FALCONSTOR SOFTWARE INC

FORM 10-K
(Annual Report)

Filed 03/23/23 for the Period Ending 12/31/22

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

FORM 10-K

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

For the fiscal year ended December 31, 2022

OR

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

Commission File Number 0-23970

FALCONSTOR SOFTWARE, INC.
(Exact name of Registrant as specified in its Charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**77-0216135** **(I.R.S. Employer Identification No.)**
501 Congress Avenue, Suite 150 **Austin, TX** **(Address of principal executive offices)**	**78701** **(Zip Code)**

Registrant's telephone number, including area code: (631) 777-5188

Securities registered pursuant to Section 12(b) of the Act: **None**
Securities registered pursuant to Section 12(g) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.001 Par Value	FALC	OTC

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

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

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to § 240.10D-1(b). ☐

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

The aggregate market value of Common Stock held by non-affiliates of the Registrant as of June 30, 2022 was $3,742,024 which value, solely for the purposes of this calculation, excludes shares held by Registrant's officers and directors. Such exclusion should not be deemed a determination by Registrant that all such individuals are, in fact, affiliates of the Registrant.
The number of shares of Common Stock issued and outstanding as of March 11, 2023 was 7,120,949.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of Form 10-K will be incorporated by reference to certain portions of a definitive proxy statement which is expected to be filed by the Company pursuant to Regulation 14A within 120 days after the close of its fiscal year.

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES

2022 ANNUAL REPORT ON FORM 10-K

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Unless the context otherwise requires, references in this Annual Report on Form 10-K (this "Form 10-K") to "we," "us," "our," "our company," "the Company," "FalconStor" and "our business" refer to FalconStor Software, Inc., a Delaware corporation.

Summary of Risk Factors

Investing in our common stock involves a high degree of risk. We have described below a number of risk factors which, in addition to uncertainties, risks and other information presented elsewhere in this Form 10-K, including our consolidated financial statements and notes thereto, may adversely affect our business, operating results and financial condition. The uncertainties and risks enumerated below, as well as those presented elsewhere in this Form 10-K, should be considered carefully in evaluating the Company, our business and the value of our securities. These risks are more fully described in Part I, Item 1A. Risk Factors. These risks include, among others, the following:

- We have had limited liquidity and our future prospects are dependent on our ability to execute our business plan, of which there can be no assurance.
- Our revenues decreased in 2022 compared to 2021. There is no guarantee that we will be able or to maintain, profitability.
- We have undertaken a restructuring and other cost reduction initiatives to reduce our expenses and to better align our expenses with our business. There can be no assurance that we have made enough reductions or the right reductions.
- We may not be able to fully utilize our net operating loss and other tax carryforwards, which may have the effect of devaluing significant deferred tax assets of the company.
- Our future business, financial and operating results are substantially dependent on the market acceptance of our products.
- The effects of the COVID-19 pandemic have materially affected and may continue to materially affect how we and our customers are operating our businesses, and the duration and extent to which this will impact our future results of operations and overall financial performance remains uncertain.
- Due to the uncertain and shifting development of the data protection and network storage software markets and our reliance on our partners, we may have difficulty accurately predicting revenue for future periods and appropriately budgeting for expenses.
- If we are unable to develop new products that achieve acceptance in the data protection and the network storage software markets, our operating results may suffer.
- Our products handle mission-critical data for our end-customers and are highly technical in nature. If our products have defects, failures occur or end-customer data is lost or corrupted, our reputation and business could be harmed.
- The failure of our resellers to sell our products effectively could have a material adverse effect on our revenue and results of operations.
- We rely on channel partners to sell our solutions, and disruptions to, or our failure to develop and manage our channel partners would harm our business.
- We face intense competition in our market, especially from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.
- The international nature of our business could have an adverse effect on our operating results.
- If we are unable to protect our intellectual property, our business will suffer.
- Our redemption obligation under the Series A Preferred Stock and indebtedness could adversely affect our financial health.
- To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control. As such, we may not be able to generate sufficient cash to service the term notes or our other indebtedness, and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.
- The likelihood of a change of control in our company could be impacted by the fact that we have a significant amount of authorized but unissued preferred stock, protective provisions in our charter, outstanding Series A Preferred Stock, a staggered board of directors and change of control agreements as well as certain provisions under Delaware law.
- The conversion and exercise of our outstanding securities and the anticipated grant of restricted stock to our employees will dilute the then-existing stockholders' percentage ownership of our common stock.
- There may be a limited public market for our securities; we presently fail to qualify for listing on any national securities exchanges.

- Our agreements with the holders of our Series A Preferred Stock and the Amended and Restated Loan Agreement prevent us from undertaking certain transactions or incurring certain indebtedness without such holders' consent or unless the Series A Preferred Stock held by such holders is repurchased and/or the Term Loan is repaid. This could hurt our ability to sell underperforming assets or lines of business or to obtain financing.
- The holders of the Series A Preferred Stock are entitled to dividends on the Series A Preferred Stock they hold. Depending on whether these dividends are paid in cash or stock, the payment of these dividends will either decrease cash that is available to us to invest in our business or dilute the holdings of all other stockholders.
- The potential concentration of equity ownership by Hale Capital and ESW Capital LLC may limit your ability to influence corporate matters.

PART I

Item 1. Business

OVERVIEW

FalconStor is the trusted data protection software leader modernizing disaster recovery and backup operations for the hybrid cloud world. The Company enables enterprise customers and managed service providers to secure, migrate, and protect their data while reducing data storage and long-term retention costs by up to 95%. More than 1,000 organizations and managed service providers worldwide standardize on FalconStor as the foundation for their cloud first data protection future. Our products are offered through and supported by a worldwide network of leading original equipment manufacturers ("OEMs"), managed service providers ("MSPs"), systems integrators, and resellers.

Our products address the increasing demand for hybrid-cloud data protection for multiple devices, networks and platforms across enterprise on-premises data centers, and private and public clouds. The onset of the coronavirus pandemic accelerated this shift, as ongoing remote work and work from home arrangements introduced novel challenges to maintaining enterprise data security. The adoption of increased employee mobility and flexible remote work arrangements, such as a broader incorporation of cloud technology and the option for employees to use their own devices, has introduced additional vulnerabilities that businesses must monitor and protect through solutions like ours in order to maintain enterprise data integrity.

Our products are utilized by enterprises and MSPs to address two key areas of enterprise data protection: (i) long-term data retention and recovery, and (ii) data replication to preserve business continuity. As enterprises increasingly look to focus their core IT staffs on application development and refresh, MSPs are increasingly assuming responsibility for cloud integration and data protection. Our integration with modern cloud-based data storage environments, such as IBM Cloud, Amazon Web Services ("AWS") and Microsoft Azure, enables our enterprise customers to significantly reduce costs and improve the portability, security and accessibility of their enterprise data and enables MSPs to serve their customers with their cloud of choice. We believe this accessibility is key in our modern world, where data must be protected and intelligently leveraged to facilitate learning, improve product design and drive competitive advantage. Our products can be used regardless of the underlying hardware, cloud and source-data, which enables our enterprise customers to leverage their existing hardware and software investments.

Since the beginning of 2020, we have focused our go to market efforts on long-term data retention and recovery data protection segment. In 2021, we increased our go-to-market investment within our core regions of the Americas, EMEA, Japan, Korea, and Southeast Asia, and released StorSafeTM, the next generation of our Virtual Tape Library ("VTL") product family built for MSPs. In 2022, we secured a key strategic relationship with IBM to optimize data protection for on-premises and cloud-native workloads that operate on the IBM Power Systems platform.

INDUSTRY BACKGROUND

Enterprises of all sizes are increasingly challenged to securely archive, replicate and make available their data assets. This challenge is increased as business pressures to reduce cost and increase efficiency push enterprises to adopt cloud-based technologies, which are critical to handling the growth in data and strategic uses of enterprise data, despite an increasing amount of records and data that has been compromised over the past several years. For example, according to the 2021 Year End Report published by RiskBased Security, approximately 22 billion records of sensitive data were lost from various breaches, with a 10 percent increase in the number of publicly disclosed breaches that occurred in the United States as compared to 2020.

We believe long-term data archive is the fastest-growing segment of an enterprise's data assets. This growth is accelerating as enterprises are increasingly subject to complex regulatory compliance, such as that driven by the Food and Drug Administration, the Health Insurance Portability and Accountability Act, European Union's General Data Protection Regulation and the Sarbanes-Oxley Act. As the volume of long-term archive continues to expand, the need for enterprises to securely and cost-effectively store the associated data will only increase.

The introduction of new long-term archive storage options has also given rise to a growth in MSPs remotely managing data protection, primarily to smaller enterprises with a less complex array of data assets. The MSPs are able to leverage modern broadband connectivity and offer more scalable long-term storage options, which will serve to reduce data protection costs for their customers. We believe this trend to outsourced long-term archive data protection will continue.

New regulations and laws governing the processing, storage, retention, protection and reinstatement of high-value information assets are driving significant growth in the data protection markets. We believe that data archives will play an increasing role in training and validating artificial intelligence and machine learning algorithms and optimizing strategic analytic model outcomes. Given our long history and deep skillset of the unique challenges associated with long-term storage, we believe that we are in position to capitalize on data assets that are subject to new protection requirements with our existing product portfolio. Our innovative StorSafe product is designed and architected to leverage the scale-up and scale-out capabilities found in today's public and private clouds to support the expanding long-term data protection market demand that is estimated to grow into the Zettabyte (10^21) range by 2030, according to market intelligence provider International Data Corporation. We believe our innovative integration of long-term archive storage into modern cloud-based technologies will enable our customers to dramatically improve the portability, security, and accessibility of their enterprise data.

OUR SOFTWARE PRODUCTS AND SUPPORTING TECHNOLOGY

FalconStor's software products create investment protection, flexibility, and leverage of modern cloud-based technologies, through software-defined functionality that provides backup and long-term retention, and business continuity driven data replication. As a result, our enterprise clients are able to utilize the underlying storage hardware, media, or environment (on-premise or cloud) that best aligns with their strategic needs. Our customers utilize our products to protect data residing in physical, virtual, private-cloud, public-cloud, and multi-cloud environments, giving them the freedom to optimize their data protection infrastructure and eliminate costly hardware-vendor, cloud, and form-factor lock-in.

Long-Term Data Retention and Recovery Products

FalconStor Virtual Tape Library: We were an early innovator in Virtual Tape Library ("VTL") technology, which allows enterprise customers to emulate and replace cumbersome physical tape libraries with archive related data preservation, without replacing their existing backup and archive software and associated processes. We believe our VTL product continues to be a leading virtual tape library solution in terms of performance and scalability. With VTL, our enterprise customers are able to complete their data archive operations more reliably, with minimal changes to their legacy archive environment. They are also able to leverage sophisticated physical tape emulation, advanced data security, data-deduplication, and public- or private-cloud based virtual tape archive storage. We have subjected our VTL solution to independent performance testing, which at the time demonstrated that our product was 25% faster than a competitor and could be executed on hardware that was one-third the cost of that required by our closest competitor. We enable our customers to reduce the amount of data that needs to be archived by processing their archive data through our integrated data deduplication engine. By eliminating redundant archive data, the archive storage capacity required can be significantly reduced. Our technology allows our enterprise customers to significantly reduce the cost of storing the ever-growing volume of data that is subject to long-term archive data protection mandates.

FalconStor StorSafe™ ("StorSafe") - Traditionally, enterprises have had limited choice and have been forced to store their archive data on physical tape or within storage arrays installed in an internal data center. Our newest and most innovative long-term archive data management software product, StorSafe, breaks these traditional storage limitations and enables enterprises to securely and cost effectively leverage a wide array of storage options, including ultra-efficient and scalable cloud-based storage environments, such as IBM Cloud, AWS, and Microsoft Azure.

Launched in 2020, StorSafe, like our proven VTL solution, provides sophisticated physical tape emulation and seamless integration with an enterprise's legacy backup and archive software and processes. In addition, StorSafe includes our advanced data deduplication technology. However, StorSafe takes long-term archive storage optimization to an entirely new and innovative level by providing multi-tenant data management that is critical to MSP Backup-as-a-Service ("BaaS") and Migration-as-a-Service ("MaaS") offerings. Our StorSafe solution dramatically improves archive data portability, accessibility, security, and integrity validation, for both individual enterprise customers and MSPs providing BaaS and MaaS to dozens, if not hundreds, of individual enterprises customers. As a result, a full spectrum of archive data storage options is made available to our enterprise customers to efficiently utilize essentially any storage environment, while confidently ensuring data security and efficient archive access.

Business Continuity Driven Data Replication Products

The FalconStor StorGuard™ ("StorGuard") Suite includes the functionality of the following point solutions.

FalconStor Continuous Data Protector ("CDP"): In addition to retaining long-term archive data, enterprises routinely maintain short-term copies, or backups, of data generated by various user applications to protect against data loss or natural disaster. Moving beyond once-a-day backup models, CDP combines local and remote protection into a cost-effective, unified, disk-based solution that allows enterprises to recover data back to the most recent transaction. Combining application-aware snapshot agents and continuous journaling functions, CDP enables customers to recover data effectively at any point in time. CDP delivers instant data availability and reliable recovery, with the capacity to bring business applications back online in a matter of minutes after a failure. CDP protects application-specific data for Microsoft, Oracle, SAP and other business applications, ensuring high performance and stability for complex business environments.

FalconStor Network Storage Server ("NSS"): The expanding capacity of data managed by enterprises creates a continual challenge in ensuring adequate amounts of available storage. NSS is a scalable solution that enables data storage virtualization and business continuity in heterogeneous environments. Supporting existing third-party disk arrays, NSS eliminates storage boundaries and vendor lock-in, providing fast and secure data storage provisioning and migration. Our core storage virtualization technology provides a non-disruptive approach to data mobility across different storage area network protocols and vendors. With NSS, it becomes a simple operation to move data from older platforms to newer ones or to introduce new storage capacity and tiers. This allows enterprises to respond to evolving performance and capacity requirements, as well as changing data protection mandates. Our products are sold as stand-alone software, but can also be bundled with standard hardware configurations to simplify implementation for our customers.

We are currently marketing our CDP and NSS products under the name StorGuard™.

Supporting Technology

Our core long-term archive and business continuity driven products are complemented by a set of underlying technologies that streamline usability and overall solution performance.

FalconStor StorSight™ ("StorSight"): StorSight gives our enterprise customers and MSPs the ability to administer long-term archive and business continuity driven data replication from one centralized management point and to easily test our other products they may not be currently licensing. To simplify our development efforts and to enable broader use of our products by our enterprise customers, we have unified all user management into our modern HTML-based console and rebranded that unified tool as StorSight. As a result, StorSight is now our unified data protection console used to administer our VTL, StorSafe, CDP, and NSS products. Our StorSight user console provides deep analytics relative to each of our products as they are utilized in production. StorSight also includes a full array of functionality key to our MSP customers, such as multi-tenancy and charge-back. StorSight usage licensing is included when customers and MSPs license any of our products.

FalconStor RecoverTrac™ ("RecoverTrac") Disaster Recovery Technology: Our patented RecoverTrac technology streamlines the implementation, testing and execution of disaster recovery operations. It minimizes service failover time between sites and reduces disaster recovery costs by offering full recovery from physical-to-physical, virtual-to-virtual and physical-to-virtual server infrastructures. This technology is a disaster recovery automation service, and is included as a standard feature of our NSS and CDP products to automate complex, time-consuming and error-prone failover and failback operations of systems, applications, services and entire data centers. This technology can also work across those environments, enabling organizations to seamlessly migrate locally, remotely or to and from cloud environments.

FalconStor MicroScan™ ("MicroScan") Technology: Our patented MicroScan technology minimizes the amount of data transferred during replication by eliminating inefficiencies at the application and file system layer. Data changes are replicated at the smallest possible level of granularity, reducing LAN/WAN bandwidth and associated storage costs for disaster recovery ("DR"), and any time data is replicated from one source to another. MicroScan is an integral part of our replication option for CDP and NSS.

BUSINESS STRATEGY

FalconStor's products and supporting technologies serve enterprise IT organizations and MSPs worldwide and are guided by the following strategies.

Provide a Bridge to Cloud-Based Data Storage, While Protecting Investments

As enterprise IT organizations look to modernize their long-term archive and business continuity related data replication, they are challenged by the cost, risk, and disruption upgrades and migrations can cause. Because FalconStor abstracts the data protection services from the physical storage infrastructure, additional capabilities can be added to legacy hardware, eliminating the need and cost to replace that hardware. This delivers discrete value in terms of lowering capital and operational costs, reduced risk and disruption, and significantly faster time to deployment. For IT organizations wishing to deploy new hardware or storage paradigms, including the utilization of private- or public-cloud based storage, such as IBM Cloud, AWS, or Azure, our products enable the migration and on-going optimization of data storage to and on those new platforms, versus being forced to start with a new or "greenfield" deployment required by many of the latest hardware vendors. FalconStor offers these organizations a path forward with an approach that minimizes or eliminates risk and disruption to business processes and workflows while lowering both capital and operational costs.

We intend to continue leveraging the protocol-independent, unified architecture, analytics and open data services technology of our products to maintain a competitive position in the enterprise storage software market. With the addition of StorSafe, and its associated storage container technology, we have joined and are dedicated to the Open Source community, which has accelerated development and integration efforts across our entire product suite. We intend to continue delivering technical innovation that creates investment protection, flexibility and leverage of modern cloud-based technologies for our enterprise customers.

Enable Managed Service Providers

As the MSP segment continues to grow, MSPs increasingly have a need to support heterogeneous storage environments across their own data centers and their customers' environments. MSPs often have different hardware and software capabilities, making it significantly challenging to offer consistent data services across these environments. We believe that we offer strategic benefits for MSPs by (i) enabling the seamless and non-disruptive movement of data from the customer premises to the service provider's hosted environment, (ii) offering common data services across a customer's environments regardless of underlying hardware or technology, (iii) allowing for the introduction and ability to monetize additional data services they may not have previously been able to offer, (iv) providing a low-cost growth opportunity due to the flexibility of StorSight licensing, while eliminating the need to have multiple feature licenses array by array, and (v) enabling reduced storage management complexity and costs within their infrastructure by eliminating silos, reducing licensing costs and optimizing hardware.

Expand Software and Hardware Strategic Alliances with Industry Leaders

The Flash/SSD, High-Density Single Disk and Cloud Data Archival markets are key opportunities for us on two fronts: targeting customers wanting to integrate this new technology into existing IT environments, and OEMs needing to enhance their software stack in order to offer data movement and protection services on their platform. Cloud service providers ("CSPs") such as IBM Cloud, AWS, Microsoft Azure, Wasabi and Alibaba Cloud also represent a growth opportunity. Our mutual customers and partners need help moving data from the customer site to their own facilities, as well as a way to deliver common data services across disparate and often incompatible hardware typically found across the provider and end customer environments. We believe that we are positioned to continue to take advantage of these key opportunities in the global marketplace.

Accelerate our Marketing and Distribution in our Best Suited Markets

We plan to continue to focus our marketing and distribution efforts on enterprise customers, MSPs, CSPs, resellers, systems integrators and OEM partners. We believe these markets and distribution channels offer a significant opportunity and are best suited to realize the value of our products, and provide an efficient and effective access to broad, worldwide markets.

Growth Drivers

A shift to Hybrid Cloud operating environments, new regulations and laws governing the processing, storage, retention, protection, and reinstatement of high-value information assets are driving double-digit growth in the data protection markets. Additionally, we believe that data archives will play an increasing role in training and validating AI and Machine Learning algorithms and optimizing strategic analytic model outcomes. Given FalconStor's long history and deep skillset of the unique challenges associated with long-term storage, we feel we are in an excellent position to capitalize on data assets that are subject to new protection requirements with our existing product portfolio. Our innovative StorSafe product is designed and architected to leverage the scale-up and scale-out capabilities found in today's public and private clouds to support the expanding long-term data protection market demand that is estimated to grow into the Zettabyte (10^21) range by 2030 (IDC). In addition, we believe our innovative integration of long-term archive storage into modern cloud-based technologies will enable our customers to dramatically improve the portability, security, and accessibility of their enterprise data. We believe, this accessibility will be key in our modern world, where data is not only protected, but also intelligently leveraged to facilitate learning, improve product design, and drive competitive advantage.

SALES ROUTES TO MARKET

FalconStor continues to sell products through:

- MSPs and CSPs
- Authorized partners, value-added resellers (VARs), solution providers, and large system integrators
- Direct Market Resellers (DMRs) and Distributors
- OEMs

Professional Services

FalconStor’s Professional Services personnel are also available to assist customers and partners throughout the lifecycle of FalconStor product deployments. The Professional Services team includes experienced Storage Architects (expert field engineers) who can assist in the assessment, planning/design, implementation, and test phases of the deployment project, and a Technical Support Group for post-deployment assistance and ongoing support.

MARKETING

We focus our efforts to increase awareness and demand for FalconStor products by targeting our efforts at our extensive global installed base and the expanding awareness in the emerging long-term data protection market.

PRODUCT LICENSING

Historically, the majority of our software licenses have been sold on a per terabyte capacity basis and have included a perpetual right to use the licensed capacity. However, over the last few years, we have shifted to a focus on capacity-based licenses on a subscription or term-based model, which gives a customer the right to utilize the licensed terabyte capacity over a designated period of time. We expect revenue from subscription-based licensing to increase over the next several years.

COMPETITION

Long-Term Data Retention and Recovery

We believe our StorSafe and VTL products are positioned well in the marketplace. Given the fact that these products are designed to integrate with an enterprise's legacy backup and archive software and processes, the level of competition we believe we typically face is limited to DellEMC's Data Domain virtual tape library product.

We also compete with legacy backup and archive vendors such as Veritas, and Commvault; however, in practice, we believe our products are more complimentary to their solutions than competitive, as our solutions do not require their solutions to be retired or replaced. In fact, our enterprise customers view the ability to maintain their legacy software solutions and processes as a key differentiator for selecting FalconStor products, as it is common for them to use backup and archive products from multiple vendors. By inserting our StorSafe or VTL product, customers are able to aggregate all of their archive data easily and control global data deduplication and archive storage from one central point.

We believe our enterprise and MSP customers also view the fact that our StorSafe and VTL products operate effectively with Windows, Linux, IBM i and IBM AIX operating system (OS) environments as a key differentiator. As a result, we execute specific go-to-market efforts to identify enterprise and MSP customers that have multiple OS environments in production.

Beyond the differentiation our StorSafe and VTL products provide related to existing infrastructure integration, we also believe the innovations we are delivering to improve backup and long-term retention and will serve as important competitive differentiators for FalconStor over the next several years. This belief is founded on the fact that our new innovations are designed to significantly improve archive data portability, security, and integrity validation. In addition, our new innovations are designed to allow our enterprise customers to seamlessly leverage multiple private- or public-clouds at one time to significantly reduce archive data storage costs.

Business Continuity Driven Data Replication

Competition within the business continuity driven data replication space is significant and includes products from Veeam, Rubrik, Cohesity, Commvault, Veritas, DellEMC, DataCore, and others. As a result, it is imperative that we carefully select the areas in which we will compete to ensure they are aligned with our key product differentiations. Accordingly, our two areas of focus within this space are on-premise storage virtualization and granular application-aware data replication snapshots that enable our enterprise customers to recover data back to a specific point in time for near real-time recovery time objectives.

INTELLECTUAL PROPERTY

FalconStor's success is dependent in part upon its proprietary technology. We currently have 37 patents and pending patent applications. The Company has multiple registered trademarks - including "FalconStor Software", "StorSight", "StorSafe", and "Intelligent Abstraction" - as well as pending trademark applications related to FalconStor and its products.

FalconStor seeks to protect its proprietary rights and other intellectual property through a combination of copyright, patents, trademark, and trade secret protection, as well as through contractual protections such as proprietary information agreements and nondisclosure agreements. The technological and creative skills of its personnel, new product developments, frequent product enhancements, and reliable product maintenance are essential to establishing and maintaining a technology leadership.

FalconStor generally enters into confidentiality or license agreements with employees, consultants, and corporate partners and generally controls access to and distribution of its software, documentation, and other proprietary information. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use FalconStor's products or technology. Monitoring unauthorized use of FalconStor's products is difficult, and there can be no assurance that the steps FalconStor has taken will prevent misappropriation of its technology, particularly in foreign countries where laws may not protect its proprietary rights as fully as do the laws of the United States.

MAJOR CUSTOMERS

For the years ended December 31, 2022 and December 31, 2021, we had one customer that accounted for 10% or more of total revenue.

As of December 31, 2022 and 2021, we had two customers who accounted for more than 10% of our gross accounts receivable balance, respectively.

EMPLOYEES

As of December 31, 2022, we had 53 employees and contractors. None of our employees are subject to any collective bargaining agreements and we believe that our employee relations are good.

INTERNET ADDRESS AND AVAILABILITY OF FILINGS

Our internet address is www.falconstor.com. The Company makes available free of charge, on or through its Internet website, the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Sections 13(a) or (15)(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission. The Company complied with this policy for every Exchange Act (the "Exchange Act"), report filed during the year ended December 31, 2022.

CORPORATE INFORMATION

We were incorporated in 1994 as a Delaware corporation and changed our corporate name from Network Peripherals Inc. to FalconStor Software, Inc. in 2001 through the completion of a reverse merger. We currently maintain a mailing address and rent virtual office facilities at 501 Congress Avenue, Suite 150, Austin, Texas 78701. Our telephone number is (631) 777-5188. We also rent virtual and physical office space in Taiwan, Germany, France, Malaysia, China, Korea and Japan. We maintain a corporate website at https://falconstor.com and social media accounts on LinkedIn at https://www.linkedin.com/company/falconstor-software and Facebook at https://www.facebook.com/falconstorsoftwareinc/.

RECENT DEVELOPMENTS

Extension of Preferred Stock Redemption Date and Debt Maturity Dates

As described in more detail in the "Risk Factors" section of this Form 10-K, the holders of our outstanding Series A Preferred Stock have a mandatory redemption right that may be exercised only with the approval of Hale Capital Partners, LP ("HCP") and HCP-FVA, LLC ("HCP-FVA" and, together with HCP, "Hale Capital"). In connection with the then-proposed public offering of the Company as described in the Company's Registration Statement on Form S-1, as amended, originally filed on June 3, 2021 (the "June Offering"), the effective date of such redemption right was extended from July 30, 2021 to July 30, 2023 pursuant to an amendment to the Certificate of Designations (as defined herein), dated as of June 24, 2021, which was approved by our shareholders at our 2021 annual meeting of stockholders and filed with the Delaware Secretary of State on June 25, 2021. On July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock to June 30, 2024, as described in Note (19), Subsequent Events, to the consolidated financial statements.

In connection with the June Offering, we also entered into a letter agreement with Hale Capital, dated June 2, 2021 (the "Loan Extension Letter Agreement"), that provided for an extension of the maturity date on Hale Capital's portion of the outstanding indebtedness (the "Debt Extension") owed under the Amended and Restated Loan Agreement (as defined herein) to June 30, 2023, which constituted $2,176,621 of the $3,510,679 aggregate principal amount outstanding as of March 31, 2021. The remaining $1,334,058 of the outstanding principal amount was repaid in full on June 30, 2021. On July 19, 2022, the Company entered into a letter agreement with Hale Capital, that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from June 30, 2023 to December 31, 2023. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the maturity date of the senior secured debt to June 30, 2024, as described in Note (19), Subsequent Events, to the consolidated financial statements.

Item 1A. Risk Factors

We are affected by risks specific to us as well as factors that affect all businesses operating in a global market. The significant factors known to us that could materially adversely affect our business, financial condition, or operating results are set forth below.

Risks Related to Our Financial Condition

We have had limited liquidity and our future prospects are dependent on our ability to execute our business plan of which there can be no assurance.

While we had net income for the year ended December 31, 2021 we have incurred an operating loss for the year ended December 31, 2022, Additionally, prior to 2021, we have incurred operating losses in ten of the previous twelve years and negative cash flow from operations in ten of the previous twelve years.

The Company is currently a party to an Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, as amended December 27, 2019, by and between the Company and HCP-FVA, LLC ("HCP-FVA"), (the "Amended and Restated Loan Agreement"). In connection with the June Offering, we entered into a letter agreement with Hale Capital Partners, LP ("Hale Capital"), dated June 2, 2021 (the "Loan Extension Letter Agreement"), that provided for an extension of the maturity date on Hale Capital's portion of the outstanding indebtedness owed under the Amended and Restated Loan Agreement to June 30, 2023. The remaining principal amount outstanding, which was owed to other lenders, was repaid in full. On July 19, 2022, we entered into a letter agreement with Hale Capital (the "Second Loan Extension Letter Agreement"), that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from June 30, 2023 to December 31, 2023. See Note (9) Notes Payable for more information. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the maturity date of the senior secured debt to June 30, 2024, as described in Note (19), Subsequent Events, to the consolidated financial statements. Also, as described further in Note (12) Series A Redeemable Convertible Preferred Stock, the effective date of the mandatory redemption right of the Company's Series A Redeemable Convertible Preferred Stock (the "Series A Preferred Stock") held by HCP-FVA and Hale Capital was extended from July 30, 2021 to July 30, 2023 pursuant to that certain Amendment No. 1 to the Amended and Restated Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock of the Company, dated as of June 24, 2021 (as amended, the "Certificate of Designations"). On July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock to June 30, 2024, as described in Note (19), Subsequent Events, to the consolidated financial statements. If such Series A Preferred Stock was redeemed at December 31, 2022, the Company would have been required to pay the holders of the Series A Preferred Stock $16.0 million.

As of December 31, 2022, we had a working capital deficiency of $0.3 million, which is inclusive of current deferred revenue of $3.7 million, and a stockholders' deficit of $16.4 million. Our cash and cash equivalents at December 31, 2022 was $2.0 million, a decrease of $1.2 million compared to December 31, 2021. Our operating cash outflows for the year ended December 31, 2022 and 2021 were $1.2 million, and $0.9 million, respectively. There is no assurance that we will be successful in executing our business plan either through generating sufficient revenue or continuing to reduce operating costs. The failure to execute our business plan would have a material adverse effect on our results of operations and or our ability to continue operations. In addition, to the extent that we continue to incur losses or want to expand our operations, we may need to seek additional financing. There can be no assurance that we will be able to obtain additional financing. Moreover, it is likely that the terms of the Amended and Restated Loan Agreement and Series A Preferred Stock will make it more difficult for us to obtain additional financing, and any additional financing could be dilutive to our stockholders.

Our revenues decreased in 2022 compared to 2021. There is no guarantee that we will be able or to maintain, profitability.

Consistent with the prior year, revenues continued to decline and decreased to $10.1 million for the year ended December 31, 2022, as compared with $13.9 million for the year ended December 31, 2021. If we are unable to stabilize or increase revenue, we will be unable to maintain profitability, we will deplete our available cash and we may not be able to continue to fund effective sales and marketing or research and development activities on which we are dependent.

We have undertaken a restructuring and other cost reduction initiatives to reduce our expenses and to better align our expenses with our business. There can be no assurance that we have made enough reductions or the right reductions.

For the past several years, we have taken several actions to reduce expenses significantly in an attempt to help return our company to profitability. These actions include a reduction in personnel; closing offices in geographic locations where our expenses have continued to outpace our revenue; and reducing other expenditures. To date, the reduction in expenses has not been sufficient to ensure that we can meet our ongoing cash needs for the foreseeable future. In addition, there can be no assurance that the reductions we have made are the right reductions for our business going forward. There is a risk that the restructuring, cost cutting initiatives and reduction in personnel will continue to make it more difficult to grow the business and service our customers.

We may not be able to fully utilize our net operating loss ("NOL") and other tax carryforwards, which may have the effect of devaluing significant deferred tax assets of the company.

As of December 31, 2022, we had approximately $84.6 million of federal NOL carryforwards, $79.9 million of which will begin to expire in 2030 if not used to reduce taxable income. Our ability to utilize NOLs and other tax carryforwards to reduce taxable income in future years could be limited for various reasons, including as a result of one or more ownership changes under Section 382 ("Section 382") of the Internal Revenue Code of 1986 ("Code"), if future taxable income is insufficient to recognize the full benefit of such NOL carryforwards prior to their expiration and/or if the IRS successfully asserts that a transaction or transactions were concluded with the principal purpose of evasion or avoidance of United States federal income tax. There can be no assurance that we will have sufficient taxable income in later years to enable us to use the NOLs before they expire, or that the IRS will not successfully challenge the use of all or any portion of the NOLs.

Section 382 subjects us to limitations in the use of NOLs if we experience an "ownership change." For the purposes of Section 382, an ownership change occurs if the aggregate stock ownership of certain stockholders (generally 5% stockholders, applying certain look through and aggregation rules) increases by more than 50% over such stockholders' lowest percentage ownership during the "testing period". If an ownership change occurs, we will be limited in our ability to realize a tax benefit from the use of our deferred tax assets, whether or not we are profitable in future years. These consequences include, without limitation, limiting the amount of federal NOL that can be used to offset taxable income to the Section 382 annual limitation. Generally, the annual limitation equals the product of (i) the fair market value of all of our outstanding equity immediately prior to the ownership change, multiplied by (ii) the applicable federal long-term, tax exempt rate.

In addition, if we have a net unrealized built-in gain (generally determined by comparing market capitalization plus total liabilities to the adjusted tax basis of assets) at the time of the ownership change, certain built-in gains recognized within five years after the ownership change (the "recognition period") may increase the amount of the otherwise available annual limitation. Any such recognized built-in gains that are unused may be carried forward to later post-change years. Internal Revenue Service ("IRS") Notice 2003-65 provides an approach which treats built-in gain assets of our Company as generating recognized built-in gain each year without regard to whether such assets are not disposed of at a gain during the recognition period. However, in September 2019 the IRS released proposed Section 382 regulations that would eliminate the beneficial provisions of IRS Notice 2003-65. If finalized as proposed, these regulations would limit the increase in the annual Section 382 limitation for recognized built-in gains to those gains that are actually realized through the disposition of built-in gain assets. These regulations have not been finalized but provide for an effective date of 30 days after the final regulations are published. For transactions that have been announced to the public or for which a binding commitment has been entered into when the final regulations are published, the provisions of IRS Notice 2003-65 should still be available.

The unused portion of the recognized built-in gain carries forward to later post-change years. We have not calculated any recognized built-in gain with respect to the potential ownership change but we expect to do so subsequent to such ownership change and would expect to apply for such recognition.

The Protective Provision contained in our certificate of incorporation, which is intended to help preserve the value of certain income tax assets, primarily tax net operating loss carryforwards, may have unintended negative effects.

Pursuant to Code Sections 382 and 383, use of our NOLs may be limited by an "ownership change" as defined under Section 382 of the Code, and the Treasury Regulations thereunder. In order to protect our company's significant NOLs, we included a provision to protect our NOLs in our certificate of incorporation (the "Protective Provision").

The Protective Provision is designed to assist us in protecting the long-term value of our accumulated NOLs by limiting certain transfers of our common stock. The Protective Provision's transfer restrictions generally restrict any direct or indirect transfers (defined to exclude primary offerings of our common stock effected by the company) of the common stock if the effect would be to increase the direct or indirect ownership of our common stock by any person from less than 4.99% to 4.99% or more of our common stock, or increase the percentage of our common stock owned directly or indirectly by a person owning or deemed to own 4.99% or more of our common stock (with percentage ownership determined under applicable United States federal income tax rules). Any direct or indirect transfer attempted in violation of the Protective Provision will be void as of the date of the prohibited transfer as to the purported transferee.

The Protective Provision may have an unintended "anti-takeover" effect because our board of directors may be able to prevent any future takeover. Similarly, any limits on the amount of stock that a shareholder may own could have the effect of making it more difficult for shareholders to replace current management. Additionally, because the Protective Provision may have the effect of restricting a shareholder's ability to dispose of or acquire our common stock, the liquidity and market value of our common stock might suffer.

We may be adversely affected by inflationary or market fluctuations in the cost of products consumed in providing our services or our cost of labor.

A continued increase in inflation or other market fluctuations could result in increases to the costs to provide our services and products, and we may be unable to pass these costs on to our customers. For example, our cost of labor may be influenced by factors in certain market areas. Our employees could be affected by increases in the federal or state minimum wage rates, wage inflation or local job market adjustments. We do not have a contractual right to automatically pass through all wage rate increases resulting from wage rate inflation or local job market adjustments, and we may be delayed in doing so. Our delay in, or inability to pass such wage increases or other market fluctuations through to our customers could have a material adverse effect on our financial condition, results of operations, and cash flows.

If actual results or events differ materially from our estimates and assumptions, our reported financial condition and results of operations for future periods could be materially affected.

The preparation of consolidated financial statements and related disclosure in accordance with generally accepted accounting principles requires management to establish policies that contain estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Note 1 to the consolidated financial statements this Form 10-K describes the significant accounting policies and estimates essential to preparing our financial statements. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. We base our estimates on historical experience and assumptions that we believe to be reasonable under the circumstances. Actual future results may differ materially from these estimates. We evaluate, on an ongoing basis, our estimates and assumptions.

Failure to maintain effective internal control over financial reporting could have a material adverse effect on our ability to report our financial results on a timely and accurate basis.

Failure to maintain appropriate and effective internal controls over our financial reporting could result in misstatements in our financial statements and potentially subject us to sanctions or investigations by the SEC or other regulatory authorities, and could cause us to delay the filing of required reports with the SEC and our reporting of financial results. Any of these events could result in a decline in the market price of our common stock. Although we have taken steps to maintain our internal control structure as required, we cannot guarantee that a control deficiency will not result in a misstatement in the future.

Risks Related to Our Business, Products and Operations

Our future business, financial and operating results are substantially dependent on the market acceptance of our products.

We have spent considerable resources, both financially and in our research and development efforts, developing VTL, StorSafe, CDP and NSS. We currently do not have any other products in our pipeline with the same expectations that we had or which we believe have the same potential for market acceptance as VTL, StorSafe, CDP and NSS. If (i) either VTL, StorSafe, CDP and NSS do not gain additional market acceptance, (ii) sales of either VTL, StorSafe, CDP and NSS do not increase, or (iii) the ongoing future feature/functionality sets of both products are delayed, our results may suffer and it could have a material adverse effect on our business, financial condition and operating results.

The effects of the COVID-19 pandemic have materially affected and may continue to materially affect how we and our customers are operating our businesses, and the duration and extent to which this will impact our future results of operations and overall financial performance remains uncertain.

As a result of the COVID-19 pandemic, we temporarily closed our office locations, introduced remote working for many of our employees that remains in effect, and implemented certain travel restrictions, all of which has caused disruptions to how we operate our business. Our operations have been negatively affected by a range of external factors related to the COVID-19 pandemic that are not within our control. Many of our customers are non-essential businesses within the meaning of applicable regulations that have been forced, in some jurisdictions, to temporarily suspend or greatly reduce operations, resulting in a lay off or termination of workers. This has had a direct impact on our revenue, as this results in a decrease in overall product spend by our customers. Additionally, we have shifted certain of our customer events to virtual-only experiences and we may deem it advisable to similarly alter, postpone or cancel entirely additional customer, employee or industry events in the future. The conditions caused by the COVID-19 pandemic have affected and may continue to affect the rate of IT spending and our customer's ability or willingness to attend our events or to purchase our offerings, our prospective customers' purchasing decisions, our ability to provide on-site consulting services to our customers and the provisioning of our offerings, and may lengthen payment terms, reduce the value or duration of our contracts, or affect attrition rates, all of which has and may continue to adversely affect our future sales, operating results and overall financial information.

We continue to monitor the developments relating to the COVID-19 pandemic, including actions taken or recommended by governments and other authorities to reduce the spread of the virus and to assess its impact on our business. The future impact of the pandemic on us is uncertain and could have a material adverse impact on inflation, global financial markets, and our results of operations, financial position, and/or liquidity. The extent of the impact will depend on future developments, including actions taken to limit the spread of COVID-19 and the uncertain impact of potential judicial, legislative, and regulatory actions by local, state, and national governmental and regulatory bodies.

We are currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability due to the ongoing military conflict between Russia and Ukraine. Our business, financial condition and results of operations may be materially and adversely affected by any negative impact on the global economy and capital markets resulting from the conflict in Ukraine or any other geopolitical tensions.

U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the start of the military conflict between Russia and Ukraine. On February 24, 2022, a full-scale military invasion of Ukraine by Russian troops was reported. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine could lead to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions. We are continuing to monitor the situation in Ukraine and globally and assessing its potential impact on our business.

Additionally, Russia's prior annexation of Crimea, recent recognition of two separatist republics in the Donetsk and Luhansk regions of Ukraine and subsequent military interventions in Ukraine have led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia, Belarus, the Crimea Region of Ukraine, the so-called Donetsk People's Republic, and the so-called Luhansk People's Republic, including agreements to remove certain Russian financial institutions from the Society for Worldwide Interbank Financial Telecommunication payment system. Additional potential sanctions and penalties have also been proposed and/or threatened. Russian military actions and the resulting sanctions could adversely affect the global economy and financial markets and lead to instability and lack of liquidity in capital markets, potentially making it more difficult for us to obtain additional funds.

Any of the above mentioned factors could affect our business, prospects, financial condition, and operating results. The extent and duration of the military action, sanctions and resulting market disruptions are impossible to predict, but could be substantial. Any such disruptions may also magnify the impact of other risks described in this Form 10-K.

The loss of any of our key personnel could harm our business.

Our success depends upon the continued contributions of our key employees, many of whom would be extremely difficult to replace. We do not have key person life insurance on any of our personnel, and worldwide competition for skilled employees in the network storage software industry is intense. In particular, our success is dependent on our executive management team, including Todd Brooks, our Chief Executive Officer. If we are unable to retain existing employees or hire and integrate new employees, our business, financial condition and operating results could suffer.

Due to the uncertain and shifting development of the data protection and network storage software markets and our reliance on our partners, we may have difficulty accurately predicting revenue for future periods and appropriately budgeting for expenses.

The rapidly evolving nature of the data protection and network storage software markets in which we sell our products, the degrees of effort and success of our partners' sales and marketing efforts, and other factors that are beyond our control, reduce our ability to accurately forecast our quarterly and annual revenue. However, we must use our forecasted revenue to establish our expense budget. Most of our expenses are fixed in the short term or incurred in advance of anticipated revenue. As a result, we may not be able to decrease our expenses in a timely manner to offset any shortfall in revenue.

If we are unable to develop new products that achieve acceptance in the data protection and the network storage software markets, our operating results may suffer.

The data protection and the network storage software markets continue to evolve and as a result there is continuing demand for new products. Accordingly, we may need to develop new products that address additional data protection or network storage software market segments and emerging technologies to remain competitive in the data storage software industry. We are uncertain whether we will successfully qualify new data protection or network storage software products with our customers by meeting customer performance and quality specifications. Any failure to address additional market segments could harm our business, financial condition and operating results.

Our products must conform to industry standards in order to be accepted by customers in our markets.

Our current products are only one part of a storage system. All components of these systems must comply with the same industry standards in order to operate together efficiently. We depend on companies that provide other components of these systems to conform to industry standards. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by OEM customers or end users. If other providers of components do not support the same industry standards as we do, or if competing standards emerge, our products may not achieve market acceptance and we may be required to invest considerable resources to shifting our products to meet such industry standards, either of which could adversely affect our business.

Our products handle mission-critical data for our end-customers and are highly technical in nature. If our products have defects, failures occur or end-customer data is lost or corrupted, our reputation and business could be harmed.

Our products are highly technical and complex and are involved in storing and replicating mission-critical data for our end-customers. Our products may contain undetected defects and failures when they are first introduced or as new versions are released. We have in the past and may in the future discover software errors in new versions of our existing products, new products or product enhancements after their release or introduction, which could result in lost revenue. Despite testing by us and by current and potential end-customers, errors might not be found in new releases or products until after commencement of commercial shipments, resulting in loss of or delay in market acceptance. Our products may have security vulnerabilities and be subject to intentional attacks by viruses that seek to take advantage of these bugs, errors or other weaknesses. If defects or failures occur in our products, a number of negative effects in our business could result, including:

- lost revenue or lost end-customers;
- increased costs, including warranty expense and costs associated with end-customer support;
- delays, cancellations, reductions or rescheduling of orders or shipments;
- product returns or discounts;
- diversion of management resources;
- legal claims for breach of contract, product liability, tort or breach of warranty; and
- damage to our reputation and brand.

Because our end-customers use our products to manage and protect their data, we could face claims resulting from any loss or corruption of our end-customers' data due to a product defect. While our sales contracts contain provisions relating to warranty disclaimers and liability limitations, these provisions might not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention from our business and could result in public perception that our products are not effective, even if the occurrence is unrelated to the use of our products. In addition, our business liability insurance coverage might not be adequate to cover such claims. If any data is lost or corrupted in connection with the use or support of our products, our reputation could be harmed and market acceptance of our products could suffer.

We rely on our resellers and our OEM partners for most of our sales.

The vast majority of our sales to end users come from sales by our resellers and by our OEM partners. These resellers and OEM partners have limited resources and sales forces and sell many different products, both in the data protection and the network storage software markets and in other markets. The resellers and OEM partners may choose to focus their sales efforts on other products in the data protection and the network storage software markets or other markets. The OEM partners might also choose not to continue to develop or to market products which include our products. This would likely result in lower revenue to us and would impede our ability to grow our business.

The failure of our resellers to sell our products effectively could have a material adverse effect on our revenue and results of operations.

We rely significantly on our MSPs, value-added resellers, direct market resellers, systems integrators and corporate resellers, which we collectively refer to as resellers, for the marketing and distribution of our software products and our services. However, our agreements with resellers are generally not exclusive, are generally renewable annually and in many cases may be terminated by either party without cause. Many of our resellers carry products that are competitive with ours. These resellers may give a higher priority to other products, including those of our competitors, or may not continue to carry our products at all. If a number of resellers were to discontinue or reduce the sales of our products, or were to promote our competitors' products in lieu of ours, it would have a material adverse effect on our future revenue. Events or occurrences of this nature could seriously harm our sales and results of operations. In addition, we expect that a significant portion of our sales growth will depend upon our ability to identify and attract new reseller partners. The use of resellers is an integral part of our distribution network. We believe that our competitors also use reseller arrangements. Our competitors may be more successful in attracting reseller partners and could enter into exclusive relationships with resellers that make it difficult to expand our reseller network. Any failure on our part to expand our network of resellers could impair our ability to grow revenue in the future.

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

Our future growth will depend on our ability to enter into successful strategic relationships with third parties. For example, our strategic relationships with DSI, Fujitsu and Hitachi Vantara are intended to enhance their software stack in order to offer data movement and protection services on their platform. In addition, we work with global distributors to streamline and grow our sales channel. These relationships may not result in additional customers or enable us to generate significant revenue. These relationships are typically non-exclusive and do not prohibit the other party from working with our competitors or from offering competing services. If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results could suffer.

We rely on channel partners to sell our solutions, and disruptions to, or our failure to develop and manage our channel partners would harm our business.

Our future success is partially dependent upon establishing and maintaining successful relationships with the right channel partners. A majority of our revenue is generated by sales through our channel partners, and we expect channel sales to continue to make up the majority of our total revenue in the future. Accordingly, our revenue is largely dependent on the effective sales and lead generation activities of these channel partners.

Recruiting and retaining qualified channel partners and training them in our technology and product offerings requires significant time and resources. In order to develop and expand our distribution channel, we must continue to scale and improve our processes and procedures that support our channel, including investment in systems and training. Those processes and procedures may become increasingly complex and difficult to manage as we grow our organization. We have no minimum purchase commitments from any of our channel partners, and our contracts with these channel partners do not prohibit them from offering products or services that compete with ours. Our competitors may provide incentives to existing and potential channel partners to favor their products or to prevent or reduce sales of our solutions. Our channel partners may choose not to offer our solutions exclusively or at all. Establishing relationships with channel partners who have a history of selling our competitors' products may also prove to be difficult. In addition, some of our channel partners are also competitors. Our failure to establish and maintain successful relationships with channel partners would harm our business and operating results.

We face intense competition in our market, especially from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.

A number of very large corporations have historically dominated the data management market. We consider our primary competitors to be companies that provide enterprise storage products, including Dell Inc., Hitachi Vantara, Hewlett-Packard Company, IBM, CommVault, DataCore and Nexenta. We also compete to a lesser extent with a number of other private companies and certain other well-established companies. Some of our competitors have made acquisitions of businesses that allow them to offer more directly competitive and comprehensive solutions than they had previously offered. In addition, the emergence of cloud computing and software-defined-storage may impact both short-term and long-term growth patterns in the markets in which we compete. We expect to encounter new competitors domestically and internationally as other companies enter our market or if we enter new markets.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

- potential for broader market acceptance of their storage architectures and solutions;
- greater name recognition and longer operating histories;
- larger sales and marketing and customer support budgets and resources;
- broader distribution and established relationships with distribution partners and end-customers;
- the ability to bundle storage products with other technology products and services, or offer a broader range of storage solutions to better fit certain customers' needs;
- lower labor and development costs;
- larger and more mature intellectual property portfolios;
- substantially greater financial, technical and other resources; and
- greater resources to make acquisitions.

Our ability to sell our products is highly dependent on the quality of our services offerings, and our failure to offer high quality support and professional services would have a material adverse effect on our sales of our products and results of operations.

Our services include the assessment and design of solutions to meet our customers' data protection and storage management requirements and the efficient installation and deployment of our products based on specified business objectives. Further, once our products are deployed, our customers depend on us to resolve issues relating to our products. A high level of service is critical for the successful marketing and sale of our software. If our partners or we do not effectively install or deploy our applications, or succeed in helping our customers quickly resolve post-deployment issues, it would adversely affect our ability to sell software products to existing customers and could harm our reputation with potential customers. As a result, our failure to maintain high quality support and professional services would have a material adverse effect on our sales of our products and results of operations.

Failure to achieve anticipated growth could harm our business and operating results.

Achieving our anticipated growth will depend on a number of factors, some of which include retention of key management, marketing and technical personnel, our ability to increase our customer base and to increase the sales of our products; and competitive conditions in the network storage infrastructure software market. We cannot assure you that the anticipated growth will be achieved. The failure to achieve anticipated growth could harm our business, financial condition and operating results.

Adverse economic conditions or reduced IT spending may adversely impact our business.

Our business depends on the overall demand for IT and on the economic health of our current and prospective customers. In general, worldwide economic conditions remain unstable, and these conditions make it difficult for our current and prospective customers and us to forecast and plan future business activities accurately, and they could cause our customers or prospective customers to reevaluate their decision to purchase our products or services. Also, global or national health concerns, including the outbreak of pandemic or contagious disease such as the recent coronavirus outbreak, can negatively impact the global economy and demand for our services. Weak global economic conditions, or a reduction in IT spending even if economic conditions improve, could adversely impact our business and operating results in a number of ways, including longer sales cycles, lower prices for our products, reduced bookings and lower or no growth.

Our future quarterly results may fluctuate significantly, which could cause our stock price to decline.

Our previous results are not necessarily indicative of our future performance and our future quarterly results may fluctuate significantly. Our future performance will depend on many factors, including:

- fluctuations in the economy;
- the timing of securing software license contracts and the delivery of software and related revenue recognition;
- the seasonality of information technology, including network storage products, spending;
- the average unit selling price of our products;
- existing or new competitors introducing better products at competitive prices before we do;
- our ability to manage successfully the complex and difficult process of qualifying our products with our customers;
- new products or enhancements from us or our competitors;
- our ability to release new and innovative products;
- import or export restrictions on our proprietary technology; and
- personnel changes.

Many of our expenses are relatively fixed and difficult to reduce or modify. As a result, the fixed nature of our expenses will magnify any adverse effect of a decrease in revenue on our operating results.

The ability to predict our future effective tax rates could impact our ability to accurately forecast future earnings.

We are subject to income taxes in both the United States and the various foreign jurisdictions in which we operate. Judgment is required in determining our provision for income taxes and there are many transactions and calculations where the tax determination may be uncertain. Our future effective tax rates could be affected by changes in our (i) earnings or losses; (ii) changes in the valuation of our deferred tax assets; (iii) changes in tax laws; and (iv) other factors. Our ability to correctly predict our future effective tax rates based upon these possible changes could significantly impact our forecasted earnings.

Our business could be materially affected as a result of a natural disaster, terrorist acts, or other catastrophic events.

While our facilities contain redundant power supplies and generators, our domestic and foreign operations, and the operations of our industry partners, remain susceptible to fire, floods, power loss, power shortages, telecommunications failures, break-ins and similar events. Terrorist actions domestically or abroad could lead to business disruptions or to cancellations of customer orders or a general decrease in corporate spending on information technology, or could have direct impact on our marketing, administrative or financial functions and our financial condition could suffer. We continually look for alternatives to help mitigate any supply chain disruptions due to natural disasters, terrorist acts or other catastrophic events, including public health epidemics such as the recent outbreak of coronavirus, first identified in China. However, our failure to mitigate these supply chain disruptions could impact our ability to procure and deliver products to our customers, which could adversely impact our overall financial condition.

We are dependent on a variety of IT and telecommunications systems, and any failure of these systems could adversely impact our business and operating results.

We depend on IT and telecommunications systems for our operations. These systems support a variety of functions including order processing, shipping, shipment tracking, billing, support center and internal information exchange. Failures or significant downtime of our IT or telecommunications systems could prevent us from taking customer orders, shipping products, billing customers, handling support calls, or communication among our offices. The Internet and individual websites have experienced a number of disruptions and slowdowns, some of which were caused by organized attacks. In addition, some websites have experienced security breakdowns. If we were to experience a security breakdown, disruption or breach that compromised sensitive information, it could harm our relationship with our customers. Our support centers are dependent upon telephone and data services provided by third party telecommunications service vendors and our IT and telecommunications system. Any significant increase in our IT and telecommunications costs or temporary or permanent loss of our IT or telecommunications systems could harm our relationships with our customers. The occurrence of any of these events could have an adverse effect on our operations and financial results.

United States government export restrictions could impede our ability to sell our software to certain end users.

Certain of our products enable end user to encrypt data. The United States, through the Bureau of Industry Security, places restrictions on the export of certain encryption technology. These restrictions may include: the requirement to have a license to export the technology; the requirement to have software licenses approved before export is allowed; and outright bans on the licensing of certain encryption technology to particular end users or to all end users in a particular country. As a result, certain of our products are subject to various levels of export restrictions, which could negatively impact our business.

The international nature of our business could have an adverse effect on our operating results.

We sell our products worldwide. Accordingly, our operating results could be materially adversely affected by various factors including regulatory, political, or economic conditions in a specific country or region, trade protection measures and other regulatory requirements, and acts of terrorism and international conflicts. Additional risks inherent in our international business activities generally include, among others, longer accounts receivable payment cycles, difficulties in managing international operations, decreased flexibility in matching workforce needs as compared with the U.S., and potentially adverse tax consequences. Such factors could materially adversely affect our future international sales and, consequently, our operating results.

Foreign currency fluctuations may impact our revenue.

Our licenses and services in Japan are sold in Yen. Many of our licenses and services in Australia, Canada, and in Europe are sold in Australian dollars, Canadian dollars and European Monetary Units (or Euros), respectively. Changes in economic or political conditions globally and in any of the countries in which we operate could result in exchange rate movements, new currency or exchange controls or other restrictions being imposed on our operations.

Fluctuations in the value of the U.S. dollar may adversely affect our results of operations. Because our consolidated financial results are reported in U.S. dollars, translation of sales or earnings generated in other currencies into U.S. dollars can result in a significant increase or decrease in the reported amount of those sales or earnings. Significant changes in the value of these foreign currencies relative to the U.S. dollar could have a material adverse effect on our financial condition or results of operations.

Fluctuations in currencies relative to currencies in which our earnings are generated make it more difficult to perform period- to-period comparisons of our reported results of operations. For purposes of accounting, the assets and liabilities of our foreign operations, where the local currency is the functional currency, are translated using period-end exchange rates, and the revenue, expenses and cash flows of our foreign operations are translated using average exchange rates during each period.

In addition to currency translation risks, we incur currency transaction risk whenever we enter into either a purchase or a sales transaction using a currency other than the local currency of the transacting entity. Given the volatility of exchange rates, we cannot be assured we will be able to effectively manage our currency transaction and/or translation risks. Volatility in currency exchange rates may have a material effect on our financial condition or results of operations. Currency exchange rate fluctuations have not, in the past, resulted in a material impact on earnings. However, we may experience at times in the future an impact on earnings as a result of foreign currency exchange rate fluctuations.

If we are unable to protect our intellectual property, our business will suffer.

Our success is dependent upon our proprietary technology. We have thirty-seven patents and patent applications, numerous trademarks registered and multiple pending trademark applications related to our products. We cannot predict whether we will receive patents for our pending or future patent applications, and any patents that we own or that are issued to us may be invalidated, circumvented or challenged. In addition, the laws of certain countries in which we sell our products, including various countries in Asia, may not protect our products and intellectual property rights to the same extent as the laws of the United States.

We also rely on trade secret, copyright and trademark laws, as well as the confidentiality and other restrictions contained in our respective sales contracts and confidentiality agreements to protect our proprietary rights. These legal protections afford only limited protection and if we are unable to protect our intellectual property our business and operating results may suffer.

FalconStor generally enters into confidentiality or license agreements with employees, consultants, and corporate partners and generally controls access to and distribution of its software, documentation, and other proprietary information. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use FalconStor's products or technology. Monitoring unauthorized use of FalconStor's products is difficult, and there can be no assurance that the steps FalconStor has taken will prevent misappropriation of its technology, particularly in foreign countries where laws may not protect its proprietary rights as fully as do the laws of the United States.

Our efforts to protect our intellectual property may cause us to become involved in costly and lengthy litigation, which could seriously harm our business.

In recent years, there has been significant litigation in the United States involving patents, trademarks and other intellectual property rights. Any litigation, regardless of its outcome, would likely be time consuming and expensive to resolve and would divert management's time and attention and might subject us to significant liability for damages or invalidate our intellectual property rights. Any potential intellectual property litigation against us could force us to take specific actions (any of which could have a material adverse effect on our business), including:

- ceasing to sell our products that use the challenged intellectual property;
- obtaining from the owner of the infringed intellectual property right a license to sell or use the relevant technology or trademark, which license may not be available on reasonable terms, or at all;
- redesigning those products that use infringing intellectual property or ceasing to use an infringing product or trademark; or
- indemnifying software licensees against allegations that our products infringe on a third party's intellectual property rights or misappropriates trade secrets.

Cyber-attacks and breaches could cause operational disruptions, fraud or theft of sensitive information.

Aspects of our operations are reliant upon internet-based activities, such as ordering supplies and back-office functions such as accounting and transaction processing, making and accepting payments, processing payroll and other administrative functions, etc. Although we have taken measures to protect our technology systems and infrastructure, including employee education programs regarding cybersecurity, a breach of the security surrounding these functions could result in operational disruptions, theft or fraud, or exposure of sensitive information to unauthorized parties. Such events could result in additional costs related to operational inefficiencies, or damages, claims or fines.

Developments limiting the availability of Open Source software could impact our ability to deliver products and could subject us to costly litigation.

Many of our products are designed to include software or other intellectual property licensed from third parties, including "Open Source" software. At least one intellectual property rights holder has alleged that it holds the rights to software traditionally viewed as Open Source. In addition, United States courts have not interpreted the terms of many open source licenses, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our appliances. We could be required to seek licenses from third parties in order to continue offering our software, to re-engineer our software, to discontinue the sale of our software in the event re-engineering cannot be accomplished on a timely basis or to litigate any disputes relating to our use of open source software, any of which could harm our business. There can be no assurance that the necessary licenses would be available on acceptable terms, if at all. The inability to obtain certain licenses or other rights or to obtain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could have a material adverse effect on our business, operating results, and financial condition. Moreover, the inclusion in our products of software or other intellectual property licensed from third parties on a nonexclusive basis could limit our ability to protect our proprietary rights in our products.

Risks Related to Our Capitalization

Our redemption obligation under the Series A Preferred Stock and indebtedness could adversely affect our financial health.

Our redemption obligation and indebtedness could have important consequences to you. For example, it could:

- increase our vulnerability to general adverse economic and industry conditions;
- make it more difficult for us to satisfy our other financial obligations;
- restrict us from making strategic acquisitions or cause us to make non-strategic divestitures;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes;
- make it more difficult for us to satisfy our obligations to our lenders, resulting in possible defaults on and acceleration of such indebtedness;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- place us at a competitive disadvantage compared to our competitors that have less debt; and
- limit our ability to borrow additional funds or increase our cost of borrowing.

In addition, the terms of the Amended and Restated Loan Agreement contain restrictive covenants that limit our ability to engage in activities that may be in our long-term best interests which could have a material adverse effect on our business, financial condition or prospects.

To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control. As such, we may not be able to generate sufficient cash to service the Term Notes or our other indebtedness, and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make payments on and to refinance the term notes under our Amended and Restated Loan Agreement, (the "Term Notes") to fund planned capital expenditures, maintain sufficient working capital and fund any redemption of our Series A Preferred Stock will depend on our ability to generate cash in the future. Our ability to generate cash is, to a certain extent, subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

We cannot assure you that our business will generate sufficient cash flow from operations or future borrowings from other sources in an amount sufficient to enable us to service our obligations under the Amended and Restated Loan Agreement or our Series A Preferred Stock, or to fund our other liquidity needs. If our cash flows and capital resources are insufficient to allow us to make scheduled payments on our indebtedness, we may need to reduce or delay expenditures, sell assets, seek additional capital, restructure or refinance the Term Notes, on or before the maturity thereof or seek a waiver of any redemption rights under our Series A Preferred Stock, any of which could have a material adverse effect on our operations. We cannot assure you that we will be able to refinance the Term Notes, on commercially reasonable terms or at all, or that the terms of that indebtedness will allow any of the above alternative measures or that these measures would satisfy our scheduled debt service obligations. If we are unable to generate sufficient cash flow to repay or refinance our debt on favorable terms, it could significantly adversely affect our financial condition, and our ability to make any required cash payments under our Term Notes or fund any redemption of our Series A Preferred Stock. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at that time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. In addition, any future credit facility may be secured by a priority lien on substantially all of our assets. As such, our ability to refinance our Term Notes or seek additional financing could be impaired as a result of such security interest.

We are subject to a number of covenants and other conditions, which may restrict our business and financing activities.

The Amended and Restated Loan Agreement has customary representations, warranties and affirmative and negative covenants. The Amended and Restated Loan Agreement also contains customary events of default, including but not limited to payment defaults, cross defaults with certain other indebtedness, breaches of covenants, bankruptcy events and a change of control. In the case of an event of default, as administrative agent under the Amended and Restated Loan Agreement, HCP-FVA may (and upon the written request of lenders holding in excess of 50% of the Term Loan, which must include HCP-FVA, is required to) accelerate payment of all obligations under the Amended and Restated Loan Agreement, and seek other available remedies.

The restrictions in the Amended and Restated Loan Agreement may prevent us from taking actions that we believe would be in the best interests of our business, and may make it difficult for us to successfully execute our business strategy or effectively compete with companies that are not similarly restricted. In addition, our ability to comply with the financial and other covenants and restrictions in the Amended and Restated Loan Agreement will largely depend on the pricing of our products and services, and our ability to successfully implement our overall business strategy. We cannot assure you that we will be granted waivers or amendments to the Amended and Restated Loan Agreement if for any reason we are unable to comply with these covenants and restrictions. The breach of any of these covenants and restrictions could result in a default under the Amended and Restated Loan Agreement, which could result in an acceleration of our indebtedness.

The likelihood of a change of control in our company could be impacted by the fact that we have a significant amount of authorized but unissued preferred stock, protective provisions in our charter, outstanding Series A Preferred Stock, a staggered board of directors and change of control agreements as well as certain provisions under Delaware law.

Our board of directors has the authority, without further action by our common stockholders, to issue up to an additional 1,100,000 shares of preferred stock on such terms and with such rights, preferences and designations, including, without limitation restricting dividends on our common stock, dilution of the voting power of our common stock and impairing the liquidation rights of the holders of our common stock, as the board may determine without any vote of our common stockholders. Issuance of such preferred stock, depending upon the rights, preferences and designations thereof may have the effect of delaying, deterring or preventing a change in control. Moreover, our outstanding Series A Preferred Stock provides the holders with certain rights in the event of a merger with a third party and if we are unable to redeem the Series A Preferred Stock prior to June 30, 2024 or if the holders of the Series A Preferred Stock elect to exercise their rights to require us to redeem the Series A Preferred Stock due to our failure to comply with the financial covenants covering the Series A Preferred Stock.

As discussed above, our certificate of incorporation includes certain provisions that restrict transfers of our common stock in order to protect our NOLs if the effect of such transfers would be to increase the direct or indirect ownership of stockholders from less than 4.99% to 4.99% or more of our common stock, or increase the ownership percentage of stockholders owning 4.99% or more of our common stock. Certain "anti-takeover" provisions of the Delaware General Corporation Law, among other things, may also restrict the ability of our stockholders to authorize a merger, business combination or change of control. Further, we have a staggered board of directors and have entered into change of control agreements through employment agreements with certain executives. In addition, proceeds received upon a change of control will generally be used first to repay outstanding principal and interest on the Term Loan and then to the holders of the Series A Preferred Stock, prior to the holders of the common stock, in an amount equal to the amount of unpaid principal and interest on the Term Loan and 100% of the stated value plus accrued and unpaid dividends with respect to the Series A Preferred Stock. As a result of the foregoing, our stockholders may lose opportunities to dispose of their shares at favorable prices generally available in takeover attempts or that may be available under a merger proposal, and the market price of our common stock and the voting and other rights of our stockholders may also be affected.

The conversion and exercise of our outstanding securities and the anticipated grant of restricted stock to our employees will dilute the then-existing stockholders' percentage ownership of our common stock.

As of December 31, 2022, we have outstanding options to purchase 4,615 shares of our common stock, an aggregate of 1,316,933 outstanding unvested restricted shares and outstanding Series A Preferred Stock convertible into 87,815 shares of our common stock. Additionally, as of December 31, 2022, we have 68,148 shares of common stock that are potentially issuable as accumulated dividends with respect to the Series A Preferred Stock.

The exercise of all of the outstanding warrants, options and/or the vesting of all outstanding restricted shares, the conversion of our outstanding Series A Preferred Stock into common stock, the payment of dividends on our Series A Preferred Stock through the issuance of common stock and/or the grant and exercise of additional options and/or the grant and vesting of restricted stock and restricted stock units to our employees would dilute the then-existing stockholders' percentage ownership of common stock, and any sales in the public market of the common stock issuable upon such exercise could adversely affect prevailing market prices for the common stock. Moreover, the terms upon which we would be able to obtain additional equity capital could be adversely affected because the holders of such securities can be expected to exercise or convert them at a time when we would, in all likelihood, be able to obtain any needed capital on terms more favorable than those provided by such securities.

There may be a limited public market for our securities; we presently fail to qualify for listing on any national securities exchanges.

Trading in our common stock is conducted in the over-the-counter market. In addition, we currently fail to qualify for listing on either the NASDAQ Capital Market or the NYSE American. As a result, an investor may find it difficult to dispose of or to obtain accurate quotations as to the market value of our common stock, and our common stock may be less attractive for margin loans, for investment by larger financial institutions, as consideration in possible future acquisition transactions or other purposes.

Our stock price may be volatile.

The market price of our common stock has been volatile in the past and may be volatile in the future. For example, during the twelve months ended December 31, 2022, the closing market price of our common stock as quoted on the OTC MKTS fluctuated between $0.50 and $3.90 and recently the closing trading price has been $0.82. The market price of our common stock may be significantly affected by the following factors:

- actual or anticipated fluctuations in our operating results, including changes in the timing of when we recognize revenue;
- failure to meet financial estimates;
- changes in market valuations of other technology companies, particularly those in the network storage software market;
- the announcement of any strategic alternatives;
- announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, strategic alternatives, joint ventures or capital commitments;
- loss of one or more key customers;
- the conversion or exercise into common stock of stock options, the vesting of restricted stock and the anticipated grant of equity to employees;
- the issuance of additional shares of the Series A Preferred Stock pursuant to dividend rights; and

- departures of key personnel.

The stock market has experienced extreme volatility that often has been unrelated to the performance of particular companies. These market fluctuations may cause our stock price to fall regardless of our performance.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our stock adversely, or if our actual results differ significantly from our guidance, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, our stock price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

In addition, from time to time, we may release earnings guidance or other forward-looking statements in our earnings releases, earnings conference calls or otherwise regarding our future performance that represent our management's estimates as of the date of release. Some or all of the assumptions of any future guidance that we furnish may not materialize or may vary significantly from actual future results. Any failure to meet guidance or analysts' expectations could have a material adverse effect on the trading price or volume of our stock.

Our agreements with the holders of our Series A Preferred Stock and/or the Amended and Restated Loan Agreement contain covenants that could limit our ability to obtain financing using our equity. In addition, if we engage in future financings, we may have to use the proceeds to redeem the preferred stock held by such holders. This could cause us to have difficulty in obtaining capital necessary to run our business.

Our agreements with the holders of our Series A Preferred Stock and the Amended and Restated Loan Agreement give such holders and lenders, as applicable, consent rights over certain future financings, Because of these covenants, if we determine that we are in need of additional capital, we will require the prior consent of the holders of our Series A Preferred Stock and the lenders party to the Amended and Restated Loan Agreement to do so. In addition, our agreements with the holders of the Series A Preferred Stock provide that if, at the time of certain future debt or equity financings, the proceeds of which exceed $5 million, the holders of the Series A Preferred Stock still have outstanding Series A Preferred Stock, then we must offer to repurchase their Series A Preferred Stock. The holders of the Series A Preferred Stock have the right to accept the offer or to retain their Series A Preferred Stock. If we do a financing, and the holders of the Series A Preferred Stock elect to have their Series A Preferred Stock repurchased, then the capital raised in excess of $5 million will go to repurchase the holders' Series A Preferred Stock, instead of being able to be used for our business.

Our agreements with the holders of our Series A Preferred Stock and the Amended and Restated Loan Agreement prevent us from undertaking certain transactions or incurring certain indebtedness without such holders' consent or unless the Series A Preferred Stock held by such holders is repurchased and/or the Term Loan is repaid. This could hurt our ability to sell underperforming assets or lines of business or to obtain financing.

Our agreements with the holders of our Series A Preferred Stock and the Amended and Restated Loan Agreement prevent us from undertaking certain transactions or incurring certain debt without such holders' consent or unless the Series A Preferred Stock held by such holders' is repurchased and/or the Term Loan is repaid. These transactions include, but are not limited to:

- a merger with, or the sale of substantially all of our assets or capital stock, to a third party;
- assumption of indebtedness in excess of 80% of our accounts receivable; and
- the sale, license or other disposition of 10% or more of our tangible assets or capital stock.

This could limit our ability to sell off underperforming assets or business lines. It could also prevent us from obtaining financing we may need to run or to grow our business.

The holders of the Series A Preferred Stock are entitled to dividends on the Series A Preferred Stock they hold. Depending on whether these dividends are paid in cash or stock, the payment of these dividends will either decrease cash that is available to us to invest in our business or dilute the holdings of all other stockholders.

Our agreements with the holders of our Series A Preferred Stock provide that such holders will receive quarterly dividends on the Series A Preferred Stock at prime rate plus 5%, subject to a maximum dividend rate of 10%. We also have the ability to accrue and roll over dividends. Due to the lack of sufficient surplus to pay dividends as required by the Delaware General Corporation Law, we were not permitted to pay the fourth quarter 2016 dividend in cash or common stock and have been accruing the quarterly dividends since then. As of December 31, 2022, the Company's liability for dividends to the holders of the Series A Preferred Stock totaled $7.0 million. While the Term Loan is outstanding, we are only permitted to pay in-kind dividends on the Series A Preferred Stock. If in the future we pay cash dividends on the Series A Preferred Stock, it will reduce the cash that we have available to invest in our business. There can be no assurance that we will have enough cash to pay future dividends in cash. If future dividends are paid in kind, it will dilute the holdings of all other stockholders.

The potential concentration of equity ownership by Hale Capital and ESW Capital LLC may limit your ability to influence corporate matters.

Hale Capital currently owns approximately 50.6% of our outstanding common stock and ESW currently owns approximately 18.1% of our outstanding common stock. In addition, the beneficial ownership of Hale Capital and ESW Capital LLC is higher when calculated in accordance with Section 13(d) of the Exchange Act due to their ownership of derivative securities. In addition, Hale Capital and ESW have additional rights through their ownership of Series A Preferred Stock and their holdings of Company debt.

Such ownership could enable Hale Capital and ESW to exert significant influence over all corporate activities, including the election or removal of directors and the outcome of tender offers, mergers, proxy contests or other purchases of common stock that could give our stockholders the opportunity to realize a premium over the then-prevailing market price for their shares of common stock. This concentrated control will limit your ability to influence corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. In addition, such concentrated control could discourage others from initiating changes of control. In such cases, the perception of our prospects in the market may be adversely affected and the market price of our common stock may decline.

Unknown Factors

Additional risks and uncertainties of which we are unaware or which currently we deem immaterial also may become important factors that affect us.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

The Company currently maintains a mailing address and rents virtual office facilities at 501 Congress Avenue, Suite 150, Austin, Texas 78701. The Company also rents virtual and physical office space in Taiwan, Germany, France, Malaysia, China, Korea and Japan.

Item 3. Legal Proceedings

In view of the inherent difficulty of predicting the outcome of litigation, particularly where the claimants seek very large or indeterminate damages, we generally cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be, or what the eventual loss, fines or penalties related to each pending matter may be.

In accordance with the authoritative guidance issued by the Financial Accounting Standards Board ("FASB") on contingencies, we accrue anticipated costs of settlement, damages and losses for claims to the extent specific losses are probable and estimable. We record a receivable for insurance recoveries when such amounts are probable and collectable. In such cases, there may be an exposure to loss in excess of any amounts accrued. If, at the time of evaluation, the loss contingency related to a litigation is not both probable and estimable, the matter will continue to be monitored for further developments that would make such loss contingency both probable and estimable and, we will expense these costs as incurred. If the estimate of a probable loss is a range and no amount within the range is more likely, we will accrue the minimum amount of the range.

Other Claims

We are subject to various legal proceedings and claims, asserted or unasserted, which arise in the ordinary course of business. While the outcome of any such matters cannot be predicted with certainty, such matters are not expected to have a material adverse effect on our financial condition or operating results.

We continue to assess certain litigation and claims to determine the amounts, if any, that we believe may be paid as a result of such claims and litigation and, therefore, additional losses may be accrued and paid in the future, which could materially adversely impact our financial results, cash flows and cash reserves.

Item 4. Mine Safety Disclosures

Not applicable

PART II

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

Market Information

Our common stock is quoted on the OTC Markets' OTCQB under the symbol "FALC".

Holders

We had approximately 41 holders of record of common stock as of February 28, 2023. This does not reflect persons or entities that hold common stock in nominee or "street" name through various brokerage firms.

Dividends

We have not paid any cash dividends on our common stock since inception. We expect to reinvest any future earnings to finance growth, and therefore do not intend to pay cash dividends on our common stock in the foreseeable future. In addition, the terms of our Series A Preferred Stock and the Amended and Restated Loan Agreement restrict our ability to pay dividends on our common stock. Our board of directors may determine to pay future cash dividends on our common stock if it determines that dividends are an appropriate use of Company capital.

Holders of the Series A Preferred Stock are entitled to receive quarterly dividends at the Prime Rate (Wall Street Journal Eastern Edition) plus 5% (up to a maximum amount of 10%), payable in cash, provided, that if we will not have at least $1.0 million in positive cash flow for any calendar quarter after giving effect to the payment of such dividends, we, at our election, can pay such dividends in whole or in part in cash, provided that cash flow from operations is not negative, and the remainder can be accrued or paid in common stock to the extent certain equity conditions are satisfied. Due to the lack of sufficient surplus to pay dividends as required by the Delaware General Corporation Law, the Company was not permitted to pay the fourth quarter 2016 dividend in cash or common stock and has been accruing its quarterly dividends since then. As of December 31, 2022, the Company's liability for dividends to the holders of the Series A Preferred Stock totaled $7.0 million. While the Term Loan is outstanding, we are only permitted to pay in-kind dividends on the Series A Preferred Stock.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options and restricted stock (a)		Weighted-average exercise price of outstanding options and restricted stock (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)	
Equity compensation plans approved by security holders - restricted stock	1,316,933	1	$ —	241,899	3
Equity compensation plans approved by security holders - stock options	4,615	2	$ 98.29	—	
Total	1,321,548			241,899	3

1. Consists of 1,316,933 shares of Common Stock to be issued upon the vesting of outstanding restricted stock units issuable under the Company's 2018 Incentive Stock Plan (the "2018 Plan").
2. Consists of (i) 2,365 shares of Common Stock issuable upon the exercise of outstanding options issued under the Company's 2006 Incentive Stock Plan (the "2006 Plan"), and (ii) 2,250 issuable under the Company's 2016 Incentive Stock Plan (the "2016 Plan").
3. As of December 31, 2022, 241,899 additional shares of Common Stock remained available for future issuance under the 2018 Plan. No additional grants will be made under the Company's 2006 Plan or the 2016 Plan.

Issuer Purchases of Equity Securities

None

Unregistered Sales of Equity Securities and Use of Proceeds

None

Item 6. [Reserved]

Not applicable.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements can be identified by the use of predictive, future-tense or forward-looking terminology, such as "believes," "anticipates," "expects," "estimates," "plans," "may," "intends," "will," or similar terms. Investors are cautioned that any forward-looking statements are not guarantees of future performance and involve significant risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements. The following discussion should be read together with the consolidated financial statements and notes to those financial statements included elsewhere in this report.

OVERVIEW

FalconStor Software, Inc., a Delaware corporation ("we", the "Company" or "FalconStor") is a trusted data protection software leader modernizing disaster recovery and backup operations for the hybrid cloud world. The Company enables enterprise customers and managed service providers to secure, migrate, and protect their data while reducing data storage and long-term retention costs by up to 95%. More than 1,000 organizations and managed service providers worldwide standardize on FalconStor as the foundation for their cloud first data protection future. Our products are offered through and supported by a worldwide network of leading managed service providers ("MSPs"), systems integrators, resellers, and original equipment manufacturers ("OEMs").

Our products address a demand for enterprise data protection driven by the manner in which consumers and businesses are increasingly interacting in a digital space through multiple devices, networks and platforms. The onset of the coronavirus pandemic accelerated this shift, as ongoing remote work and work from home arrangements introduced novel challenges to maintaining enterprise data security. The adoption of increased employee mobility and flexible remote work arrangements, such as a broader incorporation of cloud technology and the option for employees to use their own devices, has introduced additional vulnerabilities that businesses must monitor and protect through solutions like ours in order to maintain enterprise data integrity.

Our products are utilized by enterprises and MSPs to address two key areas of enterprise data protection: (i) long-term data retention and recovery, and (ii) data replication to preserve business continuity. Our integration with modern cloud-based data storage environments, such as IBM PowerVS Cloud, AWS and Microsoft Azure, enables our enterprise customers to significantly reduce costs and improve the portability, security and accessibility of their enterprise data. We believe this accessibility is key in our modern world, where data must be protected and intelligently leveraged to facilitate learning, improve product design and drive competitive advantage. Our products can be used regardless of the underlying hardware, cloud and source-data, which enables our enterprise customers to leverage their existing hardware and software investments.

Since the beginning of 2020, we have focused our go-to-market efforts on long-term data retention and recovery data protection segments. In 2021, we increased our go-to-market investment within our core regions of the Americas, EMEA, Japan, Korea, and Southeast Asia, and released StorSafe™, the next generation of our Virtual Tape Library ("VTL") product family built for MSPs. In 2022, we secured a key strategic relationship with IBM to optimize data protection for on-premises and cloud-native workloads that operate on the IBM Power Systems platform.

During the fourth quarter of 2022, we continued to deliver innovation and to enhance each of our products. Our StorSafeTM solution is a vital backup long-term archive retention tool in enterprise IT departments' data protection arsenal and for MSPs that provide data protection as a service to enterprise companies. It enables them to modernize their backup and archive environments, leverage efficient hybrid- and public-cloud storage environments, such as those provided by IBM PowerVS Cloud, AWS and Microsoft Azure, save operational costs, and improve restore performance for rapid remote disaster recovery.

Through StorSafeTM, we are making progress expanding our technology to deliver an enterprise-class, highly flexible and efficient backup and long-term data storage optimization solution for the hybrid cloud world.

Beyond our long-term retention and reinstatement products, our StorGuardTM business continuity driven data replication solution gives our customers the ability to move workloads to the right destination, on-premises or in the cloud, with advanced insight. This solution is designed for MSPs and enterprise organizations with complex, heterogeneous IT environments and the full spectrum of data management use cases, including but not limited to large enterprises, universities, health care entities and governmental institutions. StorGuardTM is a modern, comprehensive and easy-to-use software solution that enables IT professionals to have complete insight into and control over their organization's data.

To provide for greater ease of use for all our products, we also made significant enhancements to our central data management console, now called StorSightTM, to interface with each of our products to provide a holistic view of an enterprise's entire data protection environment – whether on-premises in data centers, in the public cloud, or a hybrid – as well as the key analytics, reports and dashboards our customers need to continuously optimize their operations.

FalconStor continues to focus on MSPs, enterprise customers, and OEM partners. These markets offer the most significant opportunity and are best suited to realize the value of FalconStor products, and provide an efficient and effective access to broad, worldwide markets. Most of our revenue comes from sales to MSPs and to enterprise customers through resellers.

Our "Business Partner" program for our MSPs and resellers provides financial incentives for those partners that are willing to make a commitment to FalconStor through training, marketing and revenue. As part of our review of all of our operations to maximize savings without sacrificing sales, and in connection with our Business Partner program, we continually review our relationship with each of our partners in all regions. We decided to focus on only those partners who have the expertise, personnel and networks to identify potential customers and to service our end users.

Historically, the majority of our software licenses have been sold on a capacity basis and have included a perpetual right to use the licensed capacity. However, we have shifted our focus to an annual recurring revenue model through subscription or term-based licenses, which gives a customer the right to utilize our solutions over a designated period of time. We expect revenue from subscription-based licensing to increase over the next several years.

Fluctuation in our revenue is driven by the volume and mix of sales from period to period. Revenue allocated to perpetual and term software licenses are recognized at a point in time upon electronic delivery of the download link and the license keys, as these products have significant standalone functionality. Product maintenance and support services are satisfied over time as they are stand-ready obligations throughout the support period. As a result, revenues associated with maintenance services are deferred and recognized as revenue ratably over the term of the contract. Revenues associated with professional services are recognized at a point in time upon customer acceptance.

During the fourth quarter of 2022, our shift to recurring revenue based revenue took a material step forward as we continued to expand our strategic reseller relationship with IBM. Through this strategic reseller relationship, IBM and FalconStor co-market joint solutions consisting of FalconStor's VTL/StorSafe software, IBM Cloud Object Storage ("COS"), and IBM Power Virtual Servers ("PowerVS") for efficient application and data migration from on-premises environments to IBM PowerVS Cloud, and on-going SaaS-based backup and restore within IBM PowerVS Cloud. While we expect this relationship to provide healthy recurring revenue growth in the future as our joint solutions will be sold on a monthly consumption basis (MRR), our accelerated focus in these types of hybrid cloud relationships, and associated realignment of our sales teams, will continue to contribute to total GAAP revenue fluctuations in the short-term. In fact, GAAP total revenue in the fourth quarter of 2022 declined 28.5% year-over-year. Given the reduction in GAAP Q4 2022 revenues, we delivered a net income of $20,305, compared to a net loss of $333,432 in the fourth quarter of 2021, even though we managed operating costs to $2,197,875 in the quarter compared to $3,004,891 in Q4 2021. Despite our year-over-year GAAP total revenue decline, we believe GAAP total revenue will continue to increase each quarter during 2023. In fact, GAAP total revenue decreased to $2,549,665 in the fourth quarter of 2022 compared to $3,059,141 and $2,394,335 in the third and second quarters of 2022, respectively, and we expect sequential quarter-over-quarter GAAP total revenue to continue increasing throughout the balance of 2023.

COVID-19

We continue to closely monitor the impact of the COVID-19 pandemic on all aspects of our business, including the impact on our operations and on the needs and operations of our customers, suppliers, vendors and business partners.

Thus far, the COVID-19 pandemic has caused and may continue to cause various negative effects, including an inability to meet with actual or potential customers, our end customers deciding to delay or abandon their planned purchases or failing to make payments, and delays or disruptions in our or our partners' supply chains. The full extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition, including sales, expenses, reserves and allowances, and employee-related costs, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain or treat it, as well as the economic impact on local, regional, national and international markets. If we, or any of the third parties with whom we engage, were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially or negatively affected, which could have a material adverse impact on our business, results of operations and financial condition.

RESULTS OF OPERATIONS – FOR THE YEAR ENDED DECEMBER 31, 2022 COMPARED WITH THE YEAR ENDED DECEMBER 31, 2021

For the year ended December 31, 2022, we recognized $10.1 million in revenue, as compared to $13.9 million during the prior year period, a reduction due to several large multi-year contracts in 2021 that did not repeat in 2022.

Total cost of revenue for the year ended December 31, 2022 decreased 20% to $1.6 million, compared with $2.0 million for the year ended December 31, 2021. Total gross profit decreased $3.5 million, or 29%, to $8.5 million for the current year, compared with $12.0 million for 2021. Total gross margin decreased to 84% for the current year, compared with 86% for 2021. The decrease in our total gross margin percentage was primarily due to a decrease in both product revenue and support and service revenue, combined with a decrease in hardware product costs as the company no longer primarily sells hardware. Generally, our total gross profits and total gross margins fluctuate based on several factors, including (i) revenue growth /decline levels, (ii) changes costs to provide support and services, and (iii) our product offerings and mix of sales.

Overall, our total operating expenses decreased 16% from $11.6 million for the year ended December 31, 2021 to $9.7 million for the year ended December 31, 2022. This decrease was primarily attributable to a decrease in selling and marketing costs. We will continue to evaluate the appropriate headcount levels to properly align our resources with our current and long-term outlook and to take actions in areas of the Company that are not performing.

Our net loss for the year ended December 31, 2022 was $1.8 million, compared with a net loss of $42,253 for the previous year.

Net loss attributable to common stockholders, which includes the effects of the Series A Preferred Stock dividends (including accrued dividends) and accretion, was $3.3 million for the year ended December 31, 2022, compared with a net loss of $1.5 million for the year ended December 31, 2021.

We ended the year with $2.0 million of cash and cash equivalents, compared to $3.2 million at December 31, 2021 and deferred revenue of $5.0 million as of December 31, 2022, compared with $6.4 million as of December 31, 2021.

Revenue

	Years ended December 31,	
	2022	2021
Revenue:		
Product revenue	$ 4,246,177	$ 6,988,067
Support and services revenue	5,806,071	6,946,828
Total Revenue	$ 10,052,248	$ 13,934,895
Year-over-year percentage change		
Product revenue	(39)%	(2)%
Support and services revenue	(16)%	(9)%
Total percentage change	(28)%	(6)%

Product revenue

Product revenue is comprised of sales of both licenses for our software solutions and sales of the platforms on which the software is installed. This includes stand-alone software applications and, on occasion, software integrated with industry standard hardware. We no longer primarily source or sell hardware, rather we facilitate our customers in buying their own hardware. Our products are sold through (i) value-added resellers, (ii) distributors, and/or (iii) directly to end-users. These revenues are recognized when all the applicable criteria under accounting principles generally accepted in the United States are met.

Product revenue represented 42% and 50% of our total revenue for the years ended December 31, 2022 and 2021, respectively. Product revenue decreased 39% from $7.0 million for the year ended December 31, 2021 to $4.2 million for the year ended December 31, 2022, which resulted from order delays as well as entering into several large multi-year contracts in 2021 that did not repeat in 2022.

We continue to invest in our product portfolio by refreshing and updating our existing product lines and developing our next generation of innovative product offerings to drive our sales volume in support of our long-term outlook.

Support and services revenue

Support and services revenue is comprised of revenue from (i) maintenance and technical support services, (ii) professional services primarily related to the implementation of our software, and (iii) engineering services. Revenue derived from maintenance and technical support contracts are deferred and recognized ratably over the contractual maintenance term. Revenues associated with professional and engineering services are recognized at a point in time upon customer acceptance. Support and services revenue decreased 16% from $6.9 million for the year ended December 31, 2021 to $5.8 million for the year ended December 31, 2022. The decrease in support and services revenue from the previous year was primarily attributable to decreases in maintenance and technical support services revenue.

Maintenance and technical support services revenue decreased from $6.5 million for the year ended December 31, 2021 to $5.7 million for the year ended 2022. Our maintenance and technical support service revenue results primarily from (i) the purchase of maintenance and support contracts by our customers, and (ii) the renewal of maintenance and support contracts by our existing and new customers after their initial contracts expire. The decrease in maintenance and technical support service revenue from the previous year reflects a decline in new contracts and renewals.

Professional services revenue decreased from $0.5 million for the year ended December 31, 2021 to $0.1 million for the year ended December 31, 2022. Professional services revenue will vary depending on the number of solutions for which customers elect to purchase engineering or professional services to assist with their implementations or other projects. We expect professional services revenue to continue to vary from period to period based upon the number of customers who elect to utilize our professional services upon purchasing any of our solutions.

Cost of revenue

	Years ended December 31,	
	2022	2021
Cost of revenue:		
Product	$ 97,270	$ 325,089
Support and service	1,467,611	1,627,187
Total cost of revenue	$ 1,564,881	$ 1,952,276
Total Gross Profit	$ 8,487,367	$ 11,982,619
Gross Margin:		
Product	98%	95%
Support and service	75%	77%
Total gross margin	84%	86%

Cost of revenue, gross profit and gross margin

Cost of product revenue consists primarily of hardware and warranty expenses. Cost of support and service revenue consists primarily of personnel and other costs associated with providing software implementations, technical support under maintenance contracts and training.

Total gross profit decreased $3.5 million, or 29%, from $12.0 million for the year ended December 31, 2021, to $8.5 million for the year ended December 31, 2022. Total gross margin decreased to 84% for the year ended December 31, 2022, compared with 86% for the year ended December 31, 2021.

Cost of product revenue for the year ended December 31, 2022 was substantially the same at $0.1 million compared with $0.3 million for the same period in 2021. Product gross margin increased to 98% for the year ended December 31, 2022, compared with 95% for the same period in 2021. Additionally, our cost of support and service revenue for the year ended December 31, 2022 was substantially the same at $1.5 million, compared with $1.6 million for the same period in 2021. Support and service gross margin decreased to 75% for the year ended December 31, 2022 from 77% for the same period in 2021.

Operating Expenses

Research and Development Costs

Research and development costs consist primarily of personnel costs for product development, and other related costs associated with the development of new products, enhancements to existing products, quality assurance and testing. Research and development costs decreased $0.3 million, or 10%, to $2.6 million for the year ended December 31, 2022, from $2.8 million in 2021. The decrease in research and development costs was primarily related to a continued decrease in overall salaries and benefits expenses, combined with no bonus expense in 2022.

Selling and Marketing

Selling and marketing expenses consist primarily of sales and marketing personnel and related costs, travel, public relations expense, marketing literature and promotions, commissions, trade show expenses, and the costs associated with our foreign sales offices. Selling and marketing expenses decreased $1.7 million, or 29%, to $4.0 million for the year ended December 31, 2022, from $5.7 million for the year ended December 31, 2021. The decrease in selling and marketing expenses was primarily related to commissions, promotional campaign expenses, contractors, professional fees, and no bonus in the year ended December 31, 2022.

Gain on Litigation Settlement

During the year ended December 31, 2021, we recorded a gain of $0.6 million for a legal settlement of a contractual dispute with a marketing/sales firm. For further information, refer to Note (13) Litigation, to our consolidated financial statements.

General and Administrative

General and administrative expenses consist primarily of personnel costs of general and administrative functions, public company related costs, directors' and officers' insurance, legal and professional fees, and other general corporate overhead costs. General and administrative expenses increased $0.3 million, or 10%, to $3.2 million for the year ended December 31, 2022, from $2.9 million for the year ended December 31, 2021. The increase in general and administrative expenses was due primarily to additions to contractors and professional fees, which are partially offset by an decrease in salary and benefit expenses during the year ended December 31, 2022.

Restructuring costs

In June 2017, the Board of Directors of the Company (the "Board") approved a comprehensive plan to increase operating performance ("the 2017 Plan"). The 2017 Plan resulted in a realignment and reduction in workforce. The 2017 Plan was substantially completed by the end of our fiscal year ended December 31, 2017 and when combined with previous workforce reductions in the second quarter of Fiscal 2017 reduced our workforce to approximately 81 employees at December 31, 2017. As part of this consolidation effort, the Company vacated a portion of its former Melville, NY office space during the three months ended June 30, 2018. As the lease has terminated in April 2021, there are no further restructuring costs associated with this lease.

Restructuring expense decreased $0.8 million for the year ended December 31, 2022 to $744, compared to a $0.8 million restructuring charge in the prior year period. For further information, refer to Note (14) *Restructuring Costs*, to our consolidated financial statements.

Gain on Debt Extinguishment

Gain on debt extinguishment decreased to $0 for the year ended December 31, 2022, compared to $0.8 million in the prior year period. The Company's loan under the PPP was forgiven on March 30, 2021.

Interest and Other (Loss) Income, Net

Interest and other (loss) income is comprised of interest expense on our term loan, foreign currency gains and losses and the change in fair value our embedded derivatives. Interest and other expense, net, decreased $0.3 million for the year ended December 31, 2022 to $0.3 million, compared to $0.7 million for the year ended December 31, 2021. The decrease in interest and other expense primarily relates to payments made on outstanding debt. The fluctuation in interest and other (loss) income from quarter to quarter also relates to interest expense, foreign currency gains and losses, interest income, sublease income and the change in fair value of our embedded derivatives. For more information on our derivative instruments, see Note (3) Fair Value Measurements to our consolidated financial statements.

Income Taxes

For the year ended December 31, 2022, we recorded an income tax provision of $210,458, consisting of federal, state and local and foreign taxes. Our effective tax rate for the year ended December 31, 2022 was (13.2)%.

LIQUIDITY AND CAPITAL RESOURCES

Principal Sources of Liquidity

Our principal sources of liquidity are our cash and cash equivalents balances generated from operating, investing and financing activities. Our cash and cash equivalents balance as of December 31, 2022 totaled $2.0 million, compared with $3.2 million as of December 31, 2021.

We are currently a party to the Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, as amended December 27, 2019, by and between the Company and HCP-FVA, LLC (“HCP-FVA”), (the “Amended and Restated Loan Agreement”). In connection with the then-proposed public offering of the Company as described in the Company's Registration Statement on Form S-1, as amended, originally filed on June 3, 2021, we entered into the Loan Extension Letter Agreement, which provided for an extension of the maturity date on the portion of the outstanding indebtedness owed to Hale Capital Partners, LP (“Hale Capital”) under the Amended and Restated Loan Agreement to June 30, 2023. The remaining principal amount outstanding, which was owed to other lenders, was repaid in full. On July 19, 2022, we entered into a letter agreement with Hale Capital (the "Second Loan Extension Letter Agreement"), that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from June 30, 2023 to December 31, 2023. See Note (7) Notes Payable to our consolidated financial statements for more information. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the maturity date of the senior secured debt, as described in Note (19), Subsequent Events, to our consolidated financial statements. Also, as described further in Note (8) Series A Redeemable Convertible Preferred Stock to our consolidated financial statements, the effective date of the mandatory redemption right of the Company’s Series A Redeemable Convertible Preferred Stock (the “Series A Preferred Stock”) held by HCP-FVA and Hale Capital was extended from July 30, 2021 to July 30, 2023 pursuant to that certain Amendment No. 1 to the Company’s Amended and Restated Certificate of Designations, Preferences and Rights of the Series A Preferred Stock, dated as of June 24, 2021 (as amended, the “Certificate of Designations”). On July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). If such Series A Preferred Stock was redeemed at December 31, 2022, the Company would have been required to pay the holders of the Series A Preferred Stock $16.0 million. See Note (8) Series A Redeemable Convertible Preferred Stock to our consolidated financial statements for more information. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock, as described in Note (19), Subsequent Events, to the consolidated financial statements.

The Amended and Restated Loan Agreement has customary representations, warranties and affirmative and negative covenants. The negative covenants include financial covenants relating to in-force annual contract value. The Amended and Restated Loan Agreement also contains customary events of default, including but not limited to payment defaults, cross defaults with certain other indebtedness, breaches of covenants, bankruptcy events and a change of control. In the case of an event of default, as administrative agent under the Amended and Restated Loan Agreement, HCP-FVA, an affiliate of Hale Capital may (and upon the written request of lenders holding in excess of 50% of the term loans, which must include HCP-FVA, is required to) accelerate payment of all obligations under the Amended and Restated Loan Agreement, and seek other available remedies.

Liquidity

As of December 31, 2022, we had a working capital deficiency of $0.3 million, which is inclusive of current deferred revenue of $3.7 million, and a stockholders' deficit of $16.4 million. During the year ended December 31, 2022, the Company had a net loss of $1.8 million and negative cash flow from operations of $1.2 million. The Company's total cash balance at December 31, 2022 was $2.0 million, a decrease of $1.2 million compared to December 31, 2021. On June 30, 2021, the Company repaid $1.3 million of the $3.5 million principal amount that was outstanding as of June 2, 2021 under the Amended and Restated Loan Agreement. .

Although there can be no assurance, based on its projected cash flows from operations, recently completed financing activities, cost cutting measures in place and existing cash on hand, the Company is projecting to have sufficient liquidity and to be cash flow positive through the next 12 months.

Cash Flow Analysis

Cash flow information is as follows:

	Years Ended December 31,	
	2022	2021
Cash provided by (used in):		
Operating activities	$ (1,199,215)	$ (883,529)
Investing activities	(38,078)	(182,349)
Financing activities	177,149	2,332,006
Effect of exchange rate changes	(110,003)	(5,575)
Net increase (decrease) in cash and cash equivalents	$ (1,170,147)	$ 1,260,553

Cash Flows from Operating Activities

For the year ended December 31, 2022, our net cash and cash equivalents used in operating activities was $1.2 million which consisted of a net loss of $1.8 million, partially offset by cash outflows from changes in operating assets and liabilities of $0.3 million and non-cash adjustments of $0.3 million. Non-cash adjustments primarily consisted of depreciation and amortization, amortization of right of use assets and deferred income tax provision. The primary drivers of the changes in operating assets and liabilities were cash inflows from a decrease in accounts receivable, an increase in accrued expenses and other long-term liabilities, a decrease in contract assets, an increase in accounts payable, and a decrease in prepaid expenses and other current assets, which were partially offset by cash outflows from a decrease in deferred revenue.

For the year ended December 31, 2021, our net cash and cash equivalents used in operating activities was $0.9 million which consisted of cash outflows from changes in operating assets and liabilities of $0.7 million, non-cash adjustments of $0.2 million and a net loss of $42,253. The primary drivers of changes in operating assets and liabilities were cash outflows from a decrease in deferred revenue, a decrease in operating lease liabilities, a decrease in accrued expenses and other long-term liabilities, and an increase in contract assets, which were partially offset by cash inflows from a decrease in other assets and a decrease in prepaid expenses and other current assets.

Cash Flows from Investing Activities

For the year ended December 31, 2022, net cash used in investing activities was $38,078 consisting of capitalized software development costs of $35,000 and purchase of intangible assets of $3,078.

For the year ended December 31, 2021, net cash used in investing activities was $0.2 million consisting purchases of property and equipment of $0.1 million, capitalized software development costs of $30,000 and purchase of intangible assets of $10,226.

Cash Flows from Financing Activities

For the year ended December 31, 2022, net cash provided by financing activities was $0.2 million consisting of proceeds from short-term debt of $0.3 million and payments of short-term debt of $0.1 million.

For the year ended December 31, 2021, net cash provided by financing activities was $2.3 million consisting of proceeds from public offerings of our common stock of $4.2 million, partially offset by payments of short-term debt of $1.3 million and payments of offering costs of $0.5 million.

Contractual Obligations

As of December 31, 2022, our significant commitments are related to (i) the Amended and Restated Loan Agreement, (ii) our operating leases for our office facilities, (iii) dividends (including accrued dividends) on our Series A Preferred Stock, and (iv) the potential redemption of the Series A Preferred Stock as discussed above.

The following is a schedule summarizing our significant obligations to make future payments under contractual obligations as of December 31, 2022:

	Operating Leases	Note Payable (a)	Interest Payments (a)	Long-Term Income Tax Payable (b)	Series A Preferred Stock Mandatory Redemption (c)	Dividends on Series A Preferred Stock (d)
2023	$ 34,753	$ 2,429,689	$ 179,027	$ —	$ 9,000,000	$ 9,056,178
2024	—	—	—	113,169	—	—
Total contractual obligations	$ 34,753	$ 2,429,689	$ 179,027	$ 113,169	$ —	$ —

(a) Represents our liability under the Amended and Restated Term Loan Credit Agreement which, as of December 31, 2022, has a maturity date of December 31, 2023. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to extend the maturity date to June 30, 2024. See Note (7), Notes Payable, and Note (19), Subsequent Events, to our consolidated financial statements for further information.

(b) Represents our liability for uncertain tax positions. We are unable to make a reasonably reliable estimate of the timing of payments due to uncertainties in the timing of tax audit outcomes. However, the period in which the payable is expected to reverse due to statute expiration is the second quarter of 2024.

(c) Represents our potential liability if the holders of our Series A Preferred Stock redeem their shares for cash. The earliest date in which a redemption could occur was July 30, 2023. However, on July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock, as described in Note (19), Subsequent Events, to our consolidated financial statements. For further information, see Note (8) Series A Redeemable Convertible Preferred Stock to our consolidated financial statements.

(d) Our agreements with the holders of the Series A Preferred Stock provide that such holders will receive quarterly dividends on the Series A Preferred Stock at prime rate plus 5%, subject to a maximum dividend rate of 10%. We also have the ability to accrue and roll over dividends. Due to the lack of sufficient surplus to pay dividends as required by the Delaware General Corporation Law, the Company was not permitted to pay the fourth quarter 2016 dividend in cash or common stock and has been accruing its quarterly dividends since then. This amount represents our potential liability to pay preferred stock dividends in cash on July 30, 2023, which was the earliest date in which the holders of our Series A Preferred Stock could redeem their shares for cash. However, on July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock, as described in Note (19), Subsequent Events, to our consolidated financial statements. For further information, see Note (12), Series A Redeemable Convertible Preferred Stock, to our consolidated financial statements.

Off-Balance Sheet Arrangements

As of December 31, 2022 and 2021, we had no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our critical accounting policies and estimates are those related to revenue recognition, accounts receivable allowances, deferred income taxes, accounting for share-based payments, goodwill and other intangible assets, software development costs, fair value measurements and litigation.

Revenue Recognition. The Company's contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the standalone selling price ("SSP") for each distinct performance obligation. For products and services aside from maintenance and support, the Company estimates SSP by adjusting the list price by historical discount percentages. SSP for software and hardware maintenance and support fees is based on the stated percentages of the fees charged for the respective products.

The Company's perpetual and term software licenses have significant standalone functionality and therefore revenue allocated to these performance obligations are recognized at a point in time upon electronic delivery of the download link and the license keys.

Product maintenance and support services are satisfied over time as they are stand-ready obligations throughout the support period. As a result, revenues associated with maintenance services are deferred and recognized as revenue ratably over the term of the contract.

Revenues associated with professional services are recognized at a point in time upon customer acceptance.

Accounts Receivable. We review accounts receivable to determine which receivables are doubtful of collection. In making the determination of the appropriate allowance for uncollectible accounts and returns, we consider (i) historical return rates, (ii) specific past due accounts, (iii) analysis of our accounts receivable aging, (iv) customer payment terms, (v) historical collections, write-offs and returns, (vi) changes in customer demand and relationships, (vii) actual cash collections on our accounts receivables and (viii) concentrations of credit risk and customer credit worthiness. When determining the appropriate allowance for uncollectable accounts and returns each period, the actual customer collections of outstanding account receivable balances impact the required allowance for returns. We recorded a benefit and expense of $54,044 and $72,461 for the years ended December 31, 2022 and 2021, respectively. These amounts are included within our consolidated statement of operations in each respective year. Changes in the product return rates, credit worthiness of customers, general economic conditions and other factors may impact the level of future write-offs, revenue and our general and administrative expenses.

Income Taxes. As discussed further in Note (5) *Income Taxes,* to our consolidated financial statements, in accordance with the authoritative guidance issued by the FASB on income taxes, we regularly evaluate our ability to recover deferred tax assets, and report such deferred tax assets at the amount that is determined to be more-likely-than-not recoverable. The Company records income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be realized or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. In determining the period in which related tax benefits are realized for financial reporting purposes, excess share-based compensation deductions included in net operating losses are realized after regular net operating losses are exhausted.

We account for uncertain tax positions in accordance with the authoritative guidance issued by the FASB on income taxes, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return, should be recorded in the financial statements. Pursuant to the authoritative guidance, we may recognize the tax benefit from an uncertain tax position only if it meets the "more likely than not" threshold that the position will be sustained on examination by the taxing authority, based on the technical merits of the position or under statute expirations. The tax benefits recognized in the financial statements from such a position should be measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. In addition, the authoritative guidance addresses de-recognition, classification, interest and penalties on income taxes, accounting in interim periods, and requires increased disclosures.

Goodwill. As discussed further in Note (1) *Summary of Significant Accounting Policies*, to our consolidated financial statements, we account for goodwill and other intangible assets in accordance with the authoritative guidance issued by the FASB on goodwill and other intangibles. The authoritative guidance requires an impairment-only approach to accounting for goodwill and other intangibles with an indefinite life. Absent any prior indicators of impairment, we perform an annual impairment analysis during the fourth quarter of each of our fiscal years.

As of both December 31, 2022 and 2021, we had $4.2 million of goodwill. As of December 31, 2022 and 2021, we had $20,086 and $0.1 million (net of accumulated amortization), respectively, of other identifiable intangible assets. We do not amortize goodwill, but we assess for impairment at least annually on December 31st and more often if a trigger event occurs. In accordance with FASB Accounting Standards Codification ("ASC") 350, "Goodwill and Other" ("ASC 350") our goodwill impairment test includes only one step, which is a comparison of the carrying value of our one reporting unit to its fair value. Pursuant to ASC 350, any excess carrying value, up to the amount of goodwill allocated to that reporting unit, is impaired. At December 31, 2022 and 2021, the fair value of the company's single reporting unit for purposes of its goodwill impairment test exceeded it carrying value and thus the Company determined there was no impairment of goodwill.

Impact of Recently Issued Accounting Pronouncements

See Item 8 of Part II, Consolidated Financial Statements – Note (1) *Summary of Significant Accounting Policies – Recently Issued Accounting Pronouncements*.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are not required to provide the information required by this item as we are considered a smaller reporting company, as defined in Section 229.10(f)(1) of Regulation S-K.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
FalconStor Software, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of FalconStor Software Inc. (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), stockholders’ equity and cash flows for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue from Contracts with Customers – Identification of Distinct Performance Obligations and Estimate of Standalone Selling Price

As described in Note 1 to the consolidated financial statements, the Company derives its revenue from sales of its products, support and services. Product revenue consists of the Company’s software integrated with industry standard hardware and sold as complete turn-key integrated solutions, as stand-alone software applications or sold on a subscription or consumption basis. Customers may purchase perpetual licenses or subscribe to licenses, which provide customers with the same functionality and differ mainly in the duration over which the customer benefits from the software. Licenses for on-premises software provide the customer with a right to use the software as it exists when made available to the customer. The Company’s contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Judgment is required to determine the standalone selling price (“SSP”) for each distinct performance obligation. For products and services aside from maintenance and support, the Company estimates SSP by adjusting the list price by historical discount percentages. SSP for software and hardware maintenance and support fees is based on the stated percentages of the fees charged for the respective products.

The principal considerations for our determination that performing procedures relating to revenue recognition, specifically related to management’s identification of distinct performance obligations and their estimate of standalone selling price, is a critical audit matter are that there was significant judgment by management in both the identification of distinct performance obligations, specifically the determination that the on-premises software is determined to be a distinct performance obligation from support, and in estimating the standalone selling price using market pricing conditions and other observable inputs, such as historical pricing practices, for each distinct performance obligation. This in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence related to management's identification of distinct performance obligations within contracts with customers and the judgments made by management used to estimate the standalone selling price used to allocate the transaction price to the distinct performance obligations.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included, among others, (i) evaluating the Company's revenue recognition accounting policy; (ii) testing management's identification of distinct performance obligations in its contracts with customers; (iii) testing management's process for estimating standalone selling price which included testing the completeness and accuracy of input data used and evaluating the reasonableness of significant assumptions used by management, principally market and pricing conditions and other observable inputs such as historical pricing practices; and (iv) evaluation of the accuracy of management's allocation of transaction price to the performance obligations contained within a sample of contracts with customers.

/s/ Marcum LLP

Marcum LLP

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

Costa Mesa, CA
March 23, 2023

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	$ 2,011,062	$ 3,181,209
Accounts receivable, net of allowances	2,278,802	2,855,135
Prepaid expenses and other current assets	897,493	1,074,972
Contract assets	181,933	209,936
Inventory	—	7,744
Total current assets	5,369,290	7,328,996
Property and equipment, net	86,263	153,904
Operating lease right-of-use assets, net	34,416	112,405
Deferred tax assets	—	30,190
Software development costs, net	53,057	42,695
Other assets	98,747	106,023
Goodwill	4,150,339	4,150,339
Other intangible assets, net	20,086	51,362
Long-term contract assets	357,914	692,712
Total assets	$ 10,170,112	$ 12,668,626
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 387,379	$ 297,033
Accrued expenses	1,427,979	1,099,257
Current portion of operating lease liabilities	34,416	76,940
Short-term note payable	177,149	—
Deferred revenue	3,684,742	4,617,422
Total current liabilities	5,711,665	6,090,652
Other long-term liabilities	956,023	950,843
Notes payable, net of debt issuance costs and discounts	2,163,090	2,154,098
Operating lease liabilities, net of current portion	—	35,465
Deferred tax liabilities	537,651	500,499
Deferred revenue, net of current portion	1,281,107	1,764,249
Total liabilities	10,649,536	11,495,806
Commitments and contingencies (Note 11)		
Series A redeemable convertible preferred stock, $0.001 par value, 2,000,000 shares authorized, 900,000 shares issued and outstanding, redemption value of $15,984,331 and $14,490,274, respectively	15,928,018	14,384,388
Stockholders' equity:		
Common stock, $0.001 par value, 30,000,000 shares authorized, 7,118,609 shares and 7,082,276 shares issued and outstanding, respectively	7,119	7,082
Additional paid-in capital	110,844,716	112,349,613
Accumulated deficit	(125,507,178)	(123,708,223)
Accumulated other comprehensive loss, net	(1,752,099)	(1,860,040)
Total stockholders' deficit	(16,407,442)	(13,211,568)
Total liabilities and stockholders' deficit	$ 10,170,112	$ 12,668,626

See accompanying notes to consolidated financial statements.

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,	
	2022	2021
Revenue:		
Product revenue	$ 4,246,177	$ 6,988,067
Support and services revenue	5,806,071	6,946,828
Total revenue	10,052,248	13,934,895
Cost of revenue:		
Product	97,270	325,089
Support and service	1,467,611	1,627,187
Total cost of revenue	1,564,881	1,952,276
Gross profit	8,487,367	11,982,619
Operating expenses:		
Research and development costs	2,561,825	2,833,643
Selling and marketing	4,003,764	5,672,023
General and administrative	3,178,604	2,887,957
Gain on litigation settlement	—	(632,600)
Restructuring costs	744	833,313
Total operating expenses	9,744,937	11,594,336
Operating income (loss)	(1,257,570)	388,283
Gain on debt extinguishment	—	754,000
Interest and other expense	(330,927)	(657,773)
Income (loss) before income taxes	(1,588,497)	484,510
Income tax expense	210,458	526,763
Net income (loss)	$ (1,798,955)	$ (42,253)
Less: Accrual of Series A redeemable convertible preferred stock dividends	1,494,057	1,143,697
Less: Accretion to redemption value of Series A redeemable convertible preferred stock	49,573	299,969
Net income (loss) attributable to common stockholders	$ (3,342,585)	$ (1,485,919)
Basic net income (loss) per share attributable to common stockholders	$ (0.47)	$ (0.23)
Diluted net income (loss) per share attributable to common stockholders	$ (0.47)	$ (0.23)
Weighted average basic shares outstanding	7,100,929	6,515,274
Weighted average diluted shares outstanding	7,100,929	6,515,274

See accompanying notes to consolidated financial statements.

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Years Ended December 31,	
	2022	2021
Net income (loss)	$ (1,798,955)	$ (42,253)
Other comprehensive income (loss), net of applicable taxes:		
Foreign currency translation	138,788	114,675
Net minimum pension liability	(30,847)	13,246
Total other comprehensive income (loss), net of applicable taxes	107,941	127,921
Total comprehensive income (loss)	$ (1,691,014)	$ 85,668
Less: Accrual of Series A redeemable convertible preferred stock dividends	1,494,057	1,143,697
Less: Accretion to redemption value of Series A redeemable convertible preferred stock	49,573	299,969
Total comprehensive income (loss) attributable to common stockholders	$ (3,234,644)	$ (1,357,998)

See accompanying notes to consolidated financial statements.

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT

	Common Stock Outstanding	Common Stock	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss, Net	Total Stockholders' Deficit
Balance at December 31, 2020	5,949,463	$ 5,949	$ 110,107,170	$ (123,665,970)	$ (1,987,961)	$ (15,540,812)
Net income (loss)				(42,253)		(42,253)
Sale of common stock in public offering, net of underwriting discounts and offering costs	1,096,750	1,097	3,664,967	—	—	3,666,064
Shares issued in connection with vesting of restricted stock	36,063	36	(36)			—
Share-based compensation			21,178			21,178
Accretion of Series A redeemable convertible preferred stock			(299,969)			(299,969)
Dividends on Series A redeemable convertible preferred stock			(1,143,697)			(1,143,697)
Foreign currency translation					114,675	114,675
Net minimum pension liability					13,246	13,246
Balance at December 31, 2021	7,082,276	$ 7,082	$ 112,349,613	$ (123,708,223)	$ (1,860,040)	$ (13,211,568)
Net income (loss)				(1,798,955)		(1,798,955)
Shares issued in connection with vesting of restricted stock	36,333	37	(37)			—
Share-based compensation			38,770			38,770
Accretion of Series A redeemable convertible preferred stock			(49,573)			(49,573)
Dividends on Series A redeemable convertible preferred stock			(1,494,057)			(1,494,057)
Foreign currency translation					138,788	138,788
Net minimum pension liability					(30,847)	(30,847)
Balance at December 31, 2022	7,118,609	$ 7,119	$ 110,844,716	$ (125,507,178)	$ (1,752,099)	$ (16,407,442)

See accompanying notes to consolidated financial statements.

FALCONSTOR SOFTWARE, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31, 2022	Years Ended December 31, 2021
Cash flows from operating activities:		
Net income (loss)	$ (1,798,955)	$ (42,253)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	120,207	199,246
Share-based payment compensation	38,770	21,178
Gain on debt extinguishment	—	(754,000)
Gain on litigation settlement	—	(632,600)
Loss on disposal of fixed assets	—	50,149
Amortization of debt discount on notes payable	8,992	167,293
Amortization of right of use assets	77,989	423,867
Provision for returns and doubtful accounts	(54,044)	72,461
Deferred income tax provision	67,342	261,638
Changes in operating assets and liabilities:		
Accounts receivable	633,998	(103,138)
Prepaid expenses and other current assets	130,979	725,046
Contract assets	362,801	(304,231)
Inventory	7,202	7,679
Other assets	77,919	756,767
Accounts payable	191,019	(49,387)
Accrued expenses and other long-term liabilities	409,812	(476,977)
Deferred revenue	(1,395,257)	(653,598)
Operating lease liabilities	(77,989)	(552,669)
Net cash provided by (used in) operating activities	(1,199,215)	(883,529)
Cash flows from investing activities:		
Purchases of property and equipment	—	(142,123)
Capitalized software development costs	(35,000)	(30,000)
Purchase of intangible assets	(3,078)	(10,226)
Net cash provided by (used in) investing activities	(38,078)	(182,349)
Cash flows from financing activities:		
Proceeds from public offering, net of underwriting discounts paid	—	4,181,908
Payments of offering costs	—	(515,844)
Proceeds from short-term debt	253,069	—
Payments of short-term debt	(75,920)	(1,334,058)
Net cash provided by (used in) financing activities	177,149	2,332,006
Effect of exchange rate changes on cash and cash equivalents	(110,003)	(5,575)
Net increase (decrease) in cash and cash equivalents	(1,170,147)	1,260,553
Cash and cash equivalents, beginning of year	3,181,209	1,920,656
Cash and cash equivalents, end of year	$ 2,011,062	$ 3,181,209
Supplemental Disclosures:		
Cash paid for interest	$ 130,040	$ 136,042
Cash paid for income taxes, net	$ —	$ —
Non-cash financing activities:		
Undistributed Series A redeemable convertible preferred stock dividends	$ 1,494,057	$ 1,143,697
Accretion of Series A redeemable convertible preferred stock	$ 49,573	$ 299,969

See accompanying notes to consolidated financial statements.

(1) Summary of Significant Accounting Policies

(a) The Company and Nature of Operations

FalconStor Software, Inc., a Delaware corporation ("we", the "Company" or "FalconStor"), is a trusted data protection leader modernizing disaster recovery and backup for the hybrid cloud world. The Company enables enterprise customers and managed service providers to secure, migrate, and protect their data while reducing data storage and long-term retention costs. More than 1,000 organizations and managed service providers worldwide standardize on FalconStor as the foundation for their cloud first data protection future.

(b) Liquidity

As of December 31, 2022, the Company had a working capital deficiency of $0.3 million, which is inclusive of current deferred revenue of $3.7 million, and a stockholders' deficit of $16.4 million. During the year ended December 31, 2022, the Company had net loss of $1.8 million and negative cash flow from operations of $1.2 million. The Company's total cash balance at December 31, 2022 was $2.0 million, a decrease of $1.2 million compared to December 31, 2021.

The Company's principal sources of liquidity at December 31, 2022 consisted of cash and future cash anticipated to be generated from operations. The Company generated negative net income and negative cash flows from operations during the year ended December 31, 2022, and it reported negative working capital as of December 31, 2022.

The Company is currently a party to an Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, as amended December 27, 2019, by and between the Company and HCP-FVA, LLC ("HCP-FVA"), (the "Amended and Restated Loan Agreement"). In connection with the June Offering, we entered into a letter agreement with Hale Capital Partners, LP ("Hale Capital"), dated June 2, 2021 (the "Loan Extension Letter Agreement"), that provided for an extension of the maturity date on Hale Capital's portion of the outstanding indebtedness owed under the Amended and Restated Loan Agreement to June 30, 2023. The remaining principal amount outstanding, which was owed to other lenders, was repaid in full. On July 19, 2022, we entered into a letter agreement with Hale Capital (the "Second Loan Extension Letter Agreement"), that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from June 30, 2023 to December 31, 2023. See Note (7) Notes Payable for more information. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the maturity date of the senior secured debt to June 30, 2024, as described in Note (19), Subsequent Events.

Also, as described further in Note (12) Series A Redeemable Convertible Preferred Stock, the effective date of the mandatory redemption right of the Company's Series A Redeemable Convertible Preferred Stock (the "Series A Preferred Stock") held by HCP-FVA and Hale Capital was extended from July 30, 2021 to July 30, 2023 pursuant to that certain Amendment No. 1 to the Amended and Restated Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock of the Company, dated as of June 24, 2021 (as amended, the "Certificate of Designations"). On July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). If such Series A Preferred Stock was redeemed at December 31, 2022, the Company would have been required to pay the holders of the Series A Preferred Stock $16.0 million. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock to June 30, 2024, as described in Note (19), Subsequent Events.

The Company believes its current cash balances together with anticipated cash flows from operating activities will be sufficient to meet its working capital requirements for at least one year from the date the consolidated financial statements were issued.

(c) Revision of Previously Issued Financial Statements

During the year ended December 31, 2022, the Company identified an immaterial accounting error resulting from a misallocation of transaction price between the license portion and the maintenance portion of certain sales orders. This error resulted in an overstatement of revenue and an understatement deferred revenue in the financial statements included in the Company's quarterly reports on Form 10-Q and the Company's 2021 annual report on Form 10-K previously filed with the SEC. The Company assessed the materiality of this error on prior period financial statements in accordance with the SEC Staff Accounting Bulletin Number 99, Materiality, and ASC 250-10, Accounting Changes and Error Corrections. The Company determined that this error was not material to the financial statements of any prior annual or interim period.

To correct the misstatements above, the Company revised its previously issued financial statements as follows:

	As of December 31, 2021		
CONSOLIDATED BALANCE SHEET	**As Previously Reported**	**Adjustments**	**As Revised**
Deferred revenue, current	$ 4,557,317	$ 60,105	$ 4,617,422
Current liabilities	$ 6,030,547	$ 60,105	$ 6,090,652
Deferred revenue, net of current portion	$ 1,578,769	$ 185,480	$ 1,764,249
Total liabilities	$ 11,250,221	$ 245,585	$ 11,495,806
Accumulated deficit	$ (123,462,638)	$ (245,585)	$ (123,708,223)
Stockholders' deficit	$ (12,965,983)	$ (245,585)	$ (13,211,568)
Total liabilities and stockholders' deficit	$ 12,668,626	$ —	$ 12,668,626

	For the Year Ended December 31, 2021		
CONSOLIDATED STATEMENT OF OPERATIONS	**As Previously Reported**	**Adjustments**	**As Revised**
Product revenue	$ 7,254,471	$ (266,404)	$ 6,988,067
Support and services revenue	$ 6,926,009	$ 20,819	$ 6,946,828
Total revenue	$ 14,180,480	$ (245,585)	$ 13,934,895
Gross profit	$ 12,228,204	$ (245,585)	$ 11,982,619
Operating income (loss)	$ 633,868	$ (245,585)	$ 388,283
Income (loss) before income taxes	$ 730,095	$ (245,585)	$ 484,510
Net income (loss)	$ 203,332	$ (245,585)	$ (42,253)
Net income (loss) attributable to common stockholders	$ (1,240,334)	$ (245,585)	$ (1,485,919)
Basic net income (loss) per share attributable to common stockholders	$ (0.19)	$ (0.04)	$ (0.23)
Diluted net income (loss) per share attributable to common stockholders	$ (0.19)	$ (0.04)	$ (0.23)

	For the Year Ended December 31, 2021		
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (LOSS)	**As Previously Reported**	**Adjustments**	**As Revised**
Net income (loss)	$ 203,332	$ (245,585)	$ (42,253)
Total comprehensive income (loss)	$ 331,253	$ (245,585)	$ 85,668
Total comprehensive income (loss) attributable to common stockholders	$ (1,112,413)	$ (245,585)	$ (1,357,998)

	Total Stockholders' Deficit		
CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT	**As Previously Reported**	**Adjustments**	**As Revised**
Balance at December 31, 2020	$ (15,540,812)	$ —	$ (15,540,812)
Net income (loss)	$ 203,332	$ (245,585)	$ (42,253)
Balance at December 31, 2021	$ (12,965,983)	$ (245,585)	$ (13,211,568)

CONSOLIDATED STATEMENT OF CASH FLOWS	For the Year Ended December 31, 2021 As Previously Reported	Adjustments	As Revised
Cash flows from operating activities:			
Net income (loss)	$ 203,332	$ (245,585)	$ (42,253)
Changes in operating assets and liabilities:			
Deferred revenue	$ (899,183)	$ 245,585	$ (653,598)
Net cash provided by (used in) operating activities	$ (883,529)	$ —	$ (883,529)

(d) COVID-19 Pandemic, Geopolitical and Other Macroeconomic Impacts to our Operating Environment

We are subject to risks and uncertainties arising from macroeconomic and geopolitical conditions, including, but not limited to, inflation, rising interest rates, foreign currency fluctuations, lower consumer spending, geopolitical conflicts, including the conflict in the Ukraine, and continuing effects of the COVID-19 pandemic. We continuously monitor the direct and indirect impacts of these macroeconomic and geopolitical events and trends on our business and financial results.

The full extent to which these macroeconomic and geopolitical conditions impact our business is difficult to predict. Such impacts include, but are not limited to, supply chain and logistical challenges, reduced consumer demand for our products, and an industry-wide slowdown in advertising spending. The impact of COVID-19, for example, is fluid and uncertain, but it has caused and may continue to cause various negative effects, including an inability to meet with actual or potential customers, our end customers deciding to delay or abandon their planned purchases or failing to make payments, and delays or disruptions in our or our partners' supply chains. As a result, we may experience extended sales cycles, our ability to close transactions with new and existing customers and partners may be negatively impacted, our ability to recognize revenue from software transactions we do close may be negatively impacted, our demand generation activities, and the efficiency and effect of those activities, may be negatively affected, and it has been and, until the COVID-19 outbreak is contained, will continue to be more difficult for us to forecast our operating results. These uncertainties have, and may continue to, put pressure on global economic conditions and overall IT spending and may cause our end customers to modify spending priorities or delay or abandon purchasing decisions, thereby lengthening sales cycles and potentially lowering prices for our solutions, and may make it difficult for us to forecast our sales and operating results and to make decisions about future investments, any of which could materially harm our business, operating results and financial condition.

(e) Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

(f) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's significant estimates include those related to revenue recognition, accounts receivable allowances, valuation of derivatives, valuation of goodwill and income taxes. Actual results could differ from those estimates.

The financial market volatility in many countries where the Company operates has impacted and may continue to impact the Company's business. Such conditions could have a material impact on the Company's significant accounting estimates discussed above.

(g) Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To increase the comparability of fair value measurements, a three-tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies, is as follows:

Level 1—Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2—Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3—Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

As of December 31, 2022 and 2021, the fair value of the Company's financial instruments including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximated carrying value due to the short maturity of these instruments. See Note (3) *Fair Value Measurements* for additional information.

(h) Derivative Financial Instruments

The Company does not use derivative instruments to hedge exposures to cash flow, market or foreign currency risk. Terms of convertible preferred stock are reviewed to determine whether or not they contain embedded derivative instruments that are required under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 815 "Derivatives and Hedging" ("ASC 815") to be accounted for separately from the host contract, and recorded on the balance sheet at fair value. The fair value of derivatives are required to be revalued at each reporting date, with corresponding changes in fair value recorded in current period operating results. See Note (12) *Derivative Financial Instruments* for additional information.

(i) Revenue from Contracts with Customers and Associated Balances

The Company derives its revenue from sales of its products, support and services. Product revenue consists of the Company's software integrated with industry standard hardware and sold as complete turn-key integrated solutions, as stand-alone software applications or sold on a subscription or consumption basis. Depending on the nature of the arrangement revenue, related to turn-key solutions and stand-alone software applications are generally recognized upon shipment and delivery of license keys. For certain arrangements revenue is recognized based on usage or ratably over the term of the arrangement. Support and services revenue consists of both maintenance revenues and professional services revenues. Revenue is recorded net of applicable sales taxes.

The Company recognizes revenue for the transfer of services or products to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services or products. The principle is achieved through the following five-step approach:

- Identification of the contract, or contracts, with the customer
- Identification of the performance obligation in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, the Company satisfies a performance obligation

Nature of Products and Services

Licenses for on-premises software provide the customer with a right to use the software as it exists when made available to the customer. Customers may purchase perpetual licenses or subscribe to licenses, which provide customers with the same functionality and differ mainly in the duration over which the customer benefits from the software. Revenue from distinct on-premises licenses is recognized upfront at the point in time when the software is made available to the customer. Revenue allocated to software maintenance and support services is recognized ratably over the contractual support period.

Hardware products consist primarily of servers and associated components and function independently of the software products and as such are accounted for as separate performance obligations. Revenue allocated to hardware maintenance and support services is recognized ratably over the contractual support period.

Professional services are primarily related to software implementation services and associated revenue is recognized upon customer acceptance.

Contract Balances

Timing of revenue recognition may differ from the timing of invoicing to customers. The Company records a contract asset when revenue is recognized prior to invoicing, or unearned revenue when revenue is recognized subsequent to invoicing. For perpetual licenses with multi-year maintenance agreements, the Company invoices the license and generally one year of maintenance with future maintenance generally invoiced annually. For multi-year subscription licenses, the Company generally invoices customers annually at the beginning of each annual coverage period. The Company records a contract asset related to revenue recognized for multi-year on-premises licenses as its right to payment is conditioned upon providing product support and services in future years.

As of December 31, 2022 and 2021, accounts receivable, net of allowance for doubtful accounts, was $2.3 million and $2.9 million, respectively. Our allowance for doubtful accounts on accounts receivable was $25,720 as of December 31, 2022 and $0.1 million as of December 31, 2021, respectively. As of December 31, 2022 and 2021, short and long-term contract assets, net of allowance for doubtful accounts, was $0.5 million and $0.9 million, respectively. Our allowance for doubtful accounts on contract assets as of December 31, 2022 was nil.

The allowances for doubtful accounts reflect the Company's best estimates of probable losses inherent in the accounts receivable and contract assets' balances. The Company determines the allowances based on known troubled accounts, historical experience, and other currently available evidence. The change in the accounts receivable and contract assets allowance accounts during the years ended December 31, 2022 and 2021 were $6,053 and $137,980, respectively.

Deferred revenue is comprised mainly of unearned revenue related maintenance and technical support on term and perpetual licenses. Maintenance and technical support revenue is recognized ratably over the coverage period. Deferred revenue also includes contracts for professional services to be performed in the future which are recognized as revenue when the Company delivers the related service pursuant to the terms of the customer arrangement.

Changes in deferred revenue were as follows:

Year Ended December 31, 2022		
Balance at December 31, 2021	$	6,381,671
Deferral of revenue		8,642,479
Recognition of revenue		(10,052,248)
Change in reserves		(6,053)
Balance at December 31, 2022	$	4,965,849

During the twelve months ended December 31, 2022 and 2021, revenue of $4.5 million and $4.6 million, respectively, was recognized from the deferred revenue balance at the beginning of each period.

Deferred revenue includes invoiced revenue allocated to remaining performance obligations that has not yet been recognized and will be recognized as revenue in future periods. Deferred revenue was $5.0 million as of December 31, 2022, of which the Company expects to recognize approximately 74% of such amount as revenue over the next 12 months and the remainder thereafter.

Approximately $1.7 million of revenue is expected to be recognized from remaining performance obligations for unbilled support and services as of December 31, 2022. We expect to recognize revenue on approximately 34% of these remaining performance obligations over the next twelve months, with the balance recognized thereafter.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 90 days. In instances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined that its contracts generally do not include a significant financing component. The primary purpose of the Company's invoicing terms is to provide customers with simplified and predictable ways of purchasing its products and services, and not to receive financing from our customers or to provide customers with financing. Examples include invoicing at the beginning of a subscription term with maintenance and support revenue recognized ratably over the contract period, and multi-year, on-premises licenses that are invoiced annually with product revenue recognized upon delivery.

Significant Judgments

The Company's contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the standalone selling price ("SSP") for each distinct performance obligation. For products and services aside from maintenance and support, the Company estimates SSP by adjusting the list price by historical discount percentages. SSP for software and hardware maintenance and support fees is based on the stated percentages of the fees charged for the respective products.

The Company's perpetual and term software licenses have significant standalone functionality and therefore revenue allocated to these performance obligations are recognized at a point in time upon electronic delivery of the download link and the license keys.

Product maintenance and support services are satisfied over time as they are stand-ready obligations throughout the support period. As a result, revenues associated with maintenance services are deferred and recognized as revenue ratably over the term of the contract.

Revenues associated with professional services are recognized at a point in time upon customer acceptance.

Disaggregation of Revenue

Please refer to the consolidated statements of operations and Note (16) Segment Reporting and Concentrations for discussion on revenue disaggregation by product type and by geography. The Company believes this level of disaggregation sufficiently depicts how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors.

Assets Recognized from Costs to Obtain a Contract with a Customer

The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expects the benefit of those costs to be longer than one year. The Company has determined that its sales commission program meets the requirements for cost capitalization. Total capitalized costs to obtain a contract were immaterial during the periods presented and are included in other current and long-term assets on our consolidated balance sheets. The Company applies a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less.

(j) Leases

We have entered into operating leases for our various facilities. We determine if an arrangement is a lease at inception. Operating leases are included in Right-of-Use ("ROU") assets, and lease liability obligations in our condensed consolidated balance sheets. ROU assets represent our right to use an underlying asset for the lease term and lease liability obligations represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. We have lease agreements with lease and non-lease components and account for such components as a single lease component. As most of our leases do not provide an implicit rate, we estimated our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. The ROU asset also includes any lease payments made and excludes lease incentives and lease direct costs. Our lease terms may include options to extend or terminate the lease. Such extended terms have been considered in determining the ROU assets and lease liability obligations when it is reasonably certain that we will exercise that option. Lease expense is recognized on a straight-line basis over the lease term.

Right of Use Assets and Liabilities

We have various operating leases for office facilities that are expected to continue through 2023. Below is a summary of our ROU assets and liabilities as of December 31, 2022.

Right of use assets	$	34,416
Total lease liability obligations, current	$	34,416
Weighted-average remaining lease term		0.5
Weighted-average discount rate		3.35%

	Years Ended December 31,			
		2022		2021
Components of lease expense:				
Operating lease cost	$	142,388	$	766,952
Sublease income		—		(100,418)
Net lease cost	$	142,388	$	666,534

During the year ended December 31, 2022, operating cash flows from operating leases were approximately $0.1 million.

Approximate future minimum lease payments for our ROU assets over the remaining lease periods as of December 31, are as follows:

2023	$	34,753
Thereafter		—
Total minimum lease payments		34,753
Less interest		(337)
Present value of lease liabilities	$	34,416

(k) Property and Equipment

Property and equipment are recorded at cost. Depreciation is recognized using the straight-line method over the estimated useful lives of the assets (3 to 7 years). Leasehold improvements are amortized on a straight-line basis over the terms of the respective leases or over their estimated useful lives, whichever is shorter.

(l) Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the estimated fair value of net tangible and identifiable intangible assets acquired in business combinations. The Company has not amortized goodwill related to its acquisitions, but instead tests the balance for impairment. The Company evaluates goodwill for impairment annually or more frequently when an event occurs or circumstances change that indicate that the carrying value may not be recoverable. The Company tests goodwill for impairment by first comparing the book value of net assets to the fair value of the reporting unit. If the fair value is determined to be less than the book value or qualitative factors indicate that it is more likely than not that goodwill is impaired, a second step is performed to compute the amount of impairment as the difference between the estimated fair value of goodwill and the carrying value.

The fair value of the Company's single reporting unit for purposes of its goodwill impairment test exceeded its carrying value as of December 31, 2022 and 2021 and thus the Company determined there was no impairment of goodwill. As of December 31, 2022 and 2021, the Company's single reporting unit for purposes of its goodwill impairment test had no carrying value and thus the Company determined there was no impairment of goodwill.

Identifiable intangible assets include (i) assets acquired through business combinations, which include customer contracts and intellectual property, and (ii) patents amortized over three years using the straight-line method.

The gross carrying amount and accumulated amortization of goodwill and other intangible assets as of December 31, 2022 and 2021 are as follows:

	December 31, 2022	December 31, 2021
Goodwill	$ 4,150,339	$ 4,150,339
Other intangible assets:		
Gross carrying amount	$ 4,041,216	$ 4,038,138
Accumulated amortization	(4,021,130)	(3,986,776)
Net carrying amount	$ 20,086	$ 51,362

For the years ended December 31, 2022 and 2021, amortization expense was $34,354 and $58,998, respectively. As of December 31, 2022, amortization expense for existing identifiable intangible assets is expected to be $17,601, $2,163 and $322 for the years ended December 31, 2023, 2024 and 2025, respectively. Such assets will be fully amortized at December 31, 2025.

(m) Software Development Costs and Purchased Software Technology

In accordance with the authoritative guidance issued by the FASB on costs of software to be sold, leased, or marketed, costs associated with the development of new software products and enhancements to existing software products are expensed as incurred until technological feasibility of the product has been established. Based on the Company's product development process, technological feasibility is established upon completion of a working model. Amortization of software development costs is recorded at the greater of the straight-line basis over the product's estimated life, or the ratio of current period revenue of the related products to total current and anticipated future revenue of these products. The gross carrying amount and accumulated amortization of software development costs as of December 31, 2022 and 2021 are as follows:

	December 31, 2022	December 31, 2021
Software development costs:		
Gross carrying amount	$ 3,015,132	$ 2,980,132
Accumulated amortization	(2,962,075)	(2,937,437)
Software development costs, net	$ 53,057	$ 42,695

During the years ended December 31, 2022 and 2021, the Company recorded $24,638 and $6,583, respectively, of amortization expense related to capitalized software costs. As of December 31, 2022, amortization expense for software development costs is expected to be $27,779, $21,667 and $3,611 for the years ended December 31, 2023, 2024 and 2025, respectively.

(n) Income Taxes

The Company records income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be realized or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. In determining the period in which related tax benefits are realized for financial reporting purposes, excess share-based compensation deductions included in net operating losses are realized after regular net operating losses are exhausted.

The Company accounts for uncertain tax positions in accordance with the authoritative guidance issued by the FASB on income taxes, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return, should be recorded in the financial statements. Pursuant to the authoritative guidance, the Company may recognize the tax benefit from an uncertain tax position only if it meets the "more likely than not" threshold that the position will be sustained on examination by the taxing authority, based on the technical merits of the position or under statute expirations. The tax benefits recognized in the financial statements from such a position should be measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. In addition, the authoritative guidance addresses de-recognition, classification, interest and penalties on income taxes, accounting in interim periods, and also requires increased disclosures. See Note (5) *Income Taxes* for additional information.

(o) Long-Lived Assets

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If the sum of the expected future cash flows, undiscounted and without interest, is less than the carrying amount of the asset, an impairment loss is recognized as the amount by which the carrying amount of the asset exceeds its fair value.

(p) Share-Based Payments

The Company accounts for share-based payments in accordance with the authoritative guidance issued by the FASB on share-based compensation, which establishes the accounting for transactions in which an entity exchanges its equity instruments for goods or services. Under the provisions of the authoritative guidance, share-based compensation expense is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the requisite employee service period (generally the vesting period), net of actual forfeitures. For share-based payment awards that contain performance criteria share-based compensation, expense is recorded when the achievement of the performance condition is considered probable of achievement and is recorded on a straight-line basis over the requisite service period. If such performance criteria are not met, no compensation cost is recognized and any recognized compensation cost is reversed. The Company estimates the fair value of share-based payments using the Black-Scholes option-pricing model or the Monte Carlo simulation model if a market condition exists. Share-based compensation expense for a share-based payment award with a market condition is recorded on a straight-line basis over the longer of the explicit service period or the service period derived from the Monte Carlo simulation. Additionally, share-based awards to non-employees are expensed over the period in which the related services are rendered at their fair value. All share-based awards are expected to be fulfilled with new shares of common stock.

(q) Foreign Currency

Assets and liabilities of foreign operations are translated at rates of exchange at the end of the period, while results of operations are translated at average exchange rates in effect for the period. Gains and losses from the translation of foreign assets and liabilities from the functional currency of the Company's subsidiaries into the U.S. dollar are classified as accumulated other comprehensive loss in stockholders' deficit. Gains and losses from foreign currency transactions are included in the consolidated statements of operations within interest and other loss, net. During the year ended December 31, 2022, foreign currency transactional gains totaled approximately $36,891. During the year ended December 31, 2021, foreign currency transactional losses totaled approximately $7,735.

(r) Earnings Per Share (EPS)

Basic EPS is computed based on the weighted average number of shares of common stock outstanding. Diluted EPS is computed based on the weighted average number of common shares outstanding increased by dilutive common stock equivalents, attributable to stock option awards, restricted stock awards, warrants and the Series A Preferred Stock outstanding.

The following represents the common stock equivalents that were excluded from the computation of diluted shares outstanding because their effect would have been anti-dilutive for the years ended December 31, 2022 and 2021:

	Year Ended December 31,	
	2022	2021
Stock options, warrants and restricted stock	37,733	77,847
Series A redeemable convertible preferred stock	155,963	141,385
Total anti-dilutive common stock equivalents	193,696	219,232

The following represents a reconciliation of the numerators and denominators of the basic and diluted EPS computation:

	Year Ended December 31,	
	2022	2021
Numerator:		
Net income (loss)	$(1,798,955)	$(42,253)
Effects of Series A redeemable convertible preferred stock:		
Less: Accrual of Series A redeemable convertible preferred stock dividends	1,494,057	1,143,697
Less: Accretion to redemption value of Series A redeemable convertible preferred stock	49,573	299,969
Net income (loss) attributable to common stockholders	$(3,342,585)	$(1,485,919)
Denominator:		
Weighted average basic shares outstanding	7,100,929	6,515,274
Weighted average diluted shares outstanding	7,100,929	6,515,274
EPS:		
Basic net income (loss) per share attributable to common stockholders	$(0.47)	$(0.23)
Diluted net income (loss) per share attributable to common stockholders	$(0.47)	$(0.23)

(s) Recently Issued Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board, or FASB, issued ASU 2020-06, regarding ASC Topic 470 “Debt” and ASC Topic 815 “Derivatives and Hedging,” which reduces the number of accounting models for convertible instruments and amends the calculation of diluted earnings per share for convertible instruments, among other changes. The guidance is effective for smaller reporting companies as defined by the SEC, for annual reporting periods beginning after December 15, 2023, including interim periods within that reporting period. Early adoption is permitted. We are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses (together with all subsequent amendments, ("Topic 326"))", which replaced the previous U.S. GAAP that required an incurred loss methodology for recognizing credit losses and delayed recognition until it was probable a loss had been incurred. Topic 326 replaced the incurred loss methodology with a methodology that reflects expected credit losses and requires consideration of reasonable and supportable information to estimate credit losses. This provision was effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted. In February 2020, the FASB issued ASU 2020-02, "Financial Instruments—Credit Losses (Topic 326) and Leases (Topic 842)", which delayed the effective date of Topic 326 for smaller reporting companies until fiscal years beginning after December 15, 2022. We are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

(2) Property and Equipment

Property and equipment consists of computer hardware and software which was $15,505,431 and 15,544,212 for the years ended in 2022 and 2021, respectively. Accumulated depreciation and amortization was $15,419,168 and $15,390,308 in 2022 and 2021, respectively. During the year ended December 31, 2022, the Company did not write off fixed assets or related accumulated depreciation. During the year ended December 31, 2021 the Company wrote-off furniture and equipment, leasehold improvements and related accumulated depreciation upon exiting various facilities and recorded an associated loss of $50,149 in general and administrative expense.

Depreciation and amortization expense was $61,215 and $133,665 in 2022 and 2021, respectively.

(3) Fair Value Measurements

The Company measures its cash equivalents and derivative instruments at fair value. Fair value is an exit price, representing the amount that would be received on the sale of an asset or that would be paid to transfer a liability in an orderly transaction between market participants. As a basis for considering such assumptions, the Company utilizes a three-tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value.

Fair Value Hierarchy

The methodology for measuring fair value specifies a hierarchy of valuation techniques based upon whether the inputs to those valuation techniques reflect assumptions other market participants would use based upon market data obtained from independent sources (observable inputs) or reflect the Company’s own assumptions of market participant valuation (unobservable inputs). As a result, observable and unobservable inputs have created the following fair value hierarchy:

- Level 1 – Quoted prices in active markets that are unadjusted and accessible at the measurement date for identical, unrestricted assets or liabilities. The Company had no Level 1 securities at December 31, 2022 and 2021.

- Level 2 – Quoted prices for identical assets and liabilities in markets that are not active, quoted prices for similar assets and liabilities in active markets or financial instruments for which significant inputs are observable, either directly or indirectly. The Company had no Level 2 securities at December 31, 2022 and 2021.

- Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable. At December 31, 2022 and 2021, the Level 3 category included derivatives. The Company did not hold any cash and cash equivalents categorized as Level 3 as of December 31, 2022 or 2021.

Measurement of Fair Value

The Company measures fair value as an exit price using the procedures described below for all assets and liabilities measured at fair value. When available, the Company uses unadjusted quoted market prices to measure fair value and classifies such items within Level 1. If quoted market prices are not available, fair value is based upon financial models that use, when possible, current market-based or independently-sourced market parameters such as interest rates and currency rates. Items valued using financial generated models are classified according to the lowest level input or value driver that is significant to the valuation. Thus, an item may be classified in Level 3 even though there may be inputs that are readily observable. If quoted market prices are not available, the valuation model used generally depends on the specific asset or liability being valued. The determination of fair value considers various factors including interest rate yield curves and time value underlying the financial instruments.

The fair value of the Company's derivatives were valued using the Black-Scholes pricing model adjusted for probability assumptions, with all significant inputs, except for the probability and volatility assumptions, derived from or corroborated by observable market data such as stock price and interest rates. The probability and volatility assumptions are both significant to the fair value measurement and unobservable. These embedded derivatives are included in Level 3 of the fair value hierarchy. The derivatives are included in other long-term liabilities on our consolidated balance sheets.

The Company's Series A Preferred Stock and notes payable are measured at amortized cost using an effective interest rate of 12.6% and 8.7% yield, respectively.

Items Measured at Fair Value on a Recurring Basis

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2022:

		Fair Value Measurements at Reporting Date Using		
	Total	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant other Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Derivative liabilities:				
Derivative Instruments	$ 821,726	$ —	$ —	$ 821,726
Total derivative liabilities	$ 821,726	$ —	$ —	$ 821,726
Total assets and liabilities measured at fair value	$ 821,726	$ —	$ —	$ 821,726

The derivative liabilities above are classified as other long-term liabilities in the December 31, 2022 consolidated balance sheet.

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2021:

		Fair Value Measurements at Reporting Date Using		
	Total	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant other Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Derivative liabilities:				
Derivative Instruments	$ 776,623	$ —	$ —	$ 776,623
Total derivative liabilities	$ 776,623	$ —	$ —	$ 776,623
Total assets and liabilities measured at fair value	$ 776,623	$ —	$ —	$ 776,623

The derivative liabilities above are classified as other long-term liabilities in the December 31, 2021 consolidated balance sheet.

The fair value of the Company's derivatives were valued using the Black-Scholes pricing model adjusted for probability assumptions, with all significant inputs, except for the probability and volatility assumptions, derived from or corroborated by observable market data such as stock price and interest rates. The probability and volatility assumptions are both significant to the fair value measurement and unobservable. These embedded derivatives are included in Level 3 of the fair value hierarchy.

The following table presents a reconciliation of the beginning and ending balances of the Company's liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) as of each of the years ended December 31, 2022 and 2021:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	
	December 31, 2022	**December 31, 2021**
Beginning Balance	$ 776,623	$ 703,747
Total (gain) loss recognized in earnings	45,103	72,876
Ending Balance	$ 821,726	$ 776,623

Earnings and losses resulting from changes in the fair value of the derivative instruments above are recorded as a component of interest and other expense.

(4) Accrued Expenses

Accrued expenses are comprised of the following:

	December 31, 2022	**December 31, 2021**
Accrued compensation	$ 106,882	$ 54,137
Accrued consulting and professional fees	598,982	305,100
Accrued taxes	594,640	605,357
Accrued restructuring costs	127,475	134,663
	$ 1,427,979	$ 1,099,257

(5) Income Taxes

Information pertaining to the Company's income (loss) before income taxes and the applicable provision for income taxes is as follows:

	December 31,	
	2022	2021
Income (loss) before income taxes:		
Domestic income (loss)	$(1,698,610)	$287,640
Foreign income (loss)	110,113	196,870
Total income (loss) before income taxes:	$(1,588,497)	$484,510
Provision (benefit) for income taxes:		
Current:		
Federal	$—	$—
State and local	4,841	(1,080)
Foreign	138,275	266,205
	143,116	265,125
Deferred:		
Federal	$1,785	$1,785
State and local	1,022	8,148
Foreign	64,535	251,705
	67,342	261,638
Total provision (benefit) for income taxes:	$210,458	$526,763

The Coronavirus Aid, Relief, and Economic Security (CARES) Act, was enacted March 27, 2020. Among the business provisions, the CARES Act provided for various payroll tax incentives, changes to net operating loss carryback and carryforward rules, business interest expense limitation increases, and bonus depreciation on qualified improvement property. Additionally, the Consolidated Appropriations Act of 2021 was signed on December 27, 2020 which provided additional COVID relief provisions for businesses. The Company has evaluated the impact of both the Acts and has determined that any impact is not material to its financial statements.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31,	
	2022	2021
Deferred Tax Assets:		
Allowance for receivables	$6,190	$20,695
Deferred revenue	340,933	500,841
Share-based compensation	49,091	49,191
Accrued expenses and other liabilities	37,912	93,361
Domestic net operating loss carryforwards	19,388,081	19,567,724
Foreign net operating loss carryforwards	400,302	275,671
Tax credit carryforwards	3,106,022	3,106,022
Capital loss carryforwards	—	34,736
Fixed assets	8,628	6,491
Intangibles	54,278	87,796
Sec. 174 Capitalized Costs	433,448	—
Sub-total	23,824,885	23,742,528
Valuation allowance	(23,438,852)	(23,309,218)
Total Deferred Tax Assets	$386,033	$433,310
Deferred Tax Liabilities:		
Prepaid commissions and other	(27,010)	(57,438)
Deferred state income tax	(365,240)	(387,655)
Foreign withholding taxes	(434,720)	(458,526)
Unrealized Foreign Exchange Gains	(96,714)	—
Total Deferred Tax Liabilities	$(923,684)	$(903,619)
Net Deferred Tax Liabilities	$(537,651)	$(470,309)

As of each reporting date, the Company considers new evidence, both positive and negative, that could affect its view of the future realization of deferred tax assets. In assessing the Company's ability to recover its deferred tax assets, the Company evaluated whether it is more likely than not that some portion or the entire deferred tax asset will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income in those periods in which temporary differences become deductible and/or net operating losses can be utilized. The Company considered all positive and negative evidence when determining the amount of the net deferred tax assets that are more likely than not to be realized. This evidence includes, but is not limited to, historical earnings, scheduled reversal of taxable temporary differences, tax planning strategies and projected future taxable income. Based on these factors the Company determined that its U.S. deferred tax assets are not realizable on a more-likely-than-not basis and has recorded a full valuation allowance against such net deferred tax assets. The Company's valuation allowance increased by $0.1 million due to operations.

As of December 31, 2022, the Company had approximately $84.6 million of federal net operating loss carryforwards, of which $79.9 million will begin to expire beginning in 2030, if not utilized, and the remaining $4.6 million of which can be carried forward indefinitely subject to 80% of taxable income. As of December 31, 2022, the Company had approximately $3.1 million of research and development tax credit carryforwards which expire at various dates beginning in 2023, if not utilized. Utilization of the net operating losses and credit carryforwards may be subject to a substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code of 1986. The annual limitation may result in the expiration of net operating losses and credit carryforwards before utilization.

The effective tax rate before income taxes varies from the current statutory federal income tax rate as follows:

	December 31, 2022	December 31, 2021
Tax at Federal statutory rate	$(333,585)	$101,747
Increase (reduction) in income taxes resulting from:		
State and local taxes	79,182	(4,052)
Non-deductible expenses	18,374	22,104
GILTI	—	6,708
PPP loan forgiveness	—	(158,340)
Net effect of foreign operations	120,806	248,931
Uncertain tax positions	(9,768)	(1,499)
Change in valuation allowance	129,634	87,187
Foreign withholding taxes	63,941	206,323
Prior Period True-ups	147,363	—
Other	(5,489)	17,654
	$210,458	$526,763

Due to the change in U.S. federal tax law, the Company does not intend to indefinitely reinvest any of its unremitted foreign earnings. As of December 31, 2022, the Company has provided for additional foreign withholding taxes totaling approximately $0.4 million on approximately $4.0 million of undistributed earnings of its subsidiaries operating outside of the United States for which withholding tax applies.

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

	2022	2021
Balance at January 1,	$79,518	$75,506
Increases to tax positions taken in prior years	—	—
Expiration of statutes of limitation	(8,221)	(5,245)
Translation	—	9,257
Balance at December 31,	$71,297	$79,518

At December 31, 2022, unrecognized tax benefits of $71,297, if recognized, would reduce the Company's annual effective tax rate. As of December 31, 2022, the Company had approximately $41,873 of accrued interest. The Company believes it is reasonably possible that $13,316 of its unrecognized tax benefits will reverse within the next 12 months due to expiring statute of limitations. The Company records any interest and penalties related to unrecognized tax benefits in income tax expense.

The Company files federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations. The 2018 through 2022 tax years generally remain subject to examination by federal and most state tax authorities. In addition to the U.S., the Company's major taxing jurisdictions include China, Taiwan, Japan, France and Germany. Taiwan is currently under exam for the 2021 tax year, but no material tax adjustments are currently expected.

(6) Accumulated Other Comprehensive Loss

The changes in Accumulated Other Comprehensive Loss, net of tax, for December 31, 2022 are as follows:

	Foreign Currency Translation	Net Minimum Pension Liability	Total
Accumulated other comprehensive income (loss) at January 1, 2022	$ (1,881,005)	$ 20,965	$ (1,860,040)
Other comprehensive income (loss)			
Other comprehensive income (loss) before reclassifications	138,788	(30,963)	107,825
Amounts reclassified from accumulated other comprehensive income	—	116	116
Total other comprehensive income (loss)	138,788	(30,847)	107,941
Accumulated other comprehensive income (loss) at December 31, 2022	$ (1,742,217)	$ (9,882)	$ (1,752,099)

The changes in Accumulated Other Comprehensive Loss, net of tax, for December 31, 2021 are as follows:

	Foreign Currency Translation	Net Minimum Pension Liability	Total
Accumulated other comprehensive income (loss) at January 1, 2021	$ (1,995,680)	$ 7,719	$ (1,987,961)
Other comprehensive income (loss)			
Other comprehensive income (loss) before reclassifications	114,675	13,027	127,702
Amounts reclassified from accumulated other comprehensive income	—	219	219
Total other comprehensive income (loss)	114,675	13,246	127,921
Accumulated other comprehensive income (loss) at December 31, 2021	$ (1,881,005)	$ 20,965	$ (1,860,040)

For the year ended December 31, 2022 and 2021, the amounts reclassified to net income (loss) related to the Company's defined benefit plan. These amounts are included within "Operating income (loss)" within the consolidated statement of operations.

(7) Notes Payable

Senior Secured Debt

The Company is currently a party to an Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, as amended December 27, 2019, by and between the Company and HCP-FVA, LLC ("HCP-FVA"), (the "Amended and Restated Loan Agreement"). In connection with the June Offering, we entered into a letter agreement with Hale Capital Partners, LP ("Hale Capital"), dated June 2, 2021 (the "Loan Extension Letter Agreement"), that provided for an extension of the maturity date on Hale Capital's portion of the outstanding indebtedness owed under the Amended and Restated Loan Agreement to June 30, 2023. The remaining principal amount outstanding, which was owed to other lenders, was repaid in full. On July 19, 2022, we entered into a letter agreement with Hale Capital (the "Second Loan Extension Letter Agreement"), that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from June 30, 2023 to December 31, 2023. The senior secured debt bears interest at prime plus 0.75%. The Company concluded the extension under the Second Loan Extension Letter Agreement resulted in a debt modification under ASC 470-50, Modifications and Extinguishments, and therefore no gain or loss was required to be recognized. The change is accounted for prospectively using the new effective interest rate of the loan. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the maturity date of the senior secured debt to June 30, 2024, as described in Note (19), Subsequent Events.

Under the Amended and Restated Loan Agreement, in the event the Term Loan is prepaid for any reason, such prepayment will be subject to the payment of a premium in an amount equal to 5% of the principal amount prepaid. The Term Loan is required to be prepaid upon the occurrence of certain events, including but not limited to certain asset dispositions, the incurrence of additional indebtedness, the receipt of insurance proceeds, and a change of control, subject to certain exceptions.

The Amended and Restated Loan Agreement has customary representations, warranties and affirmative and negative covenants. The negative covenants include financial covenants relating to in-force annual contract value. The Amended and Restated Loan Agreement also contains customary events of default, including but not limited to payment defaults, cross defaults with certain other indebtedness, breaches of covenants, bankruptcy events and a change of control. In the case of an event of default, as administrative agent under the Amended and Restated Loan Agreement, HCP-FVA, an affiliate of Hale Capital may (and upon the written request of lenders holding in excess of 50% of the term loans, which must include HCP-FVA, is required to) accelerate payment of all obligations under the Amended and Restated Loan Agreement, and seek other available remedies.

As of December 31, 2022, the Company was in compliance with the financial covenants contained in the Amended and Restated Loan Agreement.

Other Financing Arrangements

On September 8, 2022, the Company entered into a financing arrangement with AFCO Premium Credit LLC ("AFCO"), for the renewal of its corporate insurance policies with Watkins Insurance Group in the amount of $253,068. The terms of the arrangement include a $25,307 monthly payment to be made over a ten month period at a 4.2% annual interest rate through July 15, 2023.

As of December 31, 2022, the balance payable to AFCO for this arrangement was $177,148 and is reflected as a "short-term note payable" on the Company's consolidated balance sheets.

The notes payable balance consists of the following:

Total notes payable, net at December 31, 2020	$	4,074,863
Accretion of discount		167,293
PPP loan forgiveness		(754,000)
Repayment of short-term debt		(1,334,058)
Total notes payable, net at December 31, 2021	$	2,154,098
Accretion of discount		8,992
Proceeds from issuance of AFCO financing		253,069
Repayment of AFCO financing		(75,920)
Total notes payable, net at December 31, 2022	$	2,340,239

(8) Series A Redeemable Convertible Preferred Stock

The Company has 900,000 shares of Series A Preferred Stock outstanding with a par value $0.001 per share and a stated value of $10 per share. Pursuant to the Certificate of Designations, each share of Series A Preferred Stock can be converted into shares of the Company’s common stock, at an initial conversion price of $102.488 per share, subject to appropriate adjustments for any stock dividend, stock split, stock combination, reclassification or similar transaction, (i) at any time at the option of the holder or (ii) by the Company if, following the first anniversary of the issuance of the Series A Preferred Stock (subject to extension under certain circumstances), the volume weighted average trading price per share of the Company’s common stock for sixty (60) consecutive trading days exceeds 250% of the conversion price and continues to exceed 225% of the conversion price through the conversion date, subject at all times to the satisfaction of, and the limitations imposed by, the equity conditions set forth in the Certificate of Designations (including, without limitation, the volume limitations set forth therein).

The Series A Preferred Stock consists of the following:

Total Series A redeemable convertible preferred stock, net at December 31, 2020	$	12,940,722
Accrued dividends		1,143,697
Accretion of preferred stock		299,969
Total Series A redeemable convertible preferred stock, net at December 31, 2021	$	14,384,388
Accrued dividends		1,494,057
Accretion of preferred stock		49,573
Total Series A redeemable convertible preferred stock, net at December 31, 2022	$	15,928,018

Pursuant to the Certificate of Designations, the holders of the Series A Preferred Stock are entitled to receive quarterly dividends at the prime rate (provided in the Wall Street Journal Eastern Edition) plus 5% (up to a maximum dividend rate of 10%), payable in cash or in kind (i.e., through the issuance of additional shares of Series A Preferred Stock), except that the Company is not permitted to pay such dividends in cash while any indebtedness under the Amended and Restated Loan Agreement remains outstanding without the consent of the holders of the Series A Preferred Stock. In addition, the declaration and payment of dividends is subject to compliance with applicable law and unpaid dividends will accrue. A holder's right to convert its shares of Series A Preferred Stock and receive dividends in the form of common stock is subject to certain limitations including, among other things, that the shares of common stock issuable upon conversion or as dividends will not, prior to receipt of stockholder approval, result in any holder beneficially owning greater than 9.99% of the Company's currently outstanding shares of common stock.

The Series A Preferred Stock dividends shall accrue whether or not the declaration or payment of such Series A Preferred Stock dividends are prohibited by applicable law, whether or not the Company has earnings, whether or not there are funds legally available for the payment of such dividends and whether or not such dividends are authorized or declared.

Upon certain triggering events, such as bankruptcy, insolvency or a material adverse effect or failure of the Company to issue shares of common stock upon conversion of the Series A Preferred Stock in accordance with its obligations, the holders may require the Company to redeem all or some of the Series A Preferred Stock at a price per share equal to the greater of (i) the sum of 100% of the stated value of a share of Series A Preferred Stock plus accrued and unpaid dividends with respect thereto, and (ii) the product of the number of shares of common stock underlying a share of Series A Preferred Stock (and accrued and unpaid dividends with respect thereto) and the closing price as of the occurrence of the triggering event. On or after December 31, 2023, subject to the approval of HCP-FVA, each holder of Series A Preferred Stock can also require the Company to redeem its Series A Preferred Stock in cash at a per share price equal to 100% of the stated value of a share of Series A Preferred Stock plus accrued and unpaid dividends with respect thereto. Notwithstanding the forgoing, no holder of Series A Preferred Stock is permitted to exercise any rights or remedies upon a Breach Event (as defined in the Certificate of Designations) or to exercise any redemption rights under the Certificate of Designations, unless approved by the holders of a majority of the then-outstanding shares of Series A Preferred Stock.

Upon consummation of a fundamental sale transaction, the Series A Preferred Stock will be redeemed at a per share redemption price equal to the greater of (y) 250% of the per share purchase price of the Series A Preferred Stock and (z) the price payable in respect of such share of Series A Preferred Stock if such share of Series A Preferred Stock had been converted into such number of shares of common stock in accordance with the Certificate of Designations (but without giving effect to any limitations or restrictions contained therein) immediately prior to such fundamental sale transaction; provided however that the 250% threshold is changed to 100% if the fundamental sale transaction is approved by the two Series A Directors (as defined in the Certificate of Designations). In addition, if the Company consummates an equity or debt financing that results in more than $5.0 million of net proceeds to the Company and/or its subsidiaries, the holders of Series A Preferred Stock will have the right, but not the obligation, to require the Company to use the net proceeds in excess of $5.0 million to repurchase all or a portion of the Series A Preferred Stock at a per share price equal to the greater of (i) the sum of 100% of the stated value of such share of Series A Preferred Stock plus accrued and unpaid dividends with respect thereto, and (ii) the number of shares of common stock into which such share of Series A Preferred Stock is then convertible multiplied by the greater of (y) the closing price of the common stock on the date of announcement of such financing or (z) the closing price of the common stock on the date of consummation of such financing.

Each holder of Series A Preferred Stock has a vote equal to the number of shares of common stock into which its Series A Preferred Stock would be convertible as of the record date. In addition, the holders of a majority of the Series A Preferred Stock must approve certain actions, including approving any amendments to the Company's Restated Certificate of Incorporation as amended or Amended and Restated Bylaws that adversely affects the voting powers, preferences or other rights of the Series A Preferred Stock; payment of dividends or distributions; any liquidation, capitalization, reorganization or any other fundamental transaction of the Company; issuance of any equity security senior to or on parity with the Series A Preferred Stock as to dividend rights, redemption rights, liquidation preference and other rights; issuances of equity below the conversion price; any liens or borrowings other than non-convertible indebtedness from standard commercial lenders which does not exceed 80% of the Company's accounts receivable; and the redemption or purchase of any of the capital stock of the Company.

The holders of our outstanding Series A Preferred Stock have a mandatory redemption right that may be exercised only with the approval of Hale Capital and HCP-FVA. In connection with the June Offering, the effective date of such redemption right was extended from July 30, 2021 to July 30, 2023 pursuant to an amendment to the Certificate of Designations, dated as of June 24, 2021. On July 19, 2022, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to December 31, 2023 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations). The Company concluded the extension resulted in a debt modification under ASC 470-50, Modifications and Extinguishments, and therefore no gain or loss was required to be recognized. The change is accounted for prospectively using the new effective interest rate of the preferred stock. On February 10, 2023, the Company entered into a letter agreement with Hale Capital to further extend the redemption date of the Series A Preferred Stock, as described in Note (19), Subsequent Events.

The Company has classified the Series A Preferred Stock as temporary equity in the financial statements as it is subject to redemption at the option of the holder under certain circumstances. As a result of the Company's analysis of all the embedded conversion and put features within the Series A Preferred Stock, the contingent redemption put options in the Series A Preferred Stock were determined to not be clearly and closely related to the debt-type host and also did not meet any other scope exceptions for derivative accounting. Therefore, the contingent redemption put options are being accounted for as derivative instruments and the fair value of these derivative instruments was bifurcated from the Series A Preferred Stock and recorded as a liability.

As of December 31, 2022 and December 31, 2021, the fair value of these derivative instruments were included in "other long-term liabilities" within the consolidated balance sheets. The loss on the change in fair value of these derivative instruments for the twelve months ended December 31, 2022 and December 31, 2021 of was included in "interest and other expense" within the consolidated statement of operations.

The fair value of the derivative liability and the loss for the twelve months ended December 31, 2022 and 2021, were as follows:

	Year Ended December 31,	
	2022	2021
Beginning Balance	$776,623	$703,747
Total (gain) loss recognized in earnings	45,103	72,876
Ending Balance	$821,726	$776,623

The Company's derivatives were valued using the Black-Scholes pricing model adjusted for probability assumptions, with all significant inputs, except for the probability and volatility assumptions, derived from or corroborated by observable market data such as stock price and interest rates. The probability and volatility assumptions are as follows:

Probability of redemption as part of a fundamental sale transaction	0.5%
Probability of redemption absent a fundamental sale transaction	4.75%
Annual volatility	65%

At the time of issuance, the Company recorded transaction costs, a beneficial conversion feature and the fair value allocated to the embedded derivatives as discounts to the Series A Preferred Stock. These costs were being accreted to the Series A Preferred Stock using the effective interest method through the stated redemption date of August 5, 2017, which represents the earliest redemption date of the instrument. This accretion was accelerated as of December 31, 2016 due to the failure of the financial covenants and the redemption right of the holders at that time. In connection with the June Offering, Hale Capital Partners, which was the sole holder of the Series A Preferred Stock, agreed to the extension of the mandatory redemption right and waived prior breaches of the terms of the Series A Preferred Stock. The Company included deductions for accretion, deemed and accrued dividends on the Series A Preferred Stock as adjustments to net income (loss) attributable to common stockholders on the statement of operations and in determining income (loss) per share for the twelve months ended December 31, 2022 and 2021, respectively. The following represents a reconciliation of net loss attributable to common stockholders for the twelve months ended December 31, 2022 and 2021, respectively:

	Year Ended December 31,	
	2022	2021
Net income (loss)	$ (1,798,955)	$ (42,253)
Effects of Series A redeemable convertible preferred stock:		
Less: Accrual of Series A redeemable convertible preferred stock dividends	1,494,057	1,143,697
Less: Accretion to redemption value of Series A redeemable convertible preferred stock	49,573	299,969
Net income (loss) attributable to common stockholders	$ (3,342,585)	$ (1,485,919)

(9) Stockholders' Equity

Stock Repurchase Activity

During the year ended December 31, 2022 and December 31, 2021, the Company did not repurchase any shares of its common stock. As of December 31, 2022, the Company had the authorization to repurchase 49,078 shares of its common stock based upon its judgment and market conditions.

Common Stock Offerings

On June 23, 2021, the Company issued and sold an aggregate of 811,750 shares of its common stock in a public offering underwritten by Roth Capital Partners, LLC ("Roth"), which included $86,750 shares purchased by Roth pursuant to the partial exercise of its over-allotment option. At a price of $4.10 per share, the Company received net proceeds of approximately $2.7 million after deducting the underwriting discount and offering expenses paid by the Company.

On July 27, 2021 the Company issued and sold an aggregate of 285,000 shares of its common stock in a public offering underwritten by Roth. At a price of $4.10 per share, the Company received net proceeds of approximately $0.9 million after deducting the underwriting discount and estimated offering expenses paid by the Company.

(10) Share-Based Payment Arrangements

On June 22, 2018, the Company's stockholders adopted the FalconStor Software, Inc. 2018 Incentive Stock Plan (the "2018 Plan"). The 2018 Plan is administered by the Compensation Committee (the “Compensation Committee”) of the Company’s Board of Directors (the “Board”) and initially provided for the issuance of up to 1,471,997 shares of the Company's common stock upon the grant of shares with such restrictions as determined by the Compensation Committee to the employees and directors of, and consultants providing services to, the Company or its affiliates. In June 2021, the Company's stockholders approved an amendment to increase the number of shares of our common stock authorized and reserved for issuance under the 2018 Plan by 220,800 shares to a total of 1,692,797 shares. Exercise prices of the options are determined by the Compensation Committee, subject to the consent of Hale Capital. The vesting terms are performance based and determined by the Compensation Committee, subject to the consent of Hale Capital, based on various factors, including (i) the return of capital to the holders of the Series A Preferred Stock and the Company’s common stock in the event of a change of control, (ii) the repayment of the Company’s obligations under its senior secured debt, and (iii) the Company’s free cash flow.

The following table summarizes the 2018 Plan, which was the only plan under which the Company was able to grant equity compensation as of December 31, 2022:

Name of Plan	Shares Authorized	Shares Available for Grant	Shares Outstanding
FalconStor Software, Inc. 2018 Incentive Stock Plan	1,692,797	241,899	1,316,933

The following table summarizes the Company’s equity plans that have terminated or expired but that still have equity awards outstanding as of December 31, 2022:

Name of Plan	Shares Available for Grant	Shares Outstanding
FalconStor Software, Inc., 2016 Incentive Stock Plan	—	2,250
FalconStor Software, Inc., 2006 Incentive Stock Plan	—	2,365

All outstanding options granted under the Company’s equity plans have terms of ten years.

A summary of the Company’s stock option activity for 2022 is as follows:

	Number of Options	Weighted Average Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Options Outstanding at December 31, 2021	5,690	$ 110.10	3.28	—
Granted	—	$ —		
Exercised	—	$ —		
Forfeited	(1,075)	$ 193.59		
Expired	—	$ —		
Options Outstanding at December 31, 2022	4,615	$ 98.29	2.67	—
Options Exercisable at December 31, 2022	4,615	$ 98.29	2.67	—
Options Expected to Vest after December 31, 2022	—	$ —	—	—

Stock option exercises are fulfilled with new shares of common stock.

The following table summarizes the share-based compensation expense for all awards issued under the Company's stock equity plans in the following line items in the consolidated statements of operations:

	Year Ended December 31,	
	2022	2021
Cost of revenue - Support and Service	$242	$1,656
Research and development costs	6,607	2,088
Selling and marketing	19,226	11,812
General and administrative	12,695	5,622
	$38,770	$21,178

The Company did not recognize any tax benefits related to share-based compensation expense during the years ended December 31, 2022 and 2021.

The Company has the ability to issue both restricted stock and restricted stock units. The restricted stock awards and restricted stock units are expensed at the fair value per share at date of grant for directors, officers and employees. A summary of the total stock-based compensation expense related to restricted stock units, which is included in the Company's total share-based compensation expense for each respective year, is as follows:

	Year Ended December 31,	
	2022	2021
Directors, officers and employees	$38,770	$21,178
	$38,770	$21,178

A summary of the Company's restricted stock activity for 2022 is as follows: Such restricted stock did not bestow any voting or dispositive power and is not deemed outstanding until they vest.

	Number of Restricted Stock Awards
Non-Vested at December 31, 2021	1,513,380
Granted	113,230
Vested	(37,365)
Forfeited	(272,312)
Non-Vested at December 31, 2022	1,316,933

Restricted stock units are fulfilled with new shares of common stock. The total intrinsic value of restricted stock for which the restrictions lapsed during the years ended was $41,102 and $93,043 for the years ended December 31, 2022 and 2021, respectively.

As of December 31, 2022, total unrecognized compensation costs for unvested restricted stock unit awards was $1,102,692, including $1,073,505 relating to performance-based awards. The performance condition for such awards was not deemed probable at grant dates or at December 31, 2022 and the cost related to such awards will begin to be recognized once the performance condition is deemed probable. The remaining amount of $29,187 relating to time-based awards is expected to be recognized over a weighted-average period of 0.7 years as of December 31, 2022.

As of December 31, 2022, the Company had 1,563,797 shares of common stock reserved for issuance upon the exercise or vesting of stock options and restricted stock.

(11) Commitments and Contingencies

The Company typically provides its customers a warranty on its software products for a period of no more than 90 days. Such warranties are accounted for in accordance with the authoritative guidance issued by the FASB on contingencies. For the year ended December 31, 2022, the Company has not incurred any costs related to warranty obligations.

Under the terms of substantially all of its software license agreements, the Company indemnifies its customers for all costs and damages arising from claims against such customers based on, among other things, allegations that the Company's software infringes on the intellectual property rights of a third party. In most cases, in the event of an infringement claim, the Company retains the right to (i) procure for the customer the right to continue using the software; (ii) replace or modify the software to eliminate the infringement while providing substantially equivalent functionality; or (iii) if neither (i) nor (ii) can be reasonably achieved, the Company may terminate the license agreement and refund to the customer a pro-rata portion of the license fee paid to the Company. Such indemnification provisions are accounted for in accordance with the authoritative guidance issued by the FASB on guarantees. From time to time, in the ordinary course of business, the Company receives claims for indemnification, typically from original equipment manufacturers. The Company is not currently aware of any material claims for indemnification.

As described under Note (8) *Series A Redeemable Convertible Preferred Stock* the holders of the Series A Preferred Stock have redemption rights upon certain triggering events. As of December 31, 2022, the Company did not fail any non-financial covenants related to the Company's Series A Preferred Stock.

In connection with the appointment of Todd Brooks as Chief Executive Officer, the Board approved an offer letter to Mr. Brooks (the "Brooks Agreement"), which was executed on August 14, 2017. The Brooks Agreement provides that Mr. Brooks is entitled to receive an annualized base salary of $350,000, payable in regular installments in accordance with the Company's general payroll practices. Mr. Brooks will also be eligible for a cash bonus of $17,500 for any quarter that is free cash flow positive on an operating basis and additional incentive compensation of an annual bonus of up to $200,000, subject to attainment of performance objectives to be mutually agreed upon and established. Mr. Brooks' employment can be terminated at will. Pursuant to the Brooks Agreement and the 2018 Plan, Mr. Brooks received 735,973 shares of restricted stock. If Mr. Brooks' employment is terminated by the Company other than for cause, he is entitled to receive severance equal to 12 months of his base salary if (i) he has been employed by the Company for at least 12 months at the time of termination or (ii) a change of control has occurred within six months of Mr. Brooks' employment. Except as set forth in the preceding sentence, Mr. Brooks is entitled to receive severance equal to six months of his base salary if he has been employed by the Company for less than six months and his employment was terminated by the Company without cause. Mr. Brooks is also entitled to vacation and other employee benefits in accordance with the Company's policies as well as reimbursement for an apartment.

In connection with Mr. Sita's appointment as Chief Financial Officer, the Board approved an Independent Contractor Services Agreement with Alucria Consulting, Inc. ("Alucria"), an entity owned by Mr. Sita (the "Sita Agreement"), which was executed on February 11, 2022. The Sita Agreement provides that Alucria is entitled to receive a fee of $20,000 per month. Alucria will also be eligible for an additional payment of up to $60,000 annually, based upon the achievement of goals determined by the Company, to be paid quarterly in accordance with standard Company policies. The agreement also provided that Mr. Sita received a grant of shares of the Company's common stock, to be governed by the Company's 2018 Stock Incentive Plan and subject to specific vesting conditions.

The term of the Sita Agreement expires on July 1, 2023, unless earlier terminated by either party in accordance with the terms therein.

As described under Note (14) *Restructuring Costs*, the Company incurred certain restructuring costs in connection with restructuring plans adopted in 2017 and 2019.

In addition, as of December 31, 2022, our liability for uncertain tax positions totaled $113,169. At this time, the settlement period for this liability, including related accrued interest, cannot be determined.

(12) Derivative Financial Instruments

The Company does not use derivative financial instruments for trading or speculative purposes. As of December 31, 2022 and 2021, the Company had no foreign currency forward contracts outstanding. The Company did not utilize foreign currency forward contracts during the years ended December 31, 2022 and 2021.

As a result of the Company’s analysis of all the embedded conversion and put features within the Series A Preferred Stock, the contingent redemption put options in the Series A Preferred Stock were determined to not be clearly and closely related to the debt-type host and also did not meet any other scope exceptions for derivative accounting. Therefore, the contingent redemption put options are being accounted for as derivative instruments and the fair value of these derivative instruments was bifurcated from the Series A Preferred Stock and recorded as a liability. At the time of issuance of the Series A redeemable convertible preferred stock the fair value of these derivative instruments were recorded as a reduction to preferred stock. As of December 31, 2022 and 2021, the fair value of these derivative instruments was $821,726 and $776,623, respectively, and were included in "other long-term liabilities" within the consolidated balance sheets. The loss on the change in fair value of these derivative instruments for 2022 of $45,103 and the loss on the change in fair value of these derivative instruments for 2021 of $72,876, were included in “interest and other loss, net” within the consolidated statement of operations.

(13) Litigation

In view of the inherent difficulty of predicting the outcome of litigation, particularly where the claimants seek very large or indeterminate damages, the Company generally cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be, or what the eventual loss, fines or penalties related to each pending matter may be.

In accordance with the authoritative guidance issued by the FASB on contingencies, the Company accrues anticipated costs of settlement, damages and losses for claims to the extent specific losses are probable and estimable. The Company records a receivable for insurance recoveries when such amounts are probable and collectable. In such cases, there may be an exposure to loss in excess of any amounts accrued. If, at the time of evaluation, the loss contingency related to a litigation is not both probable and estimable, the matter will continue to be monitored for further developments that would make such loss contingency both probable and estimable and, the Company will expense these costs as incurred. If the estimate of a probable loss is a range and no amount within the range is more likely, the Company will accrue the minimum amount of the range.

The Company is subject to various legal proceedings and claims, asserted or unasserted, which arise in the ordinary course of business. While the outcome of any such matters cannot be predicted with certainty, such matters are not expected to have a material adverse effect on the Company’s financial condition or operating results.

Litigation Settlement with Datatech Enterprises, Inc.

The Company has been involved in litigation with Datatech Enterprises, Inc. ("Datatech") since April 27, 2015 when Falconstor commenced a lawsuit regarding a contractual dispute with Datatech. Falconstor recorded an accrual for a loss contingency in the amount of $0.8 million in the fiscal year ended 2015. On September 23, 2021, Falconstor and Datatech entered into a settlement agreement which resulted in Falconstor issuing payment of $0.2 million to Datatech and recording a gain of $0.6 million. Falconstor issued the payment in full on September 23, 2021. The matter is now fully concluded.

Other Claims

The Company is subject to various legal proceedings and claims, asserted or unasserted, which arise in the ordinary course of business. While the outcome of any such matters cannot be predicted with certainty, such matters are not expected to have a material adverse effect on the Company’s financial condition or operating results.

The Company continues to assess certain litigation and claims to determine the amounts, if any, that the Company believes may be paid as a result of such claims and litigation and, therefore, additional losses may be accrued and paid in the future, which could materially adversely impact the Company's financial results, its cash flows and its cash reserves.

(14) Restructuring Costs

In June 2017, the Board approved a comprehensive plan to increase operating performance (the "2017 Plan"). The 2017 Plan was substantially completed by the end of the Company's fiscal year ended December 31, 2017, and when combined with previous workforce reductions in the second quarter of fiscal 2017 reduced the Company's workforce to approximately 86 employees at December 31, 2018. In making these changes, the Company prioritized customer support and development while consolidating operations and streamlining direct sales resources, allowing the Company to focus on the install base and develop alternate channels to the market. As part of this consolidation effort, the Company vacated a portion of its former Melville, NY office space during the three months ended June 30, 2018. During the fiscal year ended December 31, 2021, the Company incurred lease disposal-related costs for this property of $833,313. The Melville, NY lease which ended on April 30, 2021 with a gross annualized rental cost of $1.5 million, will not be replaced. The Company expects the remaining accrued severance-related costs of $127,475 as of December 31, 2022 to be paid once final settlement litigation is completed. Such litigation stems from the termination of three employees in France, one of which has been settled, and the remainder of which are expected to settle by December 31, 2022.

The following table summarizes the activity during 2021 and 2022 related to restructuring liabilities recorded in connection with the 2017, 2019 and 2020 Plans:

	Severance related costs	Facility and other costs	Total
Balance at December 31, 2020	$ 239,444	$ 75,466	$ 314,910
Provisions/Additions	—	833,313	833,313
Translation Adjustment	(14,336)	—	(14,336)
Utilized/Paid	(90,445)	(908,779)	(999,224)
Balance at December 31, 2021	$ 134,663	$ —	$ 134,663
Provisions/Additions	—	744	744
Translation Adjustment	(7,188)	—	(7,188)
Utilized/Paid	—	(744)	(744)
Balance at December 31, 2022	$ 127,475	$ —	$ 127,475

The severance and facility related liabilities are included within "accrued expenses" in the accompanying condensed consolidated balance sheets. The expenses under the 2017 Plan are included within "restructuring costs" in the accompanying condensed consolidated statements of operations.

(15) Employee Benefit Plans

Defined Contribution Plan

Effective July 2002, the Company established a voluntary savings and defined contribution plan (the "Plan") under Section 401(k) of the Internal Revenue Code. This Plan covers all U.S. employees meeting certain eligibility requirements and allows participants to contribute a portion of their annual compensation. Employees are 100% vested in their own contributions. For the years ended December 31, 2022 and 2021, the Company did not make any contributions to the Plan.

Effective July 1, 2007, the Company, in accordance with the labor pension system in Taiwan, contributes 6% of salaries to individual pension accounts managed by the Bureau of Labor Insurance. The plan covers all Taiwan employees that elect the new pension system and all employees hired after July 1, 2005. For the years ended December 31, 2022 and 2021, the Company contributed approximately $2,000 and $6,000, respectively.

Defined Benefit Plan

The Company has a defined benefit plan covering employees in Taiwan. The Company accounts for its defined benefit plan in accordance with the authoritative guidance issued by the FASB on retirement benefits, which requires the Company to recognize the funded status of its defined benefit plan in the accompanying consolidated balance sheet, with the corresponding adjustment to accumulated other comprehensive income, net of tax.

At December 31, 2022 and 2021, $31,873 and $23,255, respectively, is included in accumulated other comprehensive (loss) income for amounts that have not yet been recognized in net periodic pension cost. These amounts include the following: unrecognized transition obligation of $0 and $0 at December 31, 2022 and 2021, respectively, and unrecognized actuarial gains of $31,873 and $23,255 at December 31, 2022 and 2021, respectively. During 2022, the total amount recorded in other comprehensive income (loss) related to the pension plan was $30,847 (net of tax), which consisted of an actuarial loss of $30,847 and the recognition of $0 of transition obligations recognized during 2022 as a component of net periodic pension cost.

Pension information for the years ended December 31, 2022 and 2021, is as follows:

	2022	2021
Accumulated benefit obligation	$60,592	$69,627
Changes in projected benefit obligation:		
Projected benefit obligation at beginning of year	85,961	95,511
Interest cost	618	414
Actuarial gain	(7,760)	(11,223)
Currency translation	(8,071)	1,259
Projected benefit obligation at end of year	$70,748	$85,961
Changes in plan assets:		
Fair value of plan assets at beginning of year	$49,097	$40,476
Actual return on plan assets	3,605	2,135
Employer contributions	1,801	5,873
Currency translation	4,920	613
Fair value of plan assets at end of year	$59,423	$49,097
Funded status	$(11,325)	$(36,864)

The underfunded status of the Company's defined benefit plan has been recorded as a component of other long-term liabilities as of December 31, 2022 and 2021.

Components of net periodic pension cost:				
Interest cost	$	618	$	414
Expected return on plan assets		354		(176)
Amortization of net (gain) loss		(856)		(19)
Service cost		—		—
Net periodic pension (benefit) cost	$	116	$	219

The Company makes contributions to the plan so that minimum contribution requirements, as determined by government regulations, are met. Company contributions of approximately $2,000 are expected to be made during 2023. Benefit payments of $69,000 are expected to be paid through 2030.

The Company utilized the following assumptions in computing the benefit obligation at December 31, 2022 and 2021 as follows:

	2022	2021
Discount rate	1.39 %	0.77 %
Rate of increase in compensation levels	2.00 %	2.00 %
Expected long-term rate of return on plan assets	1.39 %	0.77 %

(16) Segment Reporting and Concentrations

The Company is organized in a single operating segment for purposes of making operating decisions and assessing performance. Revenue from the United States to customers in the following geographical areas for the years ended December 31, 2022 and 2021, and the location of long-lived assets as of December 31, 2022 and 2021, are summarized as follows:

	Year Ended December 31,	
	2022	2021
Revenues:		
Americas	$ 4,372,411	$ 5,521,206
Asia Pacific	1,984,783	2,764,146
Europe, Middle East, Africa and Other	3,695,054	5,649,543
Total Revenues	$ 10,052,248	$ 13,934,895

	2022	2021
Long-lived assets:		
Americas	$ 504,545	$ 858,417
Asia Pacific	112,301	261,148
Europe, Middle East, Africa and Other	13,551	18,364
Total long-lived assets	$ 630,397	$ 1,137,929

For the years ended December 31, 2022 and December 31 2021, the Company had one customer that accounted for 10% or more of total revenue, respectively.

As of December 31, 2022 and 2021, the Company had two customers that accounted for 10% or more of the gross accounts receivable balance, respectively.

(17) Valuation and Qualifying Accounts – Allowance for Returns and Doubtful Accounts

Period Ended	Balance at Beginning of Period	Charges / (Benefits) to Revenue	(Increases) Deductions	Balance at End of Period
December 31, 2022	$ 85,816	(54,044)	6,053	$ 25,719
December 31, 2021	$ 151,335	72,461	137,980	$ 85,816

Note: Charges/benefits to the allowance for doubtful accounts are recorded within “general and administrative expenses” within the consolidated statements of operations. Charges/benefits to the return reserve for product and service are recorded within “product revenue” within the consolidated statements of operations.

(18) Related Party Transactions

Martin M. Hale, Jr., a member of the Company's Board of Directors, is a general partner of HCP-FVA, the holder in excess of 50% of the Company’s Series A Preferred Stock. The Series A Preferred Stock was purchased by Hale Capital Partners, LP, of which Mr. Hale is a general partner, pursuant to a September 16, 2013 stock purchase agreement with the Company at a time when Mr. Hale was not a director of the Company. Hale Capital Partners, LP subsequently assigned all of its rights in the Series A Preferred Stock to HCP-FVA. Under the terms of the Certificate of Designations, the holders of the Series A Preferred Stock are entitled, as a group, to nominate and to elect up to two directors so long as at least 85% of the Company's Series A Preferred Stock is outstanding. HCP-FVA, the sole holder of the Series A Preferred Stock at the time, nominated and elected Mr. Hale in September 2013 and Michael P. Kelly on October 29, 2014, to the Company’s Board of Directors.

As described further in Note (7) *Notes Payable*, on December 27, 2019, the Company entered into the Amended and Restated Loan Agreement to provide for, among other things, a new $2,500,000 term loan facility to the Company. In connection with the June Offering, we entered into the Loan Extension Letter Agreement on June 2, 2021 which provided for an extension of the maturity date on Hale Capital’s portion of the outstanding indebtedness owed under the Amended and Restated Loan Agreement to June 30, 2023. The amount extended constituted approximately $2,176,621 of the $3,510,679 principal amount outstanding as of June 2, 2021. The remaining $1,334,058 of the outstanding principal, which was owed to other lenders, was repaid in full on June 30, 2021.

(19) Subsequent Events

Senior Secured Debt

On February 10, 2023, we entered into a letter agreement with Hale Capital that provided for a subsequent extension of the maturity date on the outstanding indebtedness owed under the Amended and Restated Loan Agreement from December 31, 2023 to June 30, 2024.

Series A Redeemable Convertible Preferred Stock

On February 10, 2023, the Company and Hale Capital entered into a letter agreement pursuant to which Hale Capital agreed not to exercise or to permit the exercise of the mandatory redemption right of the Series A Preferred Stock on or prior to June 30, 2024 unless the redemption is in accordance with Section 8(e)(z) of the Certificate of Designations or in accordance with a Breach Event (as defined in the Certificate of Designations).

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

The Company maintains "disclosure controls and procedures," as such term is defined in Rules 13a-15e and 15d-15e of the Exchange Act, that are designed to ensure that information required to be disclosed in its reports, pursuant to the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding the required disclosures. In designing and evaluating the disclosure controls and procedures, management has recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurances of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost benefit relationship of possible controls and procedures.

The Company's Chief Executive Officer (its principal executive officer) and Chief Financial Officer (its principal financial officer and principal accounting officer) have evaluated the effectiveness of its "disclosure controls and procedures" and concluded that such disclosure controls and procedures were effective as of the end of the period covered by this report.

Internal Control Over Financial Reporting

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company; as such term is defined in Rules 13a-15(f) under the Exchange Act, as amended. To evaluate the effectiveness of the Company's internal control over financial reporting, the Company's management uses the Integrated Framework (2013) adopted by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

The Company's management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022, using the COSO framework (2013). The Company's management has determined that the Company's internal control over financial reporting is effective as of that date.

The Principal Executive Officer and the Principal Financial Officer believe that the consolidated financial statements and other information contained in this Annual Report present fairly, in all material respects, our business, financial condition and results of operations.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information called for by Part III, Item 10, regarding the Registrant’s directors and executive officers will be included in our Proxy Statement relating to our annual meeting of stockholders scheduled to be held in June 2023, and is incorporated herein by reference. The information will appear in the Proxy Statement under the captions “Election of Directors”, “Management”, “Executive Compensation”, “Section 16 (a) Beneficial Ownership Reporting Compliance”, and “Committees of the Board of Directors.” The Proxy Statement will be filed within 120 days of December 31, 2022, our year-end.

Item 11. Executive Compensation

Information called for by Part III, Item 11, will be included in our Proxy Statement relating to our annual meeting of stockholders scheduled to be held in June 2023, and is incorporated herein by reference. The information will appear in the Proxy Statement under the captions “Executive Compensation”, “Director Compensation”, “Compensation Committee Interlocks and Insider Participation”, "Compensation Committee Report” and “Committees of the Board of Directors.” The Proxy Statement will be filed within 120 days of December 31, 2022, our year-end.

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

Information regarding Securities Authorized for Issuance Under Equity Compensation Plans is included in Item 4 and is incorporated herein by reference. All other information called for by Part III, Item 12, will be included in our Proxy Statement relating to our annual meeting of stockholders scheduled to be held in June 2023, and is incorporated herein by reference. The information will appear in the Proxy Statement under the caption “Beneficial Ownership of Shares.” The Proxy Statement will be filed within 120 days of December 31, 2022, our year-end.

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

Information regarding our relationships and related transactions will be included in our Proxy Statement relating to our annual meeting of stockholders scheduled to be held in June 2023, and is incorporated by reference. The information will appear in the Proxy Statement under the caption “Certain Relationships and Related Transactions.” The Proxy Statement will be filed within 120 days of December 31, 2022, our year-end.

Item 14. Principal Accountant Fees and Services

Information called for by Part III, Item 14, will be included in our Proxy Statement relating to our annual meeting of stockholders scheduled to be held in June 2023, and is incorporated herein by reference. The information will appear in the Proxy Statement under the caption “Principal Accountant Fees and Services.” The Proxy Statement will be filed within 120 days of December 31, 2022, our year-end.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The information required by subsections (a)(1) and (a)(2) of this item are included in the response to Item 8 of Part II of this annual report on Form 10-K.

(b) Exhibits

3.1	Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.1 to the Registrant's registration statement on Form S-1 (File no. 33-79350), filed on April 28, 1994.
3.2	Amended and Restated By-Laws of FalconStor Software, Inc., incorporated herein by reference to Exhibit 3.2 to the Registrant's annual report on Form 10-K for the year ended December 31, 2010, filed on March 14, 2011.
3.3	Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.3 to the Registrant's the quarterly report on Form 10-Q for the period ended June 30, 2000 filed on August 11, 2000.
3.4	Certificate of Amendment of the Amended and Restated Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock of FalconStor Software, Inc., incorporated by reference to Exhibit 3.1 to the Registrant's report on Form 8-K dated June 24, 2021.
3.5	Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.4 to the Registrant's annual report on Form 10-K for the year ended December 31, 2001, filed on March 27, 2002.
3.6	Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock, incorporated herein by reference to Exhibit 4.1 to the Registrant's report on Form 8-K dated September 16, 2013.
3.7	Certificate of Amendment of the Restated Certificate of Incorporation of FalconStor Software, Inc., incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K dated June 25, 2018.
3.8	Amended and Restated Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock of FalconStor Software, Inc., incorporated by reference to Exhibit 3.2 to the Registrant's report on Form 8-K dated June 25, 2018.
3.9	Certificate of Amendment to the Restated Certificate of Incorporation incorporated herein by reference to Exhibit 3.1 to the Registrant's current report on Form 8-K filed on June 25, 2019.
3.10	Certificate of Amendment to the Restated Certificate of Incorporation incorporated herein by reference to Exhibit 3.1 to the Registrant's quarterly report on Form 10-Q for the period ended June 30, 2019 filed on August 14, 2019.
4.1 ♦	Amended and Restated 2006 Incentive Stock Plan incorporated herein by reference to Exhibit 4.1 to the Registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2007, filed on May 10, 2007.
4.2	Intentionally omitted.
4.3 ♦	Form of Restricted Stock Letter Agreement, incorporated herein by reference to Exhibit 4.1 to the Registrant's current report on Form 8-K filed on April 7, 2014.
4.4	Intentionally omitted.

4.5 ♦	FalconStor Software, Inc. 2016 Incentive Stock Plan, incorporated by reference to Exhibit A to the Proxy Statement on Schedule 14A dated March 18, 2016.
4.6	Description of Registered Securities of FalconStor Software, Inc. , incorporated by reference to Exhibit 4.6 of the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2019.
4.7	Letter Agreement, dated July 19, 2022, by and among FalconStor Software, Inc., Hale Capital Partners, LP, and HCP-FVA, LLC, regarding redemption of Series A Convertible Preferred Stock, incorporated herein by reference to Exhibit 4.1 to the Registrant's quarterly report on Form 10-Q for the period ending September 30, 2022, filed on November 11, 2022.
4.8	Letter Agreement, dated February 10, 2023, by and among FalconStor Software, Inc., Hale Capital Partners, LP, and HCP-FVA, LLC, regarding redemption of Series A Convertible Preferred Stock
10.1	Preferred Stock Purchase Agreement dated as of September 16, 2013 between FalconStor Software, Inc. and Hale Capital Partners, LP, incorporated herein by reference to Exhibit 10.1 to the Registrant's report on Form 8-K dated September 16, 2013.
10.2♦	Agreement between FalconStor Software, Inc. and Todd Brooks, dated August 14, 2017, incorporated by reference to Exhibit 10.2 to the Registrant's current report on Form 8-K filed August 17,2017.
10.3	Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, by and among FalconStor Software, Inc., HCP-FVA, LLC, as Administrative Agent and as a Lender, and the other Loan Parties named therein, incorporated herein by reference to Exhibit 10.1 to Registrant's current report on Form 8-K filed on February 26, 2018.
10.4	Amendment No. 1 to the FalconStor Software, Inc. 2018 Incentive Stock Plan, incorporated by reference to the Definitive Proxy Statement on Schedule 14A filed on June 1, 2021.
10.5	Falconstor Software Inc. 2018 Stock Incentive Plan, incorporated by reference to the Definitive Proxy Statement on Schedule 14A filed on June 5, 2018.
10.6	Joinder to Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, by and among FalconStor Software, Inc., HCP-FVA, LLC, as Administrative Agent and as a Lender, and the other Loan Parties named therein, incorporated by reference to Exhibit 10.2 to the Registrant's current report on Form 8-K filed October 11, 2018.
10.7	Amendment No. 1 to Amended and Restated Term Loan Credit Agreement dated December 27, 2019 by and among FalconStor Software, Inc., HCP-FVA, LLC, EW Capital, LLC, the lenders party thereto and the other loan parties named therein, incorporated by reference to Exhibit 10.1 to the Registrant's current report on Form 8-K, filed on January 3, 2020.
10.8	Promissory Note between the Company and Peapack-Gladstone Bank, dated April 28, 2020, incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2020.
10.9	Independent Contractor Services Agreement, dated February 11, 2022, between FalconStor Software, Inc. and Alucria Consulting, Inc., incorporated by reference to Exhibit 10.1 to the Registrant's current report on Form 8-K, filed on February 17, 2022.
10.10	Letter Agreement, dated July 19, 2022, by and among FalconStor Software, Inc., Hale Capital Partners, LP, and HCP-FVA, LLC, regarding extension of the Hale Capital term loan, incorporated herein by reference to Exhibit 10.1 to the Registrant's quarterly report on Form 10-Q for the period ending September 30, 2022, filed on November 11, 2022.
10.11	Letter Agreement, dated February 10, 2023, by and among FalconStor Software, Inc., Hale Capital Partners, LP, and HCP-FVA, LLC, regarding extension of the Hale Capital term loan
21.1	Subsidiaries of Registrant – FalconStor, Inc., FalconStor AC, Inc., FalconStor Software (Korea), Inc.

23.1*	Consent of Marcum LLP, independent registered public accounting firm..
24.1*	Power of Attorney (set forth on the Signature Page of this Registration Statement).
31.1*	Certification of the Chief Executive Officer.
31.2*	Certification of the Chief Financial Officer.
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350).
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350).
101.1	The following financial statements from FalconStor Software, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022, formatted in XBLR (eXtensible Business Reporting Language):

(i) Consolidated Balance Sheets – December 31, 2022 and December 31, 2021

(ii) Consolidated Statements of Operations – Years Ended December 31, 2022 and 2021

(iii) Consolidated Statements of Comprehensive Income (Loss) – Years Ended December 31, 2022 and 2021

(iv) Consolidated Statements of Stockholders' Deficit – Years Ended December 31, 2022 and 2021

(v) Consolidated Statements of Cash Flows – Years Ended December 31, 2022 and 2021

(vi) Notes to Consolidated Financial Statements – December 31, 2022

*- Filed herewith.
♦- Denotes management contract or compensatory 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 in Melville, State of New York on March 23, 2023.

FALCONSTOR SOFTWARE, INC.

By:	/s/ Vincent Sita	March 23, 2023
	Chief Financial Officer and Treasurer (principal financial and accounting officer)	Date

POWER OF ATTORNEY

FalconStor Software, Inc. and each of the undersigned do hereby appoint Todd Brooks and Vincent Sita, and each of them severally, its or his true and lawful attorney to execute on behalf of FalconStor Software, Inc. and the undersigned any and all amendments to this Annual Report on Form 10-K and to file the same with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission; each of such attorneys shall have the power to act hereunder with or without the other.

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

By:	/s/ Todd Brooks	March 23, 2023
	Todd Brooks, President & Chief Executive Officer and Director (principal executive officer)	Date
By:	/s/ Vincent Sita	March 23, 2023
	Vincent Sita, Chief Financial Officer and Treasurer (principal financial and accounting officer)	Date
By:	/s/ Martin Hale Jr.	March 23, 2023
	Martin Hale Jr., Director	Date
By:	/s/ Michael Kelly	March 23, 2023
	Michael Kelly, Director	Date
By:	/s/ Barry A. Rudolph	March 23, 2023
	Barry A. Rudolph, Director	Date
By:	/s/ William D. Miller	March 23, 2023
	William D. Miller, Director	Date

LETTER AGREEMENT

February 10, 2023

Hale Capital Partners, LP 17 State Street, Suite
4000 New York, NY 10004 Attn: Martin Hale, Jr.

Re: Redemption of Series A Convertible Preferred Stock

Dear Marty:

Reference is hereby made to (i) the Amended and Restated Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock of FalconStor Software, Inc. (the "Company"), dated June 22, 2018 (the "Certificate of Designations") and (ii) that certain Preferred Stock Purchase Agreement, dated as of September 16, 2013 (the "Purchase Agreement") by and between the Company and Hale Capital Partners, LP (the "Majority Holder"). Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Certificate of Designations.

In order to facilitate the Company's ongoing operations, the Majority Holder hereby acknowledges and agrees that the Majority Holder (i) will not deliver an Optional Redemption Notice to the Company pursuant to Section 8(a) of the Certificate of Designations on or prior to June 30, 2024, and (ii) will not approve of any exercise of redemption rights under the Certificate of Designations attempted by any holder of Series A Preferred Stock on or prior to June 30, 2024, pursuant to Section 10(d) of the Certificate of Designations; provided, that, the foregoing shall not apply to (i) any exercise of redemption rights relating to, and any redemption of, the Series A Preferred Stock in accordance with Section 8(e)(z) of the Certificate of Designations, (ii) any exercise of redemption rights relating to, and any redemption of, the Series A Preferred Stock in accordance with a Breach Event arising from a breach of Section 6(g) of the Certificate of Designations, and (iii) in the event of a Fundamental Transaction. For the avoidance of doubt, nothing in this Letter Agreement shall affect the Borrower's obligations or the Majority Holder's rights with respect to a Fundamental Transaction.

This letter agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law rules of such state, and may be executed in counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each of the parties and delivered to the other parties, it being understood that all parties need not sign the same counterpart. The parties acknowledge and agree that the foregoing provisions and agreements constitute due and valid consideration for this letter agreement and its bargained-for provisions, the receipt and sufficiency is hereby acknowledged by each of the parties.

If the foregoing is acceptable to you, please execute the acknowledgment and agreement below, whereupon this letter agreement shall become effective as of the date first written above.

[*Signature Page Below*]

Sincerely,

FalconStor Software, Inc.

By: /s/ Vincent Sita
Name: Vincent Sita
Title: EVP and Chief Financial Officer

ACKNOWLEDGED AND AGREED:

Hale Capital Partners, LP

By: /s/ Martin Hale, Jr.
Name: Martin Hale, Jr.
Title: Chief Executive Officer

HCP-FVA, LLC

By: /s/ Martin Hale, Jr.
Name: Martin Hale, Jr.
Title: Chief Executive Officer

[*Signature Page to Letter Agreement Regarding Redemption of Series A Preferred*]

LETTER AGREEMENT

February 10, 2023

Hale Capital Partners, LP 17 State Street, Suite
4000 New York, NY 10004 Attn: Martin Hale, Jr.

Re: Extension of the Hale Capital Term Loan

Dear Marty:

Reference is hereby made to the Amended and Restated Term Loan Credit Agreement, dated as of February 23, 2018, by and among FalconStor Software, Inc., a Delaware corporation (the "Company"), FalconStor, Inc., a Delaware corporation, FalconStor AC, Inc., a Delaware corporation, each of the Guarantors and Lenders party thereto, and HCP-FVA, LLC, a Delaware limited liability company ("Hale Capital"), as Administrative Agent for the Lenders, as amended on December 27, 2019 and subsequently extended pursuant to that certain Letter Agreement, dated July 19, 2022, by and between the Company and Hale Capital (the "Loan Agreement"). Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Loan Agreement.

In order to facilitate the Company's ongoing operations, the parties to this Letter Agreement hereby acknowledge and agree that the Term Loan Maturity Date with respect to the Term Loan made by Hale Capital pursuant to the Loan Agreement, which is in the principal amount of $2,176,621 as of the date hereof, and any additional Term Loan Commitment attributed to Hale Capital, shall be the earlier of (i) June 30, 2024, or (ii) the Termination Date for all intents and purposes; provided that the foregoing shall not apply in the event of a Change of Control. For the avoidance of doubt, nothing in this Letter Agreement shall affect the Borrower's obligations or Hale Capital's rights with respect to a Change of Control, including the mandatory prepayments that are described in Section 6.1.2(v) of the Loan Agreement.

This letter agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of law rules of such state, and may be executed in counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each of the parties and delivered to the other parties, it being understood that all parties need not sign the same counterpart. The parties acknowledge and agree that the foregoing provisions and agreements constitute due and valid consideration for this letter agreement and its bargained-for provisions, the receipt and sufficiency is hereby acknowledged by each of the parties.

If the foregoing is acceptable to you, please execute the acknowledgment and agreement below, whereupon this letter agreement shall become effective as of the date first written above.

[*Signature Page Below*]

Sincerely,

FalconStor Software, Inc.

By: /s/ Vincent Sita
Name: Vincent Sita
Title: Chief Financial Officer

ACKNOWLEDGED AND AGREED:

Hale Capital Partners, LP

By: /s/ Martin Hale, Jr.
Name: Martin Hale, Jr.
Title: Chief Executive Officer

HCP-FVA, LLC

By: /s/ Martin Hale, Jr.
Name: Martin Hale, Jr.
Title: Chief Executive Officer

(*Signature Page to Letter Agreement Regarding Hale Capital Term Loan*)

Exhibit 23.1

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in the Registration Statement of FalconStor Software, Inc. on Form S-8 (File No. 333-212717) of our report dated March 23, 2023 with respect to our audits of the consolidated financial statements of FalconStor Software, Inc. as of December 31, 2022 and 2021 and for the year then ended, which report is included in this Annual Report on Form 10-K of FalconStor Software, Inc. for the year ended December 31, 2022.

/s/ Marcum LLP

Marcum LLP
Costa Mesa, CA
March 23, 2023

Exhibit 31.1

I, Todd Brooks, certify that:

1. I have reviewed this annual report on Form 10-K of FalconStor Software, Inc.;

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

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

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: March 23, 2023

/s/ Todd Brooks

Todd Brooks
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

I, Vincent Sita, certify that:

1. I have reviewed this annual report on Form 10-K of FalconStor Software, Inc.;

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

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

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: March 23, 2023

/s/ Vincent Sita

Vincent Sita

Chief Financial Officer and Treasurer

(principal financial and accounting officer)

Exhibit 32.1

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

In connection with the Annual Report of FalconStor Software, Inc., a Delaware Corporation (the "Company") on Form 10-K for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Todd Brooks, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(i) the Form 10-K fully complies, in all material respects, with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

(ii) the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Todd Brooks

Todd Brooks
President and Chief Executive Officer
(principal executive officer)
Date: March 23, 2023

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 Annual Report of FalconStor Software, Inc., a Delaware corporation (the "Company) on Form 10-K for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Vincent Sita, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(i) the Form 10-L fully complies, in all material respects, with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

(ii) the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Vincent Sita

Vincent Sita
Chief Financial Officer and Treasurer
(principal financial and accounting officer)
Date: March 23, 2023