestiture of Overland. In November 2018, the Company exchanged all the issued and outstanding shares of capital stock of Overland to SVTP in consideration for (i) the issuance to the Company of shares of Series A Preferred Stock of SVTP representing 19.9% of the outstanding shares of capital stock of SVTP as of the closing with a value of $2.1 million, (ii) the release of the Company from outstanding debt obligations totaling $41.7 million assumed by SVTP, and (iii) $1.0 million in cash proceeds from SVTP. In addition, the Company entered into a Conversion Agreement with FBC Holdings, pursuant to which $6.5 million of the Company's outstanding related party secured note was converted into 6,500,000 Series A Preferred Shares. In 2018, the Company recorded a loss on the divestiture of Overland of $4.3 million, which is included in net loss of discontinued operations. At December 31, 2019 and 2018, accrued payroll and employee compensation included $153,000 and $1.0 million, respectively, for accrued one-time employee related costs associated with the divestiture, which expense was included in the 2018 loss on the disposal of discontinued operations.

The Company and the buyer entered into a transition service agreement ("TSA") to facilitate an orderly transition process. The TSA has terms ranging from six months to 24 months depending on the service. Expense incurred by the Company related to the TSA was approximately $525,000 and $149,000 for the years ended December 31, 2019 and 2018, respectively, and was included in continuing operations.

The results of operations for Overland for the period ended November 13, 2018 have been reflected as discontinued operations in the consolidated statements of operations for the year ended December 31, 2018, and consist of the following (in thousands):

	December 31, 2018
Revenue of discontinued operations:	
Product revenue	$ 50,285
Service revenue	4,445
	54,730
Cost of product revenue	34,493
Cost of service revenue	1,543
Gross profit of discontinued operations	18,694
Sales and marketing	10,987
Research and development	982
General and administrative	7,761
	19,730
Loss from operations of discontinued operations	(1,036)
Other expense of discontinued operations:	
Loss on disposal of discontinued operations	(4,281)
Interest expense, related party	(3,390)
Interest expense	(2,321)
Other expense	(920)
Loss before income taxes of discontinued operations	(11,948)
Provision for income taxes of discontinued operations	1,574
Net loss of discontinued operations	$ (13,522)

Certain cash flows from discontinued operations consisted of the following amounts (in thousands):

	December 31, 2018
Depreciation and amortization	$ 2,137
Share-based compensation	$ 855
Capital expenditures	$ 64

4. Certain Balance Sheet Items

The following table summarizes inventories (in thousands):

	December 31,	
	2019	2018
Raw materials	$ 92	$ 255
Work in process	137	282
Finished goods	524	693
	$ 753	$ 1,230

The following table summarizes other current assets (in thousands):

	December 31,	
	2019	2018
Transition service agreement, related party	$ 345	$ —
Prepaid insurance and services	207	344
Deferred cost - service contracts	118	385
Other	—	55
	$ 670	$ 784

The following table summarizes property and equipment (in thousands):

	December 31,	
	2019	2018
Computer equipment[(1)]	$ 291	$ 281
Accumulated depreciation[(1)]	(289)	(275)
	$ 2	$ 6

(1) Includes the impact of foreign currency exchange rate fluctuations.

Depreciation expense for property and equipment was $4,000 and $13,000 for the years ended December 31, 2019 and 2018, respectively.

The following table summarizes other assets (in thousands):

	December 31,	
	2019	2018
Prepaid Insurance	$ 519	$ 653
Deferred cost – service contracts	154	270
Other	4	27
	$ 677	$ 950

5. Investment in Affiliate

In November 2018, in connection with the divestiture of Overland, the Company received 1,879,699 SVTP Preferred Shares representing 19.9% of the outstanding shares of capital stock of SVTP with a fair value of $2.1 million. The fair value of this investment was estimated using discounted cash flows and consideration of the Exchange Agreement described below. The Company concluded it does not have a significant influence over the investee. There were no known identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investment at December 31, 2019.

In November 2018, the Company also entered into an Exchange and Buy-Out Agreement (the “Exchange Agreement”), between the Company, FBC Holdings, SVTP, and MF Ventures LLC (“MFV”). Under the terms of the Exchange Agreement, the Company granted FBC Holdings the right to exchange up to 2,500,000 of the Company’s Series A Preferred Shares held by FBC Holdings for up to all of the SVTP Preferred Shares held by the Company (the “Exchange Right”), with such Exchange Right expiring within two years of the November 2018 closing.

On July 12, 2019, in connection with the Exchange Agreement, the Company entered into an amendment to the Exchange Agreement by and among the Company, FBC Holdings, SVTP and MFV such that the rights and obligations under the Exchange Agreement would apply to the Series B Preferred Shares in respect of which the Series A Preferred Shares were exchanged under the Share Exchange Agreement.

In connection with the Exchange Agreement, the Company entered into a security and pledge agreement between the Company and FBC Holdings, pursuant to which, among other things, the Company granted a security interest to FBC Holdings in all the SVTP Preferred Shares held by the Company to secure the Company’s obligations under the Exchange Agreement.

6. Intangible Assets and Goodwill

The following table summarizes intangible assets, net (in thousands):

	December 31,	
	2019	2018
Developed technology	$ 13,323	$ 13,383
Channel partner relationships	730	730
Capitalized development costs(1)	3,047	2,918
Customer relationships	380	380
	17,480	17,411
Accumulated amortization:		
Developed technology	(12,682)	(12,222)
Channel partner relationships	(355)	(233)
Capitalized development costs(1)	(2,094)	(1,655)
Customer relationships	(328)	(303)
	(15,459)	(14,413)
Total finite-lived assets, net	2,021	2,998
Indefinite-lived intangible assets - trade names	280	350
Total intangible assets, net	$ 2,301	$ 3,348

(1) Includes the impact of foreign currency exchange rate fluctuations.

Amortization expense of intangible assets was $1.0 million and $1.7 million for the years ended December 31, 2019 and 2018, respectively. Estimated amortization expense for intangible assets is approximately $938,000, $513,000, $362,000, $34,000 and $12,000 in fiscal 2020, 2021, 2022, 2023 and 2024, respectively.

Goodwill

Goodwill at both December 31, 2019 and 2018 was $1.4 million, which consists of the goodwill from prior acquisitions. The Company performed qualitative impairment evaluations on its goodwill as of December 31, 2019 and determined that there were no indications that goodwill was impaired.

Impairment

In 2019, primarily as a result of the Company's change in revenue projection for its Snap product line, it was determined the carrying value of indefinite-lived intangible assets exceeded its estimated fair value. In measuring fair value, the Company used a relief-from-royalty approach. The Company compared the indicated fair value to the carrying value of its indefinite-lived assets, and as a result of the analysis, an impairment charge of $70,000 was recorded to indefinite-lived trade names for the year ended December 31, 2019.

7. Debt

Line of credit

The Company has a line of credit agreement with a bank with a maximum borrowing limit, effective July 2, 2019, of $0.5 million. Borrowings under this agreement bear interest at an interest rate of 6.5% per annum. The line of credit expires on June 19, 2020. Borrowings under the line of credit are secured by the inventory and accounts receivable balances of the Company. As of December 31, 2019, the outstanding balance was $0.5 million.

The line of credit agreement also contains customary insurance requirements, limits on cross collateralization and events of default, including, among other things, failure to make payments, insolvency or bankruptcy, business termination, merger or consolidation or acquisition without written consent, a material impairment of the Lender's lien in the collateral or in the value of such collateral, or material adverse change to the business that would impair the loan.

Related party note payable

In November 2018, in connection with the divestiture of Overland, the Company entered into a $0.5 million note payable held by SVTP. The note payable bore an interest at a rate of 8.0% per annum. On October 31, 2019, the Company entered into a conversion agreement by and among the Company, HVE ConneXions ("HVE") and Overland under which Overland agreed to convert the outstanding principal and accrued interest into Series C Preferred Shares of the Company. See additional information at *Note - 9 Preferred Shares*. As of December 31, 2019, the outstanding debt balance was zero.

Related party unsecured notes payable

In January 2019, the Company entered into two unsecured notes payable, for an aggregate of $523,000 with two employees of the Company. Each of the notes payable bore interest at a rate of 2.0% per annum payable annually. For the year ended December 31, 2019, the Company issued 410,158 common shares with a value of $529,000 for the settlement of the outstanding notes and interest payable. At December 31, 2019, the notes payable balances were zero.

Related party interest expense

For the year ended December 31, 2019, aggregate related party interest expense was $39,000.

Related Party Secured Note

In April 2016, the Company modified its secured note with FBC Holdings, pursuant to which the holder made an additional advance and principal amount under the secured note amount was increased to $24.5 million. The secured note had a simple annual interest rate of 8.0%, payable semi-annually. The obligations under the secured note were secured by substantially all assets of the Company. On November 13, 2018, in connection with the closing of the Purchase Agreement, the Company entered into a Conversion and Royalty Agreement, between the Company, SVTP and FBC Holdings which SVTP assumed $19.0 million of the obligations and liabilities of the secured note, including accrued interest expense, and the Company was released as obligors and guarantors of the secured note. Further, in connection with the closing, the Company entered into a Conversion Agreement, between the Company and FBC Holdings which the remaining $6.5 million of the Company's secured debt was converted into 6,500,000 Series A Preferred Shares.

For the year ended December 31, 2018, the Company issued 219,434 common shares, respectively, for the settlement of fees associated with 2018 amendments to the loan and accrued interest expense. For the year ended December 31, 2018, interest expense, including amortization of debt costs, on the convertible note was $2.5 million and is included in net loss from discontinued operations.

Related Party Debt

In December 2017, the Company entered into a $2.0 million subordinated promissory note with MFV, a related party. The promissory note bore interest at a 12.5% simple annual interest rate, payable quarterly in arrears. On November 13, 2018, pursuant to the Purchase Agreement, the promissory note balance of $2.3 million, including interest paid in kind, was assumed by SVTP. For the year ended December 31, 2018, interest expense, including amortization of debt costs, on the promissory note was $0.3 million and is included in the net loss from discontinued operations.

Credit Agreement

In April 2016, the Company entered into a Credit Agreement with Opus Bank for a term loan. On June 6, 2018, the Credit Agreement was assigned by Opus Bank to Colbeck. On August 16, 2018, the Credit Agreement was assigned by Colbeck to FBC Holdings, a related party. The credit facilities had a 13.25% simple annual interest rate. On November 13, 2018, the Company closed the transactions contemplated by the Purchase Agreement and, in connection therewith, SVTP assumed the obligations of the Company under the Credit Agreement, which had an outstanding balance, including accrued interest and debt cost, of $20.4 million. For the year ended December 31, 2018, interest expense, including amortization of debt costs, was $2.8 million, of which $0.5 million was related party interest expense, and is included in the net loss from discontinued operations.

8. Fair Value Measurements

The authoritative guidance for fair value measurements establishes a three tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

Assets and Liabilities that are Measured at Fair Value on a Recurring Basis

Our financial instruments include cash equivalents, accounts receivable, prepaid expenses, accounts payable, accrued liabilities, debt, subscription agreements, and Series A Preferred Shares. Fair value estimates of these instruments are made at a specific point in time, based on relevant market information. These estimates may be subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. The carrying amount of cash equivalents, accounts receivable, prepaid expenses, accounts payable and accrued liabilities are generally considered to be representative of their respective fair values because of the short-term nature of those instruments. The carrying value of debt approximates its fair value as the borrowing rates are substantially comparable to rates available for loans with similar terms. The Company estimates the fair value of subscription agreements utilizing Level 1 inputs. The Company estimates the fair value of the preferred shares utilizing Level 2 inputs, including market yields for similar instruments.

The following table provides information by level for liabilities that are measured at fair value using significant unobservable inputs (Level 3) (in thousands):

Warrant liability as of January 1, 2018	$	1,669
Adoption of accounting guidance		(46)
Change in fair value of warrants		(259)
Reclassification to equity resulting from warrant exchange agreement		(1,364)
Warrant liability as of December 31, 2018	$	—

Assets and Liabilities that are Measured at Fair Value on a Nonrecurring Basis

The Company's non-financial assets such as investment in affiliate, goodwill, intangible assets and property and equipment are recorded at fair value when an impairment is recognized or at the time acquired in a business combination. As discussed in *Note 6 - Intangible Assets and Goodwill*, at December 31, 2019, the Company recorded impairment charges associated with acquired intangible assets, and reduced the carrying amount of such assets subject to the impairment to their estimated fair value.

9. Preferred Shares

Series C Preferred Shares

On October 30, 2019, the directors of the Company passed a resolution authorizing the filing of articles of amendment to create a third series of preferred shares, being, an unlimited number of Series C Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto. On November 6, 2019, the Company filed Articles of Amendment to create the Series C Preferred Shares. Pursuant to the articles of amendment governing the rights and preferences of outstanding shares of Series C Preferred Shares, each preferred share, subject to prior shareholder approval, are convertible into our common shares, at a conversion rate in effect on the date of conversion. Overland, a related party and the sole shareholder of the Series C Preferred Shares, may, at any time, convert all or any part of the Series C Preferred Shares provided that after such conversion the common shares issuable, together with the aggregate common shares held by Overland would not exceed 19.9% of the total number of outstanding common shares of the Company.

Related Party Conversion Agreement and Issuance of Series C Preferred Shares

On October 31, 2019, the Company entered into a conversion agreement by and among the Company, HVE and Overland under which Overland agreed to convert the following debt, accrued payables and prepayment of future goods and services into 1,600,000 Series C Preferred Shares of the Company valued at $1.00 per share: (i) principal and accrued interest of $520,000 under the Secured Promissory Note dated November 13, 2018 by and among the Company, HVE and Overland; (ii) accrued fees of $632,000 under the TSA dated November 13, 2018 by and among the Company and Overland; and (iii) prepayment of $448,000 for future goods and services under the TSA.

Series A and Series B Preferred Shares

In November 2018, the Company filed an amendment to its articles of amalgamation setting forth the rights, privileges, restrictions and conditions of a new series of non-voting preferred shares of the Company. On November 13, 2018, in connection with the disposition of Overland, the Company entered into a Conversion Agreement with FBC Holdings, a related party, and $6.5 million of the outstanding principal amount of its secured note held by FBC Holdings was converted into 6,500,000 Series A Preferred Shares.

In July 2019, the Company filed of articles of amendment to create a second series of preferred shares, being, an unlimited number of Series B Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto. In July 2019, following the filing of the Articles of Amendment to create the Series B Preferred Shares, the Company entered into a share exchange agreement (the “Share Exchange Agreement”) with FBC Holdings to exchange 6,500,000 Series A Preferred Shares held by FBC Holdings for 6,500,000 Series B Preferred Shares. The rights, privileges, restrictions and conditions attaching to the Series B Preferred Shares are substantially the same as the Series A Preferred Shares of the Company, save and except that the requirement for the Company to redeem all of the issued and outstanding Series A Preferred Shares on or before November 13, 2020 has been amended to provide that the Company shall only be required to redeem 1,000,000 Series B Preferred Shares on or before November 13, 2020 (the "Mandatory Redemption") and any other outstanding Series B Preferred Shares may be redeemed at any time and from time to time after December 19, 2019 at the option of the Company. On October 31, 2019, FBC Holdings, as the sole shareholder of Series B Shares, irrevocably waived its entitlement to the Mandatory Redemption.

In July 2019, in connection with the Share Exchange Agreement, the Company entered into an amendment to the Exchange and Buy-Out Agreement by and among the Company, FBC Holdings, SVTP and MFV such that the rights and obligations under the Exchange and Buy-Out Agreement would apply to the Series B Preferred Shares in respect of which the Series A Preferred Shares were exchanged under the Share Exchange Agreement.

In August 2019, the Company issued 343,778 Series B Preferred Shares with a fair value of $343,778 to FBC Holdings in satisfaction of accrued dividends at such date. For the years ended December 31, 2019 and 2018, there was related party interest expense of $292,000 and $71,000, respectively, related to Series A Preferred Shares dividends.

The Series B Preferred Shares (i) are convertible into the Company's common shares, subject to prior shareholder approval, at a conversion rate equal to $1.00 per share, plus accrued and unpaid dividends, divided by an amount equal to 0.85 multiplied by a 15-day volume weighted average price per common share prior to the date the conversion notice is provided (the "Conversion Rate"), subject to a conversion price floor of $0.80, (ii) if the Company receives any cash dividends on its equity investment in Silicon Valley Technology Partners, Inc., in an amount equal to such cash dividend received, cumulative cash dividends at a rate of 8.0% of the Series B Preferred Shares, (iii) after November 13, 2020, fixed, preferential, cumulative cash dividends at the rate of 8.0% of the Series B Preferred Shares subscription price per year, and (iv) carry a liquidation preference equal to the subscription price per Series B Preferred Share plus any accrued and unpaid dividends.

The common shares issuable upon the conversion of the Series B Preferred Shares may constitute more than 20% of the common shares of the Company currently outstanding and may result in a change of control of the Company, and therefore the Company will seek shareholder approval for the issuance of all common shares issuable upon conversion of the Series B Preferred Shares; provided, however, that the Company shall not seek shareholder approval unless such approval would occur after the six-month anniversary of the initial issue date of the Series B Preferred Shares. In the event shareholder approval is not obtained, FBC Holdings and its affiliates will not be entitled to convert such Series B Preferred Shares into common shares, but any unaffiliated transferee may convert all or any part of the Series B Preferred Shares held by such transferee into the number of fully paid and non-assessable common shares that is equal to the number of Series B Preferred Shares to be converted multiplied by the Conversion Rate in effect on the date of conversion; provided that, (x) after such conversion, the common shares issuable upon such conversion, together with all common shares held by such third party transferee that are or would be deemed to be aggregated under the rules of the Nasdaq Stock Market, in the aggregate would not exceed 19.9% of the total number of common shares of the Company then outstanding and (y) such conversion and issuance would not otherwise violate or cause the Company to violate the Company's obligations under the rules or regulations of the Nasdaq Stock Market.

Management has determined that the conversion terms of the Series B Preferred Shares and Series C Preferred Shares do not cause the preferred shares to be treated as liability instruments, and accordingly such preferred shares are presented as equity instruments.

10. Share Capital

In October 2019, the Company entered into a subscription agreement and issued 149,500 common shares of the Company at $1.19 per share to a vendor in exchange for the satisfaction of certain accounts payable. The aggregate amount of the obligations shall be reduced by the cash proceeds actually received by the vendor from the sale of the shares by the vendor.

In October 2019, the Company entered into a related party subscription agreement and issued 330,000 common shares of the Company at $1.07 per share to a vendor in exchange for the satisfaction of certain accounts payable. The aggregate amount of the obligations shall be reduced by the cash proceeds actually received by the vendor from the sale of the shares by the vendor.

In August 2019, the Company entered into a purchase agreement for a private placement to issue 251,823 common shares of the Company, of which 175,765 common shares have been issued, at a purchase price of $1.29 per share for gross proceeds received of $325,000. The Company used the proceeds from the offering for general corporate and working capital purposes.

In July 2019, the Company completed a private placement and issued 240,000 common shares of the Company at a purchase price of $2.00 per share for gross proceeds of $480,000. The Company used the proceeds from the offering for general corporate and working capital purposes.

In April 2018, the Company closed an underwritten public offering and issued 412,500 common shares and warrants to purchase up to an aggregate of 123,750 common shares at an aggregate purchase price of $5.60 per common share and accompanying warrant, as well as a concurrent closing of warrants to purchase an additional 14,063 common shares pursuant to the partial exercise of the over-allotment option granted to the underwriter. Gross proceeds, before underwriting discounts and commissions and other offering expenses, were approximately $2.3 million.

In May 2018, the Company issued 80,100 common shares to satisfy payment obligations incurred by the Company in the aggregate amount of $0.3 million. The obligations were related to the Share Purchase Agreement entered into in February 2018.

The Company has unlimited authorized shares of common shares at no par value. At December 31, 2019, the Company had the following outstanding warrants to purchase common shares:

Date issued	Contractual life (years)	Exercise price per share	Number outstanding	Expiration
May 2015	5	$800.00	4,200	May 31, 2020
October 2015	5	$466.00	2,010	October 14, 2020
December 2015	5	$500.00	5,138	December 15, 2020
December 2015	5	$216.00	7,500	December 4, 2020
March 2016	5	$500.00	150	March 4, 2021
August 2017	5	$42.00	37,500	August 11, 2022
August 2017	5	$42.00	11,876	August 16, 2022
August 2017	5	$42.00	25,625	August 22, 2022
April 2018	5	$5.60	111,563	April 17, 2023
			205,562 (1)	

(1) Includes 37,500 of warrants to purchase common shares, in the aggregate, outstanding to related parties at December 31, 2019.

Related Party Share Capital Transactions

In March 2018, the Company entered into warrant exchange agreements, in a privately negotiated exchange under Section 4(a)(2) of the Securities Act of 1933, as amended, pursuant to which the Company issued 178,875 common shares in exchange for the surrender and cancellation of the Company's then outstanding March 24, 2017 warrants (the "Exchange"). Immediately after the Exchange, the previously issued warrants became null and void. A related party participated in the Exchange by acquiring 37,500 common shares in exchange for the cancellation of a warrant to purchase 34,091 common shares.

11. Equity Incentive Plans

As of December 31, 2019, a total of 870,850 common shares are authorized for issuance with respect to awards granted under the 2015 Plan (not including shares subject to terminated awards under our Second Amended and Restated Stock Option Plan that become available for issuance under the 2015 Plan). In addition, the share limit will automatically increase on the first trading day in January of each calendar year during the term of the 2015 Plan by an amount equal to the lesser of (i) 10% of the total number of common shares issued and outstanding on December 31 of the immediately preceding calendar year, or (ii) such number of common shares as may be established by the Board. The 2015 Plan authorizes the board of directors to grant stock and options awards to directors, employees and consultants. As of December 31, 2019, the Company had approximately 195,868 share-based awards available for future grant.

The Company's Employee Stock Purchase Plan ("ESPP") authorizes the purchase of up to 37,500 common shares by employees under the plan. As of December 31, 2019 and 2018, there were no offering periods available to employees.

Stock Options

Options typically vest over a three-year period from the original grant date. The exercise price of each award is based on the market price of the Company's common shares at the date of grant. Option awards can be granted for a maximum term of up to ten years. Option activity is summarized below:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Options outstanding at January 1, 2018	23,536	$ 251.20		
Granted	—	$ —		
Exercised	—	$ —		
Forfeited	(3,486)	$ 132.23		
Options outstanding at December 31, 2018	20,050	$ 199.06		
Granted	—	$ —		
Exercised	—	$ —		
Forfeited	(17,450)	$ 160.93		
Options outstanding at December 31, 2019	2,600	$ 781.19	3.5	$ —
Vested and expected to vest at December 31, 2019	2,600	$ 781.19	3.5	$ —
Exercisable at December 31, 2019	2,600	$ 781.19	3.5	$ —

Restricted Stock Units

The following table summarizes information about RSU activity:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding — January 1, 2018	125,969	$ 39.12
Granted	50	$ 20.00
Vested and released	(71,579)	$ 50.88
Forfeited	(1,436)	$ 77.80
Outstanding — December 31, 2018	53,004	$ 31.21
Granted	100,000	$ 2.51
Vested and released	(131,541)	$ 9.68
Forfeited	(665)	$ 64.95
Outstanding — December 31, 2019	20,798	$ 4.99

The estimated fair value of RSUs was based on the market value of the Company's common shares on the date of grant. RSUs typically vest over a three-year period from the original date of grant. The total grant date fair value of RSUs vested during the years ended December 31, 2019 and 2018 was approximately $1.3 million and $3.6 million, respectively. The fair value of RSUs vested during the years ended December 31, 2019 and 2018 was approximately $0.2 million and $0.7 million, respectively.

Outside of 2015 Equity Incentive Plan

On March 26, 2019, the Board of Directors of the Company approved and granted 100,000 RSUs outside of the 2015 Plan to an employee. The RSUs have an estimated fair value of $2.51 per unit and fully vested in 2019.

Restricted Stock Awards

During 2019 and 2018, the Company granted restricted stock awards ("RSA") to certain employees, directors and consultants in lieu of cash payment for services performed. The estimated fair value of the RSAs was based on the market value of the Company's common shares on the date of grant. The RSAs were fully vested on the date of grant. The fair value of the RSAs vested during the years ended December 31, 2019 and 2018 was approximately $0.2 million and $2.2 million, respectively.

The following table summarizes information about RSA activity:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding — January 1, 2018	—	$ —
Granted	340,942	$ 6.33
Vested	(340,942)	$ 6.33
Outstanding — December 31, 2018	—	$ —
Granted	194,000	$ 1.20
Vested	(194,000)	$ 1.20
Outstanding — December 31, 2019	—	$ —

Share-Based Compensation Expense

The Company recorded the following compensation expense related to its share-based compensation awards, including amounts related to discontinued operations (in thousands):

	Year Ended December 31,	
	2019	2018
Cost of sales	$ —	$ 47
Sales and marketing	279	310
Research and development	61	210
General and administrative	297	1,070
Total share-based compensation expense	$ 637	$ 1,637

As of December 31, 2019, there was a total of $5,000 of unrecognized compensation expense related to unvested equity-based compensation awards. The expense associated with non-vested restricted stock units and options awards granted as of December 31, 2019 is expected to be recognized over a weighted-average period of one month.

12. Net Loss per Share

Basic net loss per share is computed by dividing net loss applicable to common shareholders by the weighted-average number of common shares outstanding during the period. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the Company's net loss position.

Anti-dilutive common share equivalents excluded from the computation of diluted net loss per share were as follows:

	December 31,	
	2019	2018
Preferred shares	8,443,778	6,500,000
Common share purchase warrants	205,562	208,187
Restricted stock not yet vested or released	20,798	53,004
Options outstanding	2,600	20,050

13. Income Taxes

The Company is subject to taxation in Canada and also in certain foreign tax jurisdictions. The Company's tax returns for calendar year 2012 and forward are subject to examination by the Canadian tax authorities. The Company's tax returns for fiscal year 2006 and forward are subject to examination by the U.S. federal and state tax authorities.

The Company recognizes the impact of an uncertain income tax position on its income tax return at the largest amount that is "more likely than not" to be sustained upon audit by the relevant taxing authority. An uncertain tax position will not be recognized if it has less than a 50% likelihood of being sustained.

At December 31, 2019, there were no unrecognized tax benefits. The Company believes it is reasonably possible that, within the next 12 months, the amount of unrecognized tax benefits may remain unchanged. The Company recognizes interest and penalties related to unrecognized tax benefits in its provision for income taxes. The Company had no material accrual for interest and penalties on its consolidated balance sheets at December 31, 2019 and 2018, and recognized no interest and/or penalties in the consolidated statements of operations for the years ended December 31, 2019 and 2018.

The components of loss before income taxes were as follows (in thousands):

	Year Ended December 31,	
	2019	2018
Domestic	$ (1,815)	$ (11,872)
Foreign	(2,466)	(743)
Total	$ (4,281)	$ (12,615)

A reconciliation of income taxes computed by applying the federal statutory income tax rate of 26.5% to loss before income taxes to the total income tax benefit reported in the accompanying consolidated statements of operations is as follows (in thousands):

	Year Ended December 31,	
	2019	2018
Income tax at statutory rate	$ (1,134)	$ (3,343)
Foreign rate differential	(77)	—
Change in valuation allowance	15,104	1,329
Share-based compensation expense	85	44
Prior year true-ups	(13,371)	111
Other differences	(607)	1,859
Benefit from income taxes	$ —	$ —

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are shown below. A valuation allowance has been recorded, as realization of such assets is uncertain. Deferred income taxes are comprised as follows (in thousands):

	December 31,	
	2019	2018
Deferred tax assets:		
Net operating loss and capital loss carryforwards	$ 25,064	$ 9,610
Intangible assets	2,319	2,280
Share-based compensation	28	52
Other	893	1,256
Deferred tax assets, gross	28,304	13,198
Valuation allowance for deferred tax assets	(28,246)	(13,198)
Deferred tax assets, net of valuation allowance	58	—
Deferred tax liabilities:		
Indefinite-lived intangible assets	(74)	(16)
Deferred tax liabilities	(74)	(16)
Net deferred tax liabilities	$ (16)	$ (16)

At December 31, 2019, the Company had Canadian net operating loss carryforwards of $36.3 million. These carryforwards will begin expiring in 2031, unless previously utilized. At December 31, 2019, the Company had U.S. federal net operating loss carryforwards of $10.6 million that begin expiring in 2024 unless previously utilized, except for $6.9 million that have no expiration date. The Company also has net capital loss carryforwards in Canada of $99.6 million, which are available indefinitely to offset taxable capital gains.

14. Related Party Transactions

In October 2019, the Company entered into a conversion agreement by and among the Company, HVE and Overland under which Overland agreed to convert the following debt, accrued payables and prepayment of future goods and services into 1,600,000 Series C Preferred Shares of the Company valued at $1.00 per share: (i) principal and accrued interest of $520,000 under the Secured Promissory Note dated November 13, 2018 by and among the Company, HVE and Overland; (ii) accrued fees of $632,000 under the TSA dated November 13, 2018 by and among the Company and Overland; and (iii) prepayment of $448,000 for future goods and services under the TSA.

In November 2018, the Company entered into a TSA to facilitate an orderly transition process for the divestiture of Overland. The TSA has terms ranging from up to 24 months depending on the service. As of December 31, 2019, the TSA has a remaining prepaid balance of $345,000. Net expense incurred by the Company related to the TSA was approximately $525,000 and $149,000 for the years ended December 31, 2019 and 2018, respectively, and was included in continuing operations.

In August 2019, the Company entered into agreements with certain executives of the Company and the Company’s Board of Directors to extinguish certain accrued liabilities. The Company wrote off $1.7 million of outstanding liabilities and recorded a gain on forgiveness of liabilities, which is included in other income (expense), net.

Professional services provided by affiliates of the Company included in net loss from discontinued operations were zero and $0.8 million during the years ended December 31, 2019 and 2018, respectively. As of December 31, 2019 and 2018, accounts payable and accrued liabilities included zero and $0.2 million, respectively, due to related parties.

15. Commitments and Contingencies

Leases

As of December 31, 2019, the Company has no right-to-use lease assets or liabilities.

Rent expense under non-cancelable operating leases is recognized on a straight-line basis over the respective lease terms and was $0.2 million and $0.3 million for the years ended December 31, 2019 and 2018, respectively. The Company vacated such premise in September 2019.

Letters of credit

During the ordinary course of business, the Company provides standby letters of credit to third parties as required for certain transactions initiated by the Company. As of December 31, 2019, the Company’s had no outstanding standby letters of credit.

Warranty and Extended Warranty

The Company had $0.3 million and $0.7 million in deferred costs included in other current and non-current assets related to deferred service revenue at December 31, 2019 and 2018, respectively. Changes in the liability for product warranty and deferred revenue associated with extended warranties and service contracts were as follows (in thousands):

	Product Warranty	Deferred Revenue
Liability at January 1, 2018	$ 22	$ 1,537
Settlements made during the period	—	(1,417)
Change in liability for warranties issued during the period	—	1,351
Change in liability for pre-existing warranties	—	—
Liability at December 31, 2018	22	1,471
Settlements made during the period	—	(1,087)
Change in liability for warranties issued during the period	—	725
Change in liability for pre-existing warranties	(22)	—
Liability at December 31, 2019	$ —	$ 1,109
Current liability	$ —	$ 624
Non-current liability	—	485
Liability at December 31, 2019	$ —	$ 1,109

Litigation

The Company is, from time to time, subject to claims and suits arising in the ordinary course of business. In the opinion of management, the ultimate resolution of such pending proceedings will not have a material effect on the Company's results of operations, financial position or cash flows.

In January 2018, Mr. Vito Lupis filed a statement of claim in the Ontario Court of Justice alleging, among other things, breach of contracts, deceit and negligence against Mr. Giovanni J. Morelli, a former officer of the Company, and vicarious liability against the Company, in connection with stock purchase agreements and other related agreements that would have been entered into between Mr. Lupis and the Company in 2012. In March 2019, the Company and Mr. Lupis entered into a settlement agreement pursuant to which the Company has agreed to pay Mr. Lupis certain consideration, which is included in general and administrative expense, in exchange for a dismissal of the action.

In April 2015, we filed a proof of claim in connection with bankruptcy proceedings of V3 Systems, Inc. ("V3") based on breaches by V3 of the Asset Purchase Agreement entered into between V3 and the Company dated February 11, 2014 (the "APA"). On October 6, 2015, UD Dissolution Liquidating Trust ("UD Trust"), post-confirmation liquidating trust established by V3's plan of liquidation, filed a complaint against us and certain of our current and former directors in the U.S. Bankruptcy Court for the District of Utah Central Division objecting to our proof of claim and asserting claims for affirmative relief against us and our directors. This complaint alleges, among other things, that Sphere 3D breached the APA and engaged in certain other actions and/or omissions that caused V3 to be unable to timely sell the Sphere 3D common shares received by V3 pursuant to the APA. The UD Trust seeks, among other things, monetary damages for the loss of the potential earn-out consideration, the value of the common shares held back by us pursuant to the APA and costs and fees.

On December 23, 2015, we filed a motion seeking to dismiss the majority of the claims asserted by the UD Trust. On January 13, 2016, we filed a counterclaim against the UD Trust in which we allege that V3 breached numerous provisions of the APA. On July 22, 2016, we filed a motion seeking to transfer venue of this action to the United States District Court for the District of Delaware. The Utah Bankruptcy Court granted our motion to transfer venue on August 30, 2016, and the case was formally transferred to the Delaware District Court on October 11, 2016. On November 13, 2018, the Delaware District Court referred the case to the Delaware Bankruptcy Court. The Delaware Bankruptcy Court never set a hearing or decided our motion to dismiss.

In March 2018, UD Trust filed a complaint in U.S. District Court for the Northern District of California ("California Complaint") asserting that two transactions involving the Company constitute fraudulent transfers under federal and state law. First, UD Trust alleges that the consolidation of the Company's and its subsidiaries' indebtedness to the Cyrus Group into a debenture between FBC Holdings and the Company in December 2014 constitutes a fraudulent transfer. Second, UD Trust alleges that the Share Purchase Agreement constitutes a fraudulent transfer, and seeks to require that the proceeds of the transaction be placed in escrow until the V3 litigation is resolved. The California Complaint also asserts a claim against the Company's former CEO for breach of fiduciary duty, and a claim against the Cyrus Group for aiding and abetting breach of fiduciary duty. On July 25, 2018, we filed a motion seeking to dismiss all of the claims asserted against the Company and its former CEO. On the same day, the Cyrus Group filed a motion seeking to dismiss all claims asserted against the Cyrus Group. The UD Trust voluntarily dismissed this case without prejudice on February 5, 2020.

On October 22, 2019, UD Trust filed an amended complaint in the Delaware Bankruptcy Court. The amended complaint includes all of the claims and parties in the original complaint first filed in October 2015 in the Utah Bankruptcy Court as well as the claims and additional parties in the California Complaint. We continue to believe this lawsuit to be without merit and intend to vigorously defend against the action. On February 10, 2020, we filed a renewed motion seeking to dismiss the majority of the claims asserted by the UD Trust in the amended complaint. On that same day, we also filed a counterclaim against the UD Trust in which we allege that V3 breached numerous provisions of the APA. The Company's current and former officers and directors that were named as defendants in the amended complaint as well as the Cyrus Group all filed motions seeking to dismiss all claims that the UD Trust alleged against them.

16. Segmented Information

The Company reports segment information as a single reportable business segment based upon the manner in which related information is organized, reviewed, and managed. The Company operates in one segment providing data storage and desktop virtualization solutions for small and medium businesses and distributed enterprises. The Company conducts business globally, and its sales and support activities are managed on a geographic basis. Our management reviews financial information presented on a consolidated basis, accompanied by disaggregated information it receives from its internal management system about revenues by geographic region, based on the location from which the customer relationship is managed, for purposes of allocating resources and evaluating financial performance.

Information about Products and Services

The following table summarizes net revenue (in thousands):

	Year Ended December 31,	
	2019	2018
Disk systems	$ 3,086	$ 6,108
Service	2,493	2,922
Total	$ 5,579	$ 9,030

Information about Geographic Areas

The Company markets its products domestically and internationally. Revenue is attributed to the location to which the product was shipped. The Company divides its worldwide sales into three geographical regions: Americas; APAC, consisting of Asia Pacific countries; and EMEA consisting of Europe, the Middle East and Africa.

The following table summarizes net revenue by geographic area (in thousands):

	Year Ended December 31,	
	2019	2018
Americas	$ 5,023	$ 8,044
APAC	356	534
EMEA	200	452
Total	$ 5,579	$ 9,030

17. Subsequent Events

COVID-19

Beginning in early 2020, there has been an outbreak of coronavirus (“COVID-19”), initially in China and which has spread globally. The full extent of the outbreak, related business and travel restrictions and changes to behavior intended to reduce its spread are evolving. Therefore, the full extent to which COVID-19 may impact Company’s results of operations, liquidity or financial position is uncertain. Management continues to monitor the impact that the COVID-19 pandemic is having on the Company and the economies in which the Company operates.

On April 9, 2020, the Company received loan proceeds in the amount of $667,400 (the “PPP Funds”) and entered into a loan agreement with City National Bank pursuant to the CARES Act. The CARES Act was established in order to enable small businesses to pay employees during the economic slowdown caused by COVID-19 by providing forgivable loans to qualifying businesses for up to 2.5 times their average monthly payroll costs. The amount borrowed by the Company under the CARES Act is eligible to be forgiven provided that (a) the Company uses the PPP Funds during the eight week period after receipt thereof, and (b) the PPP Funds are only used to cover payroll costs (including benefits), rent, mortgage interest, and utility costs. The amount of loan forgiveness will be reduced if, among other reasons, the Company does not maintain staffing or payroll levels. Principal and interest payments on any unforgiven portion of the PPP Funds (the “PPP Loan”) will be deferred for six months and will accrue interest at a fixed annual rate of 1.0% and carry a two year maturity date. There is no prepayment penalty on the CARES Act Loan.

Nasdaq Listing

On January 3, 2020, the Company received a letter from the Nasdaq Listing Qualifications department of The Nasdaq Stock Market LLC notifying the Company that it was not in compliance with the requirement of Nasdaq Marketplace Rule 5550(a)(2) for continued inclusion on the NASDAQ Capital Market as a result of the closing bid price for the Company’s common stock being below $1.00 for 30 consecutive business days. This notification has no effect on the listing of the Company’s common shares at this time. In accordance with the Nasdaq Marketplace Rules, the Company was provided with an initial period of 180 calendar days, or until July 1, 2020, to regain compliance, which will require a closing bid price for the Company’s common stock above $1.00 for a minimum of 10 consecutive business days. However, due to recent market turmoil, Nasdaq has filed a rule change tolling the compliance periods for price-based listing requirements through June 30, 2020, extending the Company’s compliance period until September 14, 2020.

Business Advisory Agreement

On February 13, 2020, the Company entered into a business advisory agreement with Torrington Financial Services Ltd (the “Advisor”), a financial adviser to the Company and a participant of the investors party thereto below Offering. As a result of the March 23, 2020 transaction, the Advisor and its related entities who participated in the Offering became a related party of the Company.

Subscription Agreements

On March 23, 2020, the Company entered into subscription agreements by and among the Company and the investors party thereto, including the Advisor, a related party, for the purchase and sale of 725 units (collectively, the “Units” and individually, a “Unit”) for aggregate gross proceeds of up to $725,000 (the “Offering”), with each Unit consisting of (a) a 6% convertible debenture in the principal amount of $1,000, which is convertible at $0.6495 per share into 1,540 common shares of the Company, and (b) a warrant to purchase 1,540 common shares of the Company exercisable at any time on or before the third year anniversary date at an exercise price of $0.60 per share. The warrant includes a provision restricting the warrant holder from exercising it if the aggregate number of common shares held by the warrant holder equals or exceeds 5.0% of the issued and outstanding shares of the Company, calculated on a partially converted basis (i.e., assuming the conversion of all rights to receive common shares of the Company held by the warrant holder).

In connection with the Offering and as compensation for the Advisor’s services, the Company issued to the Advisor convertible debentures equal to $58,000 and convertible into 89,320 common shares and with other terms also substantially the same as the investors. The Company received cash proceeds of $575,000 from the Offering, and a participant of the offering, a related party, paid directly $150,000 to a financial consultant for a prepayment of future services to the Company. The Company intends to use the remaining proceeds from the Offering for general corporate and working capital purposes.

Between April 7, 2020 and April 24, 2020, the Company converted $377,000 of convertible debentures and issued 580,580 common shares of the Company, of which 271,040 common shares were issued to related parties.

Share Purchase Agreement

On April 21, 2020, two investors, one of which was an investor of the above Offering, entered into share purchase agreements to acquire 330,000 common shares of the Company. As a result of this transaction, the investor participating in the Offering will hold enough common shares be classified as a related party of the Company. Originally, the common shares were held by a vendor of the Company subject to the October 2019 related party subscription agreement the Company entered into with such vendor and issued 330,000 common shares of the Company at $1.07 per share to the vendor in exchange for the satisfaction of certain accounts payable. In the second quarter of 2020, the aggregate amount of the obligations owed by the Company to the vendor were reduced by $157,000, the actual cash proceeds received by the vendor from the share purchase agreements.

Securities Purchase Agreement

On April 30, 2020, the Company entered into a Securities Purchase Agreement (the “Securities Purchase Agreement”) with two investors (the “Purchasers“) relating to the issuance and sale, in the aggregate, 1,694,000 shares (the “Shares“) of the Company's to be established Series D Convertible Preferred Stock, no par value and warrants to purchase up to 1,694,000 common shares of the Company in a private placement transaction, in exchange for the assignment to the Company by the investors of certain promissory notes receivable held by the investors in an aggregate amount of $1.1 million. The sale of the Shares to the Purchasers closed on May 6, 2020 (the “Closing“). Under the Securities Purchase Agreement, the Company has made certain customary representations, warranties and covenants.

Subject to certain limitations, the warrants will be exercisable commencing on the six month anniversary of the Closing (the “Initial Exercise Date“) at an exercise price equal to $0.92 per common share, subject to adjustments as provided under the terms of the warrants. The warrants are exercisable for five years from the Initial Exercise Date.

Neither the Shares nor warrants have been registered under the Securities Act of 1933, as amended (the “Securities Act“), and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements under the Securities Act and state securities laws.

Series D Preferred Shares

On May 6, 2020, the Company filed of articles of amendment to create a fourth series of preferred shares, being, an unlimited number of Series D Preferred Shares and to provide for the rights, privileges, restrictions and conditions attaching thereto. The Series D Preferred Shares are convertible into our common shares, at a conversion price equal to $0.65, subject to certain anti-dilution adjustments. Each shareholder of the Series D Preferred Shares, may, at any time, convert all or any part of the Series D Preferred Shares provided that after such conversion the common shares issuable, together with all the common shares held by the shareholder in the aggregate would not exceed 9.9% of the total number of outstanding common shares of the Company or in the aggregate no more than 800,000 common shares by all holders of Series D Preferred Shares. The Series D Preferred Shares do not have voting rights.

Exhibit 4.8

DESCRIPTION OF SECURITIES

Sphere 3D Corp. (the "Company") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: common shares, no par value per share.

The following summary does not purport to be complete and is subject to, and is qualified in its entirety by reference to, the applicable provisions of the Business Corporation Act (Ontario) ("OBCA") and our Articles and By-laws. We encourage you to review our:

- Articles of Amendment dated May 6, 2020;
- Articles of Amendment dated November 6, 2019;
- Articles of Amendment dated July 12, 2019;
- Articles of Amendment dated November 13, 2018;
- Articles of Amendment dated November 5, 2018;
- Articles of Amendment dated September 28, 2018;
- Articles of Amendment dated July 11, 2017;
- Articles of Amalgamation dated March 24, 2015;
- By-law No. 1, as amended; and
- By-law No. 2.

Our authorized share capital consists of an unlimited number of Common Shares, no par value, and an unlimited number of Preferred Shares issuable in Series.

Common Shares

As of May 6, 2020, there were 4,597,405 Common Shares outstanding. The Company's Common Shares are listed on the NASDAQ Capital Market under the symbol "ANY". The holders of Common Shares have the following rights, restrictions and privileges in respect of their Common Shares:

- The right to vote, one vote per share, at all meetings of shareholders (except meetings at which only holders of another specified class of shares are entitled to vote pursuant to the provisions of the Company's Articles or pursuant to the provisions of the OBCA);
- Cumulative voting for the election of directors is not permitted;
- After payments of dividends to the holders of preferred shares, the right to receive dividends, as and when declared by the Board of Directors of the Company; and
- Upon the liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary, or in the event of any other distribution of assets of the Company among its shareholders for the purpose of winding up its affairs, after payment to the holders of the preferred shares of the amount or amounts to which they may be entitled, the holders of the common shares shall be entitled to share pro rata in any distribution of the property or assets of the Company.

Preferred Shares

As of May 6, 2020, there were 6,843,778 Series B Preferred Shares, 1,600,000 Series C Preferred Shares and 1,694,000 Series D Preferred Shares outstanding. The conversion of the outstanding Series B and C Preferred Shares will result in substantial dilution to our common shareholders. Pursuant to our articles of amalgamation, the Board has the authority to fix and determine the voting rights, rights of redemption and other rights and preferences of preferred stock. The preferred stock outstanding does not have voting rights.

Series B Preferred Shares

The holders of Series B Preferred Shares have the following rights, restrictions and privileges in respect of their Preferred Shares:

- Subject to prior shareholder approval, the Series B Preferred Shares are convertible into our common shares, at a conversion rate equal to $1.00 per share, plus accrued and unpaid dividends beginning November 2020, divided by an amount equal to 0.85 multiplied by a 15-day volume weighted average price per Common Share prior to the date the conversion notice is provided, subject to a conversion price floor of $0.80;
- Carry a cumulative preferred dividend at a rate of 8.0% of the subscription price per Series B Preferred Share; and
- Carry a liquidation preference equal to the subscription price per Series B Preferred Share plus any accrued and unpaid dividends.

Series C Preferred Shares

The holders of Series C Preferred Shares have the following rights, restrictions and privileges in respect of their Preferred Shares:

- Subject to prior shareholder approval, the Series C Preferred Shares are convertible into our common shares, at a conversion rate in effect on the date of conversion. The sole holder of the Series C Preferred Shares, may, at any time, convert all or any part of the Series C Preferred Shares provided that after such conversion the common shares issuable, together with all the common shares held by the shareholder in the aggregate would not exceed 19.9% of the total number of outstanding common shares of the Company.

Series D Preferred Shares

The holders of Series D Preferred Shares have the following rights, restrictions and privileges in respect of their Preferred Shares:

- The Series D Preferred Shares are convertible into our common shares, at a conversion price equal to US$0.65, subject to certain anti-dilution adjustments. Each shareholder of the Series D Preferred Shares, may, at any time, convert all or any part of the Series D Preferred Shares provided that after such conversion the common shares issuable, together with all the common shares held by the shareholder in the aggregate would not exceed 9.9% of the total number of outstanding common shares of the Company or in the aggregate no more than 800,000 common shares by all holders of Series D Preferred Shares.

Dividends

The Company has not declared or paid any dividends on its Common Shares to date. The Company's outstanding Series B Preferred Shares accrue dividends at a rate of 8.0% per annum. Dividends on Preferred Shares shall be paid on such date or dates as and when decided by the board of directors out of moneys properly applicable to the payment of such dividends.

Advance Notice Requirements for Shareholder Proposals and Director Nominations

The Company's by-laws provide that shareholders seeking to nominate candidates for election as directors at a meeting of shareholders must provide the Company with timely written notice of their proposal. The Company's by-laws also specify requirements as to the form and content of a shareholder's notice. These provisions may preclude shareholder's from making nominations for directors at an annual meeting of shareholders.

Indemnification of Our Executive Officers and Directors

In accordance with the by-laws of the Company, directors and officers are each indemnified by the Company against all liability and costs arising out of any action or suit against them from the execution of their duties, provided that they have carried out their duties honestly and in good faith with a view to the best interests of the Company and have otherwise complied with the provisions of applicable corporate law.

March 3, 2020

Chris Cunningham
HVE, Inc.
Waxahachie, Texas 75165

To Whom It May Concern:

Please be advised that HVE, Inc currently has a line of credit with Citizens National Bank of Texas in the amount of $500,000. The current maturity of this line of credit is June 19, 2020. As the loan gets closer to maturity the bank will provide HVE, Inc with a formal renewal modification for an additional 12 months.

.
Please feel free to contact me if you have any questions in regard to this letter by e-mail at aj.woodall@cnbwax.com or directly at 972-351-5192.

Thanks,

A.J. Woodall
Vice President
Citizens National Bank of Texas.

PO Box 717 • Waxahachie, TX 75168 • 972-938-4300 • Toll Free 877-938-4300 • www.cnboftexas.com • Member FDIC

Exhibit 10.32

Exhibit 10.33

BUSINESS ADVISORY AGREEMENT

THIS AGREEMENT (the "Agreement") dated as of February 13, 2020 by and between Sphere 3D (the "Company") and Torrington Financial Services Limited (the "Advisor").

W I T N E S S E T H:

WHEREAS, the Company desires to retain Advisor to provide business advisory services to the Company; and

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants herein contained, it is hereby agreed as follows:

SECTION 1. Retention.

(a) The Company hereby retains the Advisor to perform the services set forth in below during the six (6) month period commencing on the date hereof. This Agreement shall automatically renew for additional six (6) year periods unless terminated in writing not less than thirty (30) days prior to the original or any subsequent expiration date (the original two-year period and any renewals thereof shall collectively hereafter be referred to as the "Term"). The Advisor hereby accepts such retention and shall perform for the Company the duties described herein, faithfully and to the best of its ability. During the Term, the Advisor shall report directly to the President or to any other senior officer designated in writing by the President of the Company.

(b) The Advisor shall render such advice and services to the Company as may be reasonably requested by the Company concerning equity and/or debt financings, strategic planning, merger and acquisition possibilities and business development activities including, without limitation, the following:

(i) Study and review of the business, operations, and historical financial performance of the Company (based upon management's forecast of financial performance) so as to enable the Advisor to provide advice to the Company;

(ii) Assist the Company in attempting to formulate the best strategy to meet the Company's working capital and capital resource needs;

(iii) Introduce the Company to potential non-US lenders of funds as well as to potential non-US investors (whether such investment is in the form of debt and/or equity financing or some combination thereof);

(iv) Assist in the formulation of the terms and structure of any reasonable proposed business combination transaction involving the Company, including without limitation, any merger or consolidation, sale of assets, or sale or exchange of stock (a "Business Combination");

(v) Assist in the presentation to the Board of Directors of the Company of any proposed transaction.

SECTION 2. Compensation.

(a) If during the Term the Company completes an equity financing, including any securities convertible into equity (an "Equity Financing"), the Company shall pay the Advisor at closing (i) a fee equal to eight percent (8%) of the equity in the Company issued in the Equity Financing, payable in the same form of Company's equity issued in the Equity Financing.

(b) If during the Term the Company completes a Business Combination with a public or private company, the Company shall pay the Advisor, a fee equal to 2.5% of the Company's issued and outstanding common stock, on an as-converted, fully diluted basis (the "Business Combination Fee"). The Business Combination Fee shall be deemed earned and payable upon the execution by the Company of a definitive agreement for a Business Combination.

(c) Each potential source of financing, potential Business Combination candidate or any other Company either (a) introduced to the Company by Advisor (and each financing source introduced to the Company by any Advisor Source) or (b) is introduced by Company to Advisor whereby Advisor provided advisory services related to a potential transaction, including but not limited to any Equity Financing or Business Combination (collectively, a "Fee Transaction") during the Term of this Agreement shall be deemed an "Advisor Source." In the event Company completes a Fee Transaction with any Advisor Source (or with a financing source introduced to Company by any Advisor Source listed in Schedule A) within two (2) years of the termination of this Agreement, Company shall pay to Advisor its full fee due under sections 2(a), or 2(b), except if the Company has terminated this Agreement following the failure of Advisor to perform any of its material obligations under this Agreement, provided that the Company has complied with its material obligations hereunder.

(d) Except as otherwise provided for herein:

(i) All fees due the Advisor hereunder shall have no offsets, are non- refundable, non-cancelable and shall be free and clear of any and all encumbrances.

(ii) All unrestricted securities fees due the Advisor hereunder shall be made via DTC or the DWAC system if eligible for such system, or by certificates issued by the transfer agent for the Company or the Company, as applicable, and shall be delivered to the Advisor by the Closing Agent immediately upon closing of any Fee Transaction.

(iii) All securities fees due the Advisor hereunder shall be duly issued, fully-paid (exclusive of warrants or options) and non-assessable and shall be in the same form, with the same terms and conditions as the securities provided to the Company pursuant to any Fee Transaction.

(iv) For the purposes of this Agreement, "Registrable Securities" shall mean (i) all shares of Common Stock of the Company paid or payable to the Advisor under this Agreement, (ii) all shares of Common Stock into which convertible securities issued or issuable to the Advisor under this Agreement are convertible and (iii) all shares of common stock into which derivative securities (including, without limitation, warrants and options) issued or issuable to the Advisor are exercisable. The Company hereby grants to the Advisor “customary piggyback registration rights" and shall register all of the Registrable Securities on any registration statement it files with the Securities and Exchange Commission relating to its securities (excluding registration statements on Form S-8) and in compliance with any and all federal and state securities laws, in the name(s) of and to the account(s) designated by the Advisor. The Company agrees to pay all costs associated with registering the Registrable Securities for resale. In order to effectuate the foregoing provisions, at the Advisor's request, either simultaneously herewith or at any time hereafter, the Company shall execute and deliver to the Advisor a Registration Rights Agreement reflecting the foregoing provisions.

(e) The Company shall authorize and direct the closing agent to distribute directly or from escrow any and all fees due the Advisor hereunder. The Company agrees that such fees and the manner of payment and delivery as herein provided shall be included in the documentation of any Fee Transaction. The Advisor is hereby authorized to notify the Closing Agent, on behalf of the Company and as its agent, to make all payments required hereunder directly to the Advisor.

SECTION 3. Expenses. The Company shall reimburse the Advisor for any out-of pocket expenses incurred by the Advisor in relation to Advisor's services provided under this Agreement. Any individual expense in excess of $1,000 shall require the prior written approval of the Company and shall be evidenced by written documentation prior to reimbursement. Reimbursement by the Company to the Advisor will be made within fifteen (15) days of the Company's receipt of said documentation.

SECTION 4. Advisor Restrictions. Advisor agrees that Advisor shall not (A) introduce the Company to any potential financing source who is a U.S. Person, as that term is defined in Regulation S promulgated under the Securities Act of 1933, as amended (the "33 Act"), and (b) will not itself engage in, any "directed selling efforts" (as defined in Regulation S under the 1933 Act) in the United States which includes any activities undertaken for the purpose of, or that could reasonably be expected to have the effect of, conditioning the market in the United States for the resale of any of securities.

SECTION 5. Confidential Information. The Advisor agrees that during and after the Term, it will keep in strictest confidence, and will not disclose or make accessible to any other person without the written consent of the Company, the Company's products, services and technology, both current and under development, promotion and marketing programs, lists, trade secrets and other confidential and proprietary business information of the Company or any of its clients and third parties including, without limitation, Proprietary Information (as defined in Section 7) (all of the foregoing is referred to herein as the "Confidential Information"). The Advisor agrees (a) not to use any such Confidential Information for itself or others, except in connection with the performance of its duties hereunder; and (b) not to take any such material or reproductions thereof from the Company's facilities at any time during the Term except, in each case, as required in connection with the Advisor's duties hereunder.

Notwithstanding the foregoing, the parties agree that the Advisor is free to use (a) information in the public domain not as a result of a breach of this Agreement, (b) information lawfully received from a third party who had the right to disclose such information and (c) the Advisor's own independent skill, knowledge, know-how and experience to whatever extent and in whatever way he wishes, in each case consistent with his obligations as the Advisor and that, at all times, the Advisor is free to conduct any research relating to the Company's business.

SECTION 6. Indemnification. The Company represents that all materials provided or to be provided to the Advisor or any third party regarding the Company's financial affairs or operations are and shall be truthful and accurate and in compliance with any and all applicable federal and state securities laws. The Company agrees to indemnify and hold harmless the Advisor and its professionals, lawyers, consultants and affiliates, their respective directors, officers, shareholders, partners, members, managers, agents and employees and each other person, if any, controlling the Advisor or any of its affiliates to the full extent lawful, from and against all losses, claims, damages, liabilities and expenses incurred by them (including reasonable attorneys' fees and disbursements) that result from actions taken or omitted to be taken (including any untrue statements made or any statement omitted to be made) by the Company, its agents or employees which relate to the scope of this Agreement and the performance of the services by the Advisor contemplated hereunder. The Advisor will indemnify and hold harmless the Company and the respective directors, officers, agents, affiliates and employees of the Company from and against all losses, claims damages, liabilities and expenses that result from bad faith, gross negligence or unauthorized representations of the Advisor. In no event shall the Advisor be responsible or liable hereunder for an amount in excess of the compensation received by it pursuant to this Agreement. Each person or entity seeking indemnification hereunder shall promptly notify the Company, or the Advisor, as applicable, of any loss, claim, damage or expense for which the Company or the Advisor, as applicable, may become liable pursuant to this Section 8. No party shall pay, settle or acknowledge liability under any such claim without consent of the party liable for indemnification, and shall permit the Company or the Advisor, as applicable, a reasonable opportunity to cure any underlying problem or to mitigate actual or potential damages. The scope of this indemnification between the Advisor and the Company shall be limited to, and pertain only to certain transactions contemplated or entered into pursuant to this Agreement.

The Company or the Advisor, as applicable, shall have the opportunity to defend any claim for which it may be liable hereunder, provided it notifies the party claiming the right to indemnification in writing within fifteen (15) days of notice of the claim.

The rights stated pursuant to this Section 6 shall be in addition to any rights that the Advisor, the Company, or any other person entitled to indemnification may have in common law or otherwise, including, but not limited to, any right to contribution.

SECTION 7. Notices. Any notice or other communication under this Agreement shall be in writing and shall be deemed to have been duly given: (a) upon facsimile transmission (with written transmission confirmation report) at the number designated below; (b) when delivered personally against receipt therefore; (c) one day after being sent by Federal Express or similar overnight delivery; or (d) five (5) business days after being mailed registered or certified mail, postage prepaid. The addresses for such communications shall be as set forth below or to such other address as a party shall give by notice hereunder to the other party to this Agreement.

SECTION 8. Independent Contractors. The Advisor shall be deemed to be an independent contractor and, except as expressly provided or authorized in this Agreement, shall have no authority to act for on behalf of or represent the Company. This Agreement does not create a partnership or joint venture.

SECTION 9. Other Activities of Advisor. The Company recognizes that the Advisor now renders and may continue to render financial consulting and other investment banking services to other companies that may or may not conduct business and activities similar to those of the Company. The Advisor shall not be required to devote its full time and attention to the performance of its duties under this Agreement, but shall devote only so much of its time and attention as it deems reasonable or necessary for such purposes.

SECTION 10. Successors and Assigns. This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. This Agreement and any of the rights, interests or obligations hereunder may not be assigned by either party without the prior written consent of the opposing party, which consent shall not be unreasonably withheld.

SECTION 11. Severabilitv of Provisions. If any provision of this Agreement shall be declared by a court of competent jurisdiction to be invalid, illegal or incapable of being enforced in whole or in part, the remaining conditions and provisions or portions thereof shall nevertheless remain in full force and effect and enforceable to the extent they are valid, legal and enforceable, and no provision shall be deemed dependent upon any other covenant or provision unless so expressed herein.

SECTION 12. Entire Agreement; Modification. This Agreement and the schedules hereto contain the entire agreement of the parties relating to the subject matter hereof, and the parties hereto and thereto have made no agreements, representations or warranties relating to the subject matter of this Agreement which are not set forth herein. No amendment or modification of this Agreement shall be valid unless made in writing and signed by each of the parties hereto.

SECTION 13. Non-Waiver. The failure of any party to insist upon the strict performance of any of the terms, conditions and provisions of this Agreement shall not be construed as a waiver or relinquishment of future compliance therewith; and the said terms, conditions and provisions shall remain in full force and effect. No waiver of any term or condition of this Agreement on the part of any party shall be effective for any purpose whatsoever unless such waiver is in writing and signed by such party.

SECTION 14. Governing Law. The parties hereto acknowledge that the transactions contemplated by this Agreement bear a reasonable relation to the state of New York. This Agreement shall be governed by, and construed and interpreted in accordance with, the internal laws of the state of New York without regard to such state's principles of conflicts of laws. The parties irrevocably and unconditionally agree that the exclusive place of jurisdiction for any action, suit or proceeding ("Actions") relating to this Agreement shall be in the state or federal courts situated in the county of New York and state of New York. Each party irrevocably and unconditionally waives any objection it may have to the venue of any Action brought in such courts or to the convenience of the forum. Final judgment in any such Action shall be conclusive and may be enforced in other jurisdictions by suit on the judgment, a certified or true copy of which shall be conclusive evidence of the fact and the amount of any indebtedness or liability of any party therein described. Service of process in any Action by any party may be made by serving a copy of the summons and complaint, in addition to any other relevant documents, by commercial overnight courier to any other party at their address set forth in this Agreement.

SECTION 15. Headings. The headings of the Sections are inserted for convenience of reference only and shall not affect any interpretation of this Agreement.

SECTION 16. Counterparts. This Agreement may be executed in counterpart signatures, each of which shall be deemed an original, but all of which, when taken together, shall constitute one and the same instrument, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such facsimile signature page were an original thereof.

[Signature Page Immediately Follows}

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

By: /s/ Peter Tassiopoulos
Peter Tassiopoulos, CEO Sphere 3D

By: /s/ Brian McWilliams
Brian McWilliams, CEO Torrington

Exhibit 10.34

FBC Holdings S.à r.l.
c/o Trustmoore Luxembourg S.A.
6 Rue Dicks
L-1417 Luxembourg
Luxembourg

October 31, 2019

Sphere 3D Corp.
895 Don Mills Road, Bldg 2
Suite 900
Toronto, Ontario, Canada
M3C 1W3

Re: Series B Preferred Shares – Waiver of Mandatory Redemption Rights

Ladies and Gentlemen:

FBC Holdings S.à r.l. ("**FBC**") is the registered and beneficial owner of 6,500,000 Series B Preferred Shares of Sphere 3D Corp. ("**S3D**") (the "**Series B Shares**") which represents the total issued and outstanding Series B Shares. The rights, privileges and preferences of the Series B Shares are as stated in S3D's articles of amendment filed on July 12, 2019 (the "**Terms of the Series B Shares**"). Under the Terms of the Series B Shares, S3D is required to redeem 1,000,000 of the outstanding Series B Shares on or before November 13, 2020 (the "**Mandatory Redemption**").

As of the date hereof, FBC, as the sole shareholder of the Series B Shares, hereby irrevocably waives its entitlement to the Mandatory Redemption.

Nothing in this letter shall be, or construed as, a waiver, amendment, consent or agreement in respect of any other Terms of the Series B Shares. All other Terms of the Series B Shares shall remain in full force and effect.

By FBC Holdings S.à r.l. as Holder

By: /s/ Trustmoore Luxembourg S.A.
Name: Trustmoore Luxembourg S.A.
Title: Manager A

By: /s/ Cyrus Capital Partners, LP
Name: Cyrus Capital Partners, LP
Title: Manager B

Exhibit 10.35

U.S. Small Business Administration

NOTE

SBA Loan #	44830370-05
SBA Loan Name	
Date	April 9, 2020
Loan Amount	$667,400.00
Interest Rate	Fixed rate of 1%
Borrower	Sphere 3D Corp.
Operating Company	HVE, Inc.
Lender	Citizens National Bank Of Texas

1. PROMISE TO PAY

In return for the Loan, Borrower promises to pay to the order of Lender the amount of __$667,000 Dollars, interest on the unpaid principal balance, and all other amounts required by this Note.

2. DEFINITIONS:

"Guarantor" means each person or entity that signs a guarantee of payment of this Note. "Loan" means the loan evidenced by this Note.

"Loan Documents" means the PPP application related to this loan signed by Borrower, any Guarantor, or listed as owner.

"SBA" means the Small Business Administration, an Agency of the United States of America.

PPP "Paycheck Protection Program," to the U.S. Small Business Administration's (SBA's) 7(a) Loan Program. Section 1106

3. PAYMENT TERMS:

Borrower must make all payments at the place Lender designates. The payment terms for this Note are:

Maturity: This Note will mature in 2 years from date of Note. Interest Rate: Fixed at 1%

Repayment Terms:

Borrower will have no monthly payments for six months following the date of disbursement of the loan with the remaining 18 monthly payments being amortized over remaining balance. Interest will continue to accrue on PPP loan during this six-month deferment and life of loan.

Scheduled Payments will begin after The Act authorizes the Administrator to defer loan payments for up to one year. The Administrator determined, in consultation with the Secretary, that a six-month deferment period is appropriate in light of the modest interest rate (one percent) on PPP loans and the loan forgiveness provisions contained in the Act.

PPP Loan forgiveness:

The amount of loan forgiveness can be up to the full principal amount of the loan and any accrued interest. That is, the borrower will not be responsible for any loan payment if the borrower uses all of the loan proceeds for forgivable purposes described below and employee and compensation levels are maintained. The actual amount of loan forgiveness will depend, in part, on the total amount of payroll costs, payments of interest on mortgage obligations incurred before February 15, 2020, rent payments on leases dated before February 15, 2020, and utility payments under service agreements dated before February 15, 2020, over the eight-week period following the date of the loan. However, not more than 25 percent of the loan forgiveness amount may be attributable to non-payroll costs.

While the Act provides that borrowers are eligible for forgiveness in an amount equal to the sum of payroll costs and any payments of mortgage interest, rent, and utilities, the Administrator has determined that the non-payroll portion of the forgivable loan amount should be limited to effectuate the core purpose of the statute and ensure finite program resources are devoted primarily to payroll. The Administrator has determined in consultation with the Secretary that 75 percent is an appropriate percentage in light of the Act’s overarching focus on keeping workers paid and employed. Further, the Administrator and the Secretary believe that applying this threshold to loan forgiveness is consistent with the structure of the Act, which provides a loan amount 75 percent of which is equivalent to eight weeks of payroll (8 weeks / 2.5 months = 56 days / 76 days = 74 percent rounded up to 75 percent). Limiting non-payroll costs to 25 percent of the forgiveness amount will align these elements of the program, and will also help to ensure that the finite appropriations available for PPP loan forgiveness are directed toward payroll protection. SBA will issue additional guidance on loan forgiveness.

4. DEFAULT:

Borrower is in default under this Note if Borrower does not make a payment when due under this Note, or if Borrower or Operating Company:

A. Fails to do anything required by this Note and other Loan Documents;

B. Defaults on any other loan with Lender;

C. Does not preserve, or account to Lender’s satisfaction for, any of the Collateral or its proceeds;

D. Does not disclose, or anyone acting on their behalf does not disclose, any material fact to Lender or SBA;

E. Makes, or anyone acting on their behalf makes, a materially false or misleading representation to Lender or SBA;

F. Defaults on any loan or agreement with another creditor, if Lender believes the default may materially affect Borrower ’s ability to pay this Note;

G. Fails to pay any taxes when due;

H. Becomes the subject of a proceeding under any bankruptcy or insolvency law;

I. Has a receiver or liquidator appointed for any part of their business or property;

J. Makes an assignment for the benefit of creditors;

K. Has any adverse change in financial condition or business operation that Lender believes may materially affect Borrower 's ability to pay this Note;

L. Reorganizes, merges, consolidates, or otherwise changes ownership or business structure without Lender 's prior written consent; or

M. Becomes the subject of a civil or criminal action that Lender believes may materially affect Borrower's ability to pay this Note.

5. LENDER 'S RIGHTS IF THERE IS A DEFAULT:

Without notice or demand and without giving up any of its rights, Lender may:

A. Require immediate payment of all amounts owing under this Note;

B. Collect all amounts owing from any Borrower or Guarantor;

C. File suit and obtain judgment;

D. Take possession of any Collateral; or

E. Sell, lease, or otherwise dispose of, any Collateral at public or private sale, with or without advertisement.

6. LENDER 'S GENERAL POWERS:

Without notice and without Borrower 's consent, Lender may:

A. Bid on or buy the Collateral at its sale or the sale of another lienholder, at any price it chooses;

B. Incur expenses to collect amounts due under this Note, enforce the terms of this Note or any other Loan Document, and preserve or dispose of the Collateral. Among other things, the expenses may include payments for property taxes, prior liens, insurance, appraisals, environmental remediation costs, and reasonable attorney 's fees and costs. If Lender incurs such expenses, it may demand immediate repayment from Borrower or add the expenses to the principal balance;

C. Release anyone obligated to pay this Note;

D. Compromise, release, renew, extend or substitute any of the Collateral; and

E. Take any action necessary to protect the Collateral or collect amounts owing on this Note.

7. WHEN FEDERAL LAW APPLIES:

When SBA is the holder, this Note will be interpreted and enforced under federal law, including SBA regulations. Lender or SBA may use state or local procedures for filing papers, recording documents, giving notice, foreclosing liens, and other purposes. By using such procedures, SBA does not waive any federal immunity from state or local control, penalty, tax, or liability. As to this Note, Borrower may not claim or assert against SBA any local or state law to deny any obligation, defeat any claim of SBA, or preempt federal law.

8. SUCCESSORS AND ASSIGNS:

Under this Note, Borrower and Operating Company include the successors of each, and Lender includes its successors and assigns.

9. GENERAL PROVISIONS:

A. All individuals and entities signing this Note are jointly and severally liable.

B. Borrower waives all suretyship defenses.

C. Borrower must sign all documents necessary at any time to comply with the Loan Documents and to enable Lender to acquire, perfect, or maintain Lender 's liens on Collateral.

D. Lender may exercise any of its rights separately or together, as many times and in any order it chooses. Lender may delay or forgo enforcing any of its rights without giving up any of them.

E. Borrower may not use an oral statement of Lender or SBA to contradict or alter the written terms of this Note.

F. If any part of this Note is unenforceable, all other parts remain in effect.

G. To the extent allowed by law, Borrower waives all demands and notices in connection with this Note, including presentment, demand, protest, and notice of dishonor. Borrower also waives any defenses based upon any claim that Lender did not obtain any guarantee; did not obtain, perfect, or maintain a lien upon Collateral; impaired Collateral; or did not obtain the fair market value of Collateral at a sale.

10. STATE-SPECIFIC PROVISIONS:

11. BORROWER 'S NAME(S) AND SIGNATURE(S):

By signing below, each individual or entity becomes obligated under this Note as Borrower.

HVE, Inc.

By Sphere 3D Corp.

By: /s/ Kurt Kalbfleisch

Exhibit 21.1

Subsidiaries of the Company

Name of subsidiary	Jurisdiction of Incorporation or Organization
Sphere 3D Inc.	Ontario, Canada
V3 Systems Holdings, Inc.	Delaware, United States
HVE Inc.	Delaware, United States

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form F-3 (No. 333-206357, No. 333-206358, No. 333-206359, No. 333-207384, No. 333-210735, No. 333-219383) and Form S-8 (No. 333-203149, No. 333-203151, No. 333-205236, No. 333-209251, No. 333-214605, No. 333-216209, No. 333-220152, No. 333-222771, No. 333-228380, 333-231472, No. 333-238145) of Sphere 3D Corp. (the “Company”) of our report dated May 13, 2020, relating to the consolidated financial statements of the Company (which report expresses an unqualified opinion and includes an explanatory paragraph regarding the Company’s going concern uncertainty), appearing in the Company’s Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Smythe LLP

Chartered Professional Accountants

Vancouver, Canada

May 13, 2020

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form F-3 (No. 333-206357, No. 333-206358, No. 333-206359, No. 333-207384, No. 333-210735, No. 333-219383) and Form S-8 (No. 333-203149, No. 333-203151, No. 333-205236, No. 333-209251, No. 333-214605, No. 333-216209, No. 333-220152, No. 333-222771, No. 333-228380, No. 333-231472, No. 333-238145) of Sphere 3D Corp. (the "Company") of our report dated March 29, 2019, relating to the consolidated financial statements of the Company (which report expresses an unqualified opinion and explanatory paragraphs relating to the Company's going concern uncertainty and the adoption of new accounting standards, and an emphasis of a matter paragraph relating to discontinued operations), appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Moss Adams LLP

San Diego, California
May 13, 2020

Exhibit 31.1

CERTIFICATION

I, Peter Tassiopoulos certify that:

1. I have reviewed this annual report on Form 10-K of Sphere 3D Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: May 13, 2020

/s/ Peter Tassiopoulos

Peter Tassiopoulos
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Kurt L. Kalbfleisch, certify that:

1. I have reviewed this annual report on Form 10-K of Sphere 3D Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: May 13, 2020

/s/ Kurt L. Kalbfleisch

Kurt L. Kalbfleisch
Senior Vice-President and
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION. 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Annual Report of Sphere 3D Corp. (the “Registrant”) on Form 10-K for the fiscal year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Peter Tassiopoulos, Chief Executive Officer of the Registrant, certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 13, 2020

/s/ Peter Tassiopoulos
Peter Tassiopoulos
Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION. 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Annual Report of Sphere 3D Corp. (the "Registrant") on Form 10-K for the fiscal year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kurt L. Kalbfleisch, Senior Vice-President and Chief Financial Officer of the Registrant, certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 13, 2020

/s/ Kurt L. Kalbfleisch

Kurt L. Kalbfleisch
Senior Vice-President and
Chief Financial Officer