UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended June 30, 2023

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: 333-262106

Aspen Technology, Inc.

(Exact name of registrant as specified in its charter)

Delaware

87-3100817

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

20 Crosby DriveBedfordMassachusetts01730(Address of principal executive offices)(Zip Code)

Registrant's telephone number, including area code: 781-221-6400

Securities registered pursuant to Section 12(b) of the Act:							
Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered					
Common stock, \$0.0001 par value per share	AZPN	Nasdaq Global Select Market					

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

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

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

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 \boxtimes No \square

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 ($\S232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \mathbb{Z} No \square

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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	X	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. \Box

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. \blacksquare

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. \Box

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). \Box

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

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant was approximately \$4.4 billion based on the last reported sale price reported on the Nasdaq Global Select Market on December 31, 2022 (the last business day of the Registrant's most recently completed second fiscal quarter).

There were 64,382,647 shares of common stock outstanding as of August 15, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement related to the registrant's 2023 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K are incorporated by reference in Part III, Items 10-14 of this Annual Report on Form 10-K.

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Aspen Technology, Inc. ("AspenTech") has many registered trademarks including aspenONE and Aspen Plus. All other trade names, trademarks, and service marks appearing in this Annual Report on Form 10-K and not owned by AspenTech are the property of their respective owners.

Our fiscal year ends on June 30. In connection with the Transaction described below, we approved a change to our fiscal year end from September 30 to June 30 beginning with fiscal year 2022. Fiscal year 2023 refers to the twelve-month period ended June 30, 2023, fiscal year 2022 refers to the nine-month period ended June 30, 2022, and fiscal year 2021 refers to the twelve-month period ended September 30, 2021, unless otherwise noted.

Explanatory Note

On May 16, 2022 (the "Closing Date"), the transaction contemplated by the Transaction Agreement and Plan of Merger, dated as of October 10, 2021, as amended by Amendment No. 1, dated as of March 23, 2022, and Amendment No. 2, dated as of May 3, 2022 (as it may be further amended from time to time, the "Transaction Agreement"), was consummated between AspenTech Corporation (formerly known as Aspen Technology, Inc.) ("Heritage AspenTech") and Emerson Electric Co. ("Emerson") and certain of its subsidiaries, pursuant to which, among other matters, Emerson and its subsidiaries contributed to Heritage AspenTech shareholders \$6,014,000,000 in cash and its industrial software business (the "Industrial Software Business"), consisting of, Open Systems International, Inc. business (the "OSI business" or "OSI Inc.") and Geological Simulation Software business, which we have renamed as Subsurface Science & Engineering (the "SSE business") in exchange for 55% of our outstanding common stock (on a fully diluted basis) (the "Transaction"). The combined business of Heritage AspenTech, the OSI business and the SSE business are referred to herein as "AspenTech" or the "Company."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

Statements in this Annual Report on Form 10-K and in the documents incorporated by reference herein that are not strictly historical may be "forward-looking statements" for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, which involve risks and uncertainties. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "strategy," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing," "opportunity" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements are only predictions and are based on current expectations of management. The outcome of the events described in these forward-looking statements is subject to known and unknown risks, uncertainties and other factors that may cause our, our customer' or our industry's actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements, to differ. "Item 1. Business," "Item 1A. Risk Factors" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as other sections in this Annual Report on Form 10-K, discuss some of the factors that could contribute to these differences. The forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. The industry in which we operate is subject to a high degree of uncertainty and risk due to variety of factors, including those described in "Item 1A. Risk Factors." You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. Business.

Overview

We are a global leader in industrial software focused on helping customers in asset-intensive industries address the dual challenge (the "Dual Challenge") of meeting the increasing demand for resources from a rapidly growing population while also operating in a more sustainable manner. Our solutions address complex environments where it is critical to optimize across the full asset lifecycle - asset design, operation, and maintenance - enabling customers to run their assets safer, greener, longer and faster. Thousands of companies, ranging from multi-national corporations to start-ups, rely on our software to help them run their assets more profitably, resiliently, and sustainably to meet their operational excellence and sustainability goals.

We help customers solve some of their critical challenges via our purpose-built software that combines engineering first principles, deep industry domain knowledge, and advanced technologies. We drive significant value creation through our decades of experience in modeling, simulation, and optimization technologies. The operational challenges we help our customers solve include maintaining maximum efficiency in process operations, managing electrical grids amid the growth in renewable energy sources, helping ensure supply chain resiliency, reducing carbon emissions and more.

Today, our software also enables companies to develop new processes that can be scaled to support the energy transition and a net zero future, such as green hydrogen, biofuels, carbon capture, utilization and storage ("CCUS"), and circularity of plastics.

Emerson Transaction

As a result of the Transaction, we expanded the markets we serve, augmented our expertise and sales channels, and broadened our portfolio to five product suites: Performance Engineering ("ENG"), Manufacturing and Supply Chain ("MSC"), Asset Performance Management ("APM"), Digital Grid Management ("DGM"), and Subsurface Science & Engineering ("SSE"). In August 2022, we acquired inmation Software GmbH ("Inmation"), a leader in industrial real-time information management software. Inmation enables customers to generate insights that improve operations and has since become core to our DataWorks business, which supports each of our product suites.

These expanded capabilities and offerings build on our track record of success in supporting the digital transformation of asset-intensive industries and further solidify our position as a provider of end-to-end value chain solutions for asset-intensive markets. Importantly, the addition of our DGM and SSE product suites allows us to offer comprehensive solutions in power and utility grid management, CCUS, and geothermal energy.

We also enhanced our existing commercial partnership with Emerson as part of the Transaction. This relationship helps unlock the strength of Emerson's global sales channels, capital project resources, strategic account teams, and industry-focused sales organizations for AspenTech. Two new elements of the relationship are: 1) the opportunity for Emerson to OEM a select number of products from AspenTech to enhance the software capabilities in their industrial systems; and 2) co-innovating on new solutions that bring to the market the technical and innovation expertise of both companies, with a focus on sustainability, as already demonstrated for hydrogen production in the Microsoft Center of Excellence in Houston, Texas.

Market Trends

We serve customers in asset-intensive industries, which have complex operations, large footprints and require aboveaverage levels of capital to operate. As a result, our customers face significant pressure to continuously focus on operational excellence. To do this, our customers seek leading technologies and methods for the safer, more efficient, more reliable and more profitable operation of their assets. There are several other important trends in our end markets, as described below.

The Dual Challenge

The Dual Challenge is the catalyst for our sustainability efforts. While most companies are impacted by the Dual Challenge in some form, our customers, who operate asset-intensive businesses, will play crucial roles in helping ensure nations meet their sustainability goals and can continually adapt to meet this challenge while also remaining viable businesses.

Solving for this Dual Challenge will become increasingly urgent in the decades to come. According to the U.S. Energy Information Administration, International Energy Outlook 2021 ("IEO2021") Reference case, by 2050 global energy use is expected to increase by nearly 50% compared with energy usage in 2020.

Businesses will likely have to contend with an atmosphere of persistent volatility, uncertainty, complexity, and ambiguity as the world adapts to these changes in the years to come. Agility, flexibility, and insight will be critical as companies navigate these challenges, work to achieve and maintain operational excellence and ultimately meet their sustainability targets. We anticipate that digitalization will be essential, allowing companies to maximize the efficiency of their operations while minimizing emissions.

Energy Transition & Cross-Industry Convergence

We have observed a cross-industry convergence of needs as companies consider how best to leverage renewable energy sources such as wind, solar, bio feedstocks and hydrogen and other decarbonization technologies such as CCUS. This transition to renewable energy is already well underway. In 2021, the International Energy Agency ("IEA") released its Renewables 2021 Report, stating that the growth of renewable capacity was forecast to accelerate from 2021 to 2026, accounting for almost 95% of the increase in global power capacity through 2026. Supporting the transition to renewable energy resources is one of the most impactful ways for asset-intensive industries to minimize their carbon emissions and overall environmental footprint.

Electrification

Electrification refers to the rising utilization of electrical power, particularly renewable electricity, over other energy sources. Driven in part by the increasing number of companies and individuals turning to electrification to help reduce their carbon footprint, global demand for electric power has increased by more than 70% since 2000, and electricity now makes up more than 19% of energy use worldwide, according to the IEA World Energy Outlook 2022 Report. To accommodate the continued strong demand for renewable energy, spending on the electrical grid is expected to more than double by 2030, to \$740 billion, also according to the same report.

Demand for Rare Metals

Demand for a wide range of metals and minerals, including lithium, nickel, cobalt and copper, are expected to increase as a result of electrification and the energy transition. According to an IEA report, "The Role of Critical Minerals in Clean Energy Transitions," published in May 2021, increases in electrification could lead to as much as a 40-fold increase in demand for lithium by 2040 and could increase demand for cobalt by as much as 25 times.

Government Mandates

An increasing number of governments around the world view support for the green economy as mission-critical to their national interests. The significant amount of government subsidies available, particularly for renewables and electrification, has the potential to drive considerable advances in green economy infrastructure and technologies. Among the drivers of these national incentives for decarbonization are the creation of net-zero targets and the need for significant grid enhancements to accommodate the growth in renewable power and electrification.

Organizational Excellence

Companies in asset-intensive industries are facing the challenge of managing an ongoing generational transition that is impacting the capacity and capabilities in organizations to sustain operational excellence and manage their energy transition. This is reflected in a talent shortage and the transition to next-generation workforce where certain areas of knowledge and domain expertise are or may be less prevalent but are well-acclimated to a highly digital world. This will be particularly important in the decades to come. For example, by 2030, one in five Americans will be 65 or older, according to the United States Census Bureau in their report titled, "Projections of the Size and Composition of the U.S. Population: 2014 to 2060" published in March 2015. As workers retire, the loss of domain knowledge could have significant impacts on both operational excellence and sustainability initiatives. Therefore, many organizations are looking to digitalization and automation solutions to support operational excellence with further investments in talent, building training programs and establishing best practices to advance their organizations.

Collaboration and Co-Innovation

We believe collaboration and co-innovation will be critical to developing the solutions necessary for asset-intensive industries to meet the Dual Challenge in the coming decades. For example, companies increasingly are building partner ecosystems to support the development and scale-up of new processes.

We prioritize and value our co-innovation partnerships. For example, in fiscal 2023, we announced a partnership with Saudi Aramco, one of the world's leading integrated energy and chemicals companies. As part of this partnership, both parties are collaborating to develop an integrated modeling and optimization solution to be used in the selection of CCUS. By simultaneously considering economics, process design, operations constraints and CO2 reduction, this solution aims to help asset-intensive companies identify the most promising CCUS paths to further optimize and accelerate their operational sustainability.

Our Customers

We serve customers across a wide range of asset-intensive industries. This includes energy (oil and gas exploration and production, or upstream; oil and gas processing and distribution, or midstream; and oil and gas refining and marketing, or downstream), bulk and specialty chemicals, engineering and construction, power and utilities, metals and mining and pharmaceuticals. We provide descriptions of these industries and their specific business characteristics below.

Upstream and Midstream

- The upstream energy industry involves identifying and extracting hydrocarbons from onshore and offshore fields located in diverse and demanding geographies worldwide. Companies must profile subsurface geological structures and materials with great accuracy and detail to produce hydrocarbons safely and reliably, optimize production from the field, and comply with strict regulatory and environmental requirements.
- Midstream companies are involved in gathering oil and natural gas from well heads, processing, and separation into oil, dry natural gas, and natural gas liquids, then the transportation to downstream markets. Petroleum product transportation utilizes vast pipeline networks across geographies. As a result, many companies rely on Supervisory Control and Data Acquisition ("SCADA") systems to monitor and control these networks and help ensure safe, reliable, and efficient operations.

Downstream

- Downstream refiners use thermal and chemical processes to convert crude oil into end products, including gasoline, jet and diesel fuel and intermediate products used by chemical manufacturing companies. In recent years, some refiners have converted their facilities to process bio-feedstocks and the production of biofuels. This is a trend that we expect to continue as consumers look for more sustainable sources of energy.
- With high volumes and typically low operating margins, downstream companies focus on optimizing their feedstock selection and product mix to maximize profitability. Supply chain management, safety and reliability are of critical importance to this market.

New Energy

• Energy companies are increasingly focusing on decarbonization, hydrogen production, ammonia, and biofuels. Both traditional energy companies and new enterprises are investing in energy transition technologies to anticipate future market trends.

Chemicals

- Bulk chemical producers manufacture commodity chemicals and serve markets that are highly price sensitive. They seek to achieve economies of scale and manage operating margin pressure by building larger, more complex plants located near feedstock sources. Optimization of production yields, throughput, energy efficiency, and reliability are essential for bulk chemical producers.
- Specialty chemical manufacturers, which primarily produce more advanced, differentiated and even customer-specific products, face challenges in managing diverse product lines, multiple plants, complex supply chains and product quality.
- Many chemical producers are also working to develop new materials that are more easily recycled and new processes that allow for greater plastics circularity.

Engineering, Procurement & Construction ("EPC")

- Engineering and construction firms need to quickly and efficiently produce optimal process and asset designs which incorporate highly accurate modeling, analysis, and cost estimations for complex, large-scale projects. Advanced software can help EPCs design processes and assets that operate at scale, safely, reliably, and sustainably. Capital investments can be optimized, and project risks are managed.
- These companies can use digital tools to quickly collaborate across a range of stakeholders, from internal employees to manufacturers and other engineering and construction firms, helping ensure projects stay on time and on budget.

Power and Utilities

• Power and utilities companies are responsible for generating, transmitting, and distributing reliable and safe electric power to commercial, industrial, and residential customers. In recent years, the industry has become more complex due

to the rapid growth of renewable energy sources, like wind and solar, and the challenges of incorporating these sources into the grid while also maintaining safety and reliability.

- In response to significant growth in distributed energy resources ("DERs"), like residential solar panels, smart thermostats and EV chargers, these companies are actively investing in modernizing the electrical grid to better monitor and optimize grid operations.
- Many utilities have begun to utilize Distributed Energy Resource Management Systems ("DERMS") software solutions to manage the increasing number of DERs connected to the grid. DERMS software enables utility stakeholders, from operations, to consumer engagement, asset management and more, to monitor and intelligently control DERs in an orchestrated fashion, and make more informed grid management decisions.

Metals and Mining

- Mining companies are accelerating their digital initiatives to increase their efficiency and reliability, focusing on areas such as geological modeling, mine planning and scheduling, predictive maintenance and design and operational management.
- Mining companies can leverage advanced process control solutions to measure, monitor and adjust each stage of mineral processing. This method allows mining companies to work to ensure that the maximum amount of metal is recovered with minimal waste generation for higher operational efficiency.
- Mining companies are beginning to electrify their operations, including a wide range of mining equipment, to reduce their carbon footprints and increase efficiency.
- The metals and mining industry is essential to meet the growing demand for metals and minerals, including lithium, copper, nickel, cobalt and more, which are critical to building clean energy technologies, from electricity storage devices to wind turbines.

Pharmaceuticals

- Pharmaceutical companies need to quickly deliver drugs to the market, ensure consistent quality manufacturing and be flexible enough to produce advanced, personalized medicines. As a result, agility and reliability are critical for the pharmaceutical industry.
- Using digitalization tools, pharmaceutical companies can optimize key processes, including execution management, improve supply chain planning and scheduling and use predictive and prescriptive maintenance to maximize the return on their assets.

Other Asset Intensive Industries

- As a result of our enhanced relationship with Emerson, we also expect to expand the use of our software into other capital-intensive industries, such as pulp and paper and water and wastewater.
- Many companies in these industries are seeking asset optimization solutions to improve their processes and quality, reduce costs, and to improve their financial and operating results in the face of varied manufacturing challenges as well as the drive for sustainability.

Our Approach to Sustainability

Sustainability is core to our business and anchors AspenTech's purpose. As industries are transforming to respond to a world with sustainability at its center, this is a core driver for our growth. Our integrated sustainability strategy includes a dedicated sustainability team, internal sustainability programs focused on reducing emissions and advancing diversity, equity, and inclusion in our workforce and sustainability solutions for our customers to accelerate emissions reductions in their assetintensive industries through a series of critical sustainability pathways centered around industrial decarbonization and the energy transition.

Portfolio

Our portfolio spans the asset lifecycle from design to operation to maintenance, with differentiated offerings that help customers improve their safety, reliability and productivity while also reducing their carbon footprint. With our leading software for engineering, modeling and design, supply chain management, predictive and prescriptive maintenance, digital grid management, and industrial data management, we believe we are positioned to support the end-to-end asset lifecycle for our customers.

Performance Engineering

Our ENG solution provides market leading design and operations modeling capabilities to optimize the performance of process industry assets across the CAPEX and OPEX cycles. The solution includes research and development ("R&D") with process modeling and optimization, accelerating design with concurrent engineering applications and then optimizing production performance with process digital twins. Our ENG software helps customers address a variety of challenges, including accelerating and innovating design of new low-carbon technologies, improving safety and overall profitability while driving to meet emerging sustainability targets.

Manufacturing and Supply Chain

Our MSC software enables optimization of both day-to-day operations and strategic supply chain decisions, helping customers to make better, faster decisions that typically lead to improved performance and operating results. These solutions include software applications that help customers make real-time decisions, which can reduce fixed and variable costs and improve product yields. Our MSC suite helps manufacturers close the gap between planning and operations to work to increase profitability in dynamic markets; create an integrated workflow that provides real-time insight across disciplines to maximize throughput, quality, and margins; and help meet customers' sustainability goals through reduced emissions, energy efficiencies and waste reduction.

Asset Performance Management

Our APM software is used to understand and predict the reliability of a system – multiple assets, a single asset, or equipment in a facility. Factors that impact reliability include how operating conditions degrade equipment performance over time, or how process conditions can lead to equipment failure. Our APM suite is a comprehensive set of machine learning and analytics technologies which can be used with historical and real time asset and process data to help our customers ensure high asset availability and receive early, accurate warnings of problems to better plan around an event. This solution uses analytics to make smarter decisions to increase asset availability, lower costs and improve throughput.

Digital Grid Management

Our DGM software includes: energy management solutions ("EMS") that monitor, control and work to optimize the increasingly interconnected generation fleets and transmission networks to manage grid stability and help ensure security and regulatory compliance; and advanced distribution management solutions ("ADMS") that enable safe and secure energy distribution, outage management, distributed generation, demand response and microgrid solutions. These solutions provide improved system resiliency, efficiency, and safety by monitoring, controlling, and modeling the distribution network as utilities seek to increase reliability, predict, and react to increasingly dynamic supply and demand patterns, resolve outages faster and in a more automated manner, and manage field service digitally. Our DGM solutions help power and utility customers reduce their carbon footprints via the integration of new green energy resources, improve situational awareness to drive desired outcomes and protect critical assets across the network through enhanced cybersecurity.

Subsurface Science & Engineering

Our SSE solutions are a comprehensive portfolio of end-to-end geoscience and modeling software for optimization across subsurface engineering and operations. These solutions provide the ability to characterize, model and monitor the subsurface for the responsible management of resources, while supporting energy transition pathways, such as CCUS; optimize well placement and production using geophysics, petrophysics, and modeling to help minimize operational costs and obtain more productive wells with less planning: and locate and delineate opportunities for new fields, while helping to optimize and minimize risk, using seismic imaging and interpretation solutions and connecting subsurface technology to operational activities.

DataWorks Industrial Data Management

DataWorks Industrial Data Management ("DataWorks") is our industry-leading data platform that supports each of our product suites. Inmation, acquired by AspenTech in August 2022, and our AIoT Hub form the core of our DataWorks platform. With advanced capabilities in data contextualization, structuring and cleansing, DataWorks allows AspenTech customers to better manage their industrial data at scale. In addition, DataWorks empowers AspenTech customers to create operational data lakes, which connect and contextualize data at the process level to help customers manage data security and integration across the enterprise from a central location.

Business Model

Industrial Software

The majority of AspenTech revenue is generated from software licenses and software maintenance and support ("SMS") contracts. Implementation services, other than for our DGM product suite, are primarily provided by third-party implementation service partners ("ISPs"). We are currently building a third-party ISP network for our DGM software license implementations.

Recurring Revenue

Most of our revenue is generated through term software contracts. This model, combined with our tokenization usage model (see below), allows customers to access the full range of our products and solutions within a given software suite and, importantly, new products, features, technical advances, and solutions as they are developed and introduced to the suite via our continuous investments in innovation and R&D. This business model has allowed us to better serve our customers and cultivate a more predictable base of recurring cash flows.

At the time of the closing of the Transaction, most of the DGM software licensing revenue was generated from perpetual license contracts. Perpetual license contracts generally include a one-time software license sale and SMS coverage over a fixed period, with the option to purchase additional SMS coverage following the end of the agreement. We are in the process of transitioning the DGM suite to a majority term software model, which is a key element of the overall transformation to align with AspenTech's business model.

Tokenization Usage Model

AspenTech's tokenization usage model is a licensing and pricing strategy whereby customers purchase tokens for a given suite as a means of fulfilling their software needs. We believe this model benefits our customers by providing them with the flexibility to utilize their desired set of products and solutions and allowing them to explore new products and solutions to discover previously unknown or undiscovered use cases in operating their assets. This helps us to drive increased consumption, gather valuable customer feedback, and enhance our position as a strategic partner for our customers.

For both new and existing AspenTech customers, understanding their software usage requirements is paramount. Customers work with our sales team and solutions consultants to determine their requirements based on the specific needs of their assets and use cases or products. Customers contract with AspenTech for a total number of tokens to be used under a given term software contract. After software installation, customers gain access to our full set of products and solutions, with each assigned a specific token value, within the product suite, with usage constraints based on the number of tokens in their token pool. Each month, customers receive a report detailing their token and suite usage. Customers can engage with our sales team and customer success partners to evaluate the purchase of additional tokens to better solve their use cases and meet their asset requirements.

Key Financial Metrics

AspenTech recognizes customer software license contract revenue under ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606). As a result, our license revenue is heavily impacted by the timing of bookings and, more specifically, the timing of renewals. The timing of renewals is not linear between quarters or fiscal years, and the actual timing of renewal bookings can be impacted by early renewals. Please refer to the Notes to Consolidated and Combined Financial Statements below for additional disclosures around how Topic ASC 606 impacts our revenue recognition.

AspenTech management utilizes Annual Contract Value ("ACV"), Total Contract Value ("TCV"), and bookings as key metrics to track and assess our business performance. In addition to GAAP metrics, AspenTech also uses non-GAAP business

metrics to track its business performance, namely Free Cash Flow and Non-GAAP operating income. Please refer to the Key Business Metrics section for a complete description of these metrics.

Sales & Marketing: Go-to-Market Approach

Strategic Engagement

AspenTech offers powerful software suites for asset-intensive industries and employs a value-based sales and marketing approach that aligns our capabilities and solutions with our customers' needs. Our solutions support our customers in achieving their strategic business goals, including the design of their assets and processes, optimization of their operations, improved reliability, the use of analytics and data science to improve performance across their enterprise, and to support their sustainability goals.

Our software is a strategic investment for customers and, therefore, we work to engage with their senior management teams, which generally include decision makers in manufacturing, operations, maintenance, and technology business groups. Our industrial data management capabilities are also relevant for information technology ("IT") and digital transformation leaders whom we also work closely with.

Our Industry Business Groups cover AspenTech's core markets to strategically engage with customers and understand their needs. This group provides deep knowledge of industry dynamics, develops tailored value propositions and use cases for our solutions, and collaborates with customers to jointly create value. Our deep industry knowledge and technical expertise are crucial components of how we generate value for our customers.

Our total sales and marketing team, which consists of sales account managers, solution consultants, global partnerships as well as marketing personnel, consisted of 722 employees as of June 30, 2023.

Direct Sales

Historically, most of AspenTech's software sales have been generated through our direct Field Sales organization, which includes account managers, technical sales personnel, and solution consultants. To educate our customers on the specific functionality and other technical features of our software, our account managers work with specialized teams of technical sales personnel and solution consultants. Our technical sales personnel typically have degrees in engineering or related disciplines and actively consult with our customers' engineers. Solution consultants use their detailed knowledge of our software features to demonstrate how they can be applied to the unique business processes of different vertical industries. In addition to our direct Field Sales organization, we also employ an inside sales team that supports and collaborates with customers.

High Velocity Sales Team

AspenTech's High Velocity Sales Team engages with small-to-medium sized businesses and develops new accounts of all sizes as an entry point. Our focus in this customer segment is to expand individual customer accounts, achieve license subscription renewals, scale, and replicate target applications, and further our business development efforts.

Emerson Channel Partnership

Following the closing of the Transaction, we enhanced our existing commercial partnership with Emerson. Together, we are identifying and targeting market dynamics, developing new solutions and pursuing joint go-to-market opportunities which leverage our comprehensive product portfolios and Emerson's significant global installed base and sales force.

As part of this partnership, AspenTech and Emerson have created teams to identify cross-selling opportunities. The formation of these teams has involved setting quotas, sales enablement and building cross-functional relationships between AspenTech and Emerson personnel. Emerson has dedicated specific resources, in addition to its worldwide sales force, to resell AspenTech products, while AspenTech has formed an internal Emerson commercial organization that is dedicated to sales enablement and technical sales support for Emerson. Fiscal 2023 was a key year for both parties to engage in strategic planning and to lay the foundation for future channel collaboration, innovation, and growth.

We collaborate with Emerson and aim to achieve our target synergies through five different vectors, as listed below.

 Capital Projects – We jointly pursue capital projects with Emerson, with Emerson providing automation solutions and AspenTech providing software solutions.

- New Market Entry We work with Emerson to enter new markets or expand within existing markets, leveraging the power of our combined portfolios and Emerson's customer relationships. These markets include life sciences, water and wastewater management, power generation, pulp and paper and more.
- Emerson Installed Base In collaboration with Emerson, we are focused on expanding the use of AspenTech's software in their customer installed base. We believe the combined capabilities of the technology and solutions from AspenTech and Emerson create a strong and clear value proposition for these customers.
- Collaboration and Co-Innovation We collaborate and co-innovate with Emerson and other joint partners. In this work, we are focused on sustainability areas, such as green hydrogen, CCUS, and plastics circularity. In fiscal 2023, for example, we jointly developed a hydrogen value chain solution with Emerson and Microsoft that has the potential to help customers optimize their CAPEX investments, lifecycle operating cost production, supply chain and storage infrastructure to expedite speed to market.
- **OEM Solutions** Several AspenTech solutions can be included as an integral part of Emerson's automation offerings, such as control systems. We expect these OEM opportunities will continue to grow as both companies continue collaboration on joint solutions and go-to-market approaches.

Customer Success

Outcome Based Model

AspenTech's Customer Success organization supports our customers to capture, sustain and expand the value from their AspenTech solutions by maintaining lasting partnerships and helping them leverage our innovative technology to add value to their business. Our teams are regionally located and focus on our customers' needs to help drive satisfaction, retention, and lifetime value creation.

Software Maintenance and Support

SMS consists primarily of providing customers with technical support, access to software patches and upgrades and an online knowledge base. Technical support services are provided via telephone, live chat, email, and website from our eight customer support centers located around the globe. Customers with SMS coverage also are provided access to a support website where they can download the latest versions of our software and software patches and read knowledge-based articles on how to best utilize our solutions. As of June 30, 2023, the knowledge base archive includes more than 30,000 articles.

For customers with term licenses, SMS is included with the software license payment. For perpetual software license arrangements that do not include SMS, customers can purchase standalone SMS.

Third-Party Implementation Services Partners

AspenTech's solutions are designed with the intent of third-party implementation, consistent with our industrial software strategy. AspenTech ISPs are trained in providing delivery and implementation across AspenTech solutions for customers. AspenTech ISPs have track records of successful system integrations, upgrades, and performance monitoring events to draw upon. We build and maintain these third-party ISP networks around the world to help ensure the successful deployment and adoption of our product suites with customers around the world. We are in the process of building out our ISP network for our DGM product suite.

Professional Services

We provide professional services to help facilitate the implementation of our technology within customer assets. Our professional services team primarily consists of engineers with deep industry experience in technical areas relevant to our solutions and end markets. Importantly, our solutions are designed with the intent of third-party implementation, enabling global, scalable project execution and support. By working closely with our third-party ISPs, our professional services members help to guide the implementation process for customers and, in doing so, work to ensure our customers realize the full value of our software.

Customer Education

We offer training services through our program "AspenTech University". Each year, AspenTech University trains approximately 15,000 individuals through more than 1,300 classes, covering a full curriculum with over 150 courses, including 20 courses dedicated to sustainability. Training is offered through a variety of flexible learning options, including public classes open to all customers or private classes for specific customers only, taught by instructors in physical classrooms or over the Internet, private coaching with tailored course content, and/or self-paced on-demand eLearning. AspenTech University also offers User Certifications through certification exams. As of June 30, 2023, approximately 6,000 users have received Aspen Certified Users status.

We also provide customers with on-demand training via more than 300 eLearning modules, which can be accessed within the product suite they have licensed. Customers can also separately purchase eLearning subscriptions which give them access to AspenTech University's entire eLearning course catalog.

As of June 30, 2023, there were 1,014 employees in our customer support, professional services, and training groups.

Strategic Alliances

AspenTech partners with leading technology and advisory companies, as well as customers, to co-innovate and advance digitalization throughout asset-intensive industries. By leveraging partners' complementary expertise and offerings, we can gain a deeper understanding of customer requirements, prioritize use cases, formulate novel approaches and jointly develop solutions. The following section outlines our key approaches in forming strategic alliances.

Technology & Advisory Partners

Leading independent software vendors ("ISVs") and cloud providers partner with AspenTech to deliver joint solutions, infrastructure, and services. These partnerships help to provide our customers with solutions and services that are complementary to our product suites, often as part of broader digital transformation initiatives. Key partners for AspenTech in this area include, but are not limited to, Microsoft, Amazon Web Services and Hexagon.

AspenTech also partners with leading advisory firms to engage customers on broad business strategies and to strategically position our portfolio to support large-scale enterprise needs.

Co-innovation

Co-innovation is a key focus for AspenTech's development strategy. AspenTech works with customers and partners to create solutions leveraging shared knowledge and expertise that not only help solve specific customer challenges, but also are scalable to address industry-wide challenges.

In fiscal 2023, AspenTech developed a formal collaboration with Saudi Aramco, which further demonstrated the importance of technology innovators working together to address the biggest challenges in helping ensure a sustainable future. Working together, AspenTech and Saudi Aramco have developed a solution that allows companies to rapidly evaluate potential opportunities and new innovative solutions to help mitigate carbon emissions while helping ensure profitability.

AspenTech Academy Board

We also maintain strong relationships with academic institutions through our AspenTech Academy Board. We form these strategic alliances with academic partners to advance research and technology developments that can help our customers improve their operational and sustainability performance. For example, we are currently working with professors from the University of Delaware and Columbia University to combine molecular modeling in bio feedstock production and to advance artificial intelligence ("AI") applications for sustainability, respectively.

Growth Strategy

Organic Growth

We have an installed base of more than 3,000 customers. Our growth strategy includes organic expansion within our existing customer base by capitalizing on growth trends within our core markets. This growth strategy focuses on driving increased usage through organic innovation and collaborating with customers to deliver end-to-end value chain solutions with differentiated value at enterprise scale.

Industry trends and market dynamics, including the need for greater sustainability and digital transformation, are impacting each of our targeted industry verticals in diverse ways. These trends also represent key drivers for AspenTech solutions, enabling us to continue strengthening our customer relationships. We believe that our chosen partnership approach will increase our opportunities for co-innovation with our customers and therefore accelerate our development of innovative products and solutions that can be deployed at enterprise scale.

Focused Portfolio Expansion

We maintain a focused approach to the organic and inorganic expansion of our portfolio. We aim to capture more value from the industries we serve as we continue to execute this strategy and build our suites of end-to-end software solutions. In addition, we expect to increase our opportunities for expansion through our commercial agreement with Emerson, which includes both OEM and joint solution development, as well as through acquisitions that provide growth into adjacent solution areas.

Operational Excellence

Operational excellence is a key tenant of our strategy and we believe this distinguishes us in the market, as we continue to stay focused on transforming our business and developing a best in class industrial software company. We believe we have proven our ability to run and transform software businesses over the years, and we aim to maintain our strong margins in the years to come as we drive growth across our portfolio.

Product Strategy & Product Roadmap

We view our continuous investments in innovation as fundamental to our success in helping customers operate their assets more profitably and sustainably. AspenTech's product organization is structured around the following key strategic pillars that integrate product, technology & sustainability with an industrial data management layer to scale the business and partner with our customers to transform the industries we serve.

Self-Optimizing Asset

AspenTech's product roadmap is centered on helping our customers progress along the path toward greater operational autonomy and sustainability, and ultimately achieving what we call the Self-Optimizing Asset. We define the Self-Optimizing Asset as a capital asset, such as a plant or electric grid, which has achieved a state where technologies and processes work together to:

- Utilize data from across the enterprise to get smarter and increase accuracy and scope of predictions;
- React in real-time to changing conditions by automatically adjusting to meet targets; and
- Detect anomalies and trigger actions to improve longevity and prevent performance degradation.

To help our customers develop Self-Optimizing Assets, we are focused on driving product innovation and incorporating advanced technologies in Industrial AI; edge and cloud infrastructure and edge to cloud strategies; an elevated user experience which enables enterprise-wide collaboration and the incorporation of advance visualization technologies; digital twins and industrial data universes.

Smart Enterprise

Within the Self-Optimizing Asset framework, the Smart Enterprise is a business that is fully integrated across the corporate value chain, from daily operations to asset processes and supply chain management. We believe that optimization technologies for our customers' value chains, underpinned by Industrial AI, will enable the Smart Enterprise through closer integration between multiple assets and will help drive key breakthroughs for our customers in asset-intensive industries in the future.

Sustainability Solutions

AspenTech is highly focused on developing products and solutions that can help our customers minimize their environmental footprints and operate more sustainably while maintaining profitability and providing critical services to meet the world's increasing demand for resources. While our software traditionally has allowed customers to enhance the efficiency of their asset operations, which inherently reduces their environmental footprints, we now are making a concentrated effort to develop offerings that can help our customers meet their sustainability targets.

For example, in fiscal 2023, we introduced AspenTech Emissions Management solution which incorporates AspenTech Operational InsightsTM, a proven decision support capability that unites, correlates, analyzes and visualizes data from across an organization for fast, confident decision-making on those critical areas affecting emissions. By integrating decision support with our world class products, our customers can then take specific actions to mitigate issues which could compromise their ability to meet their sustainability goals.

We also hired a Chief Product and Sustainability Officer and formed a sustainability office to bring together our sustainability product development efforts with our sustainability programs to take an integrated approach in building a world class sustainability practice.

Sustainability Pathways

AspenTech has developed several sustainability pathways to partner with our customers to advance the energy transition and facilitate industrial decarbonization while meeting the demand for critical resources globally. These pathways range from well-understood approaches to energy efficiency and emissions reduction, to newer technologies, such as CCUS, the hydrogen economy and renewable energy, to novel pathways, such as direct air capture, the use of CO_2 as feedstock and advanced plastics recycling.

Using these pathways as guideposts, customers can combine our user-friendly sustainability models and industrial optimization software to reduce their carbon footprints and jumpstart their efforts in emissions management, renewable energy usage and more. In addition, our software enables emerging customers in the sustainability space to innovate and reduce time to market with feasible solutions. For example, in the direct-air carbon capture space, emerging players today leverage AspenTech software to de-risk their capital projects and ensure their technical feasibility.

These sustainability pathways help to inform our product innovation. For example, in green hydrogen production and CCUS, our advanced modeling and simulation tools are used to help customers identify the best, most economical and scalable processes, prior to companies committing to significant capital investments.

Industry Solutions

With decades of expertise in our core end markets, we maintain a strong foundation of industry-specific knowledge and experience. This experience, combined with our focus on hiring talent with asset-intensive industry experience and STEM educational backgrounds, as well as our dedication to continuous innovation, provide us with deeper insight into new and existing challenges and opportunities for our customers. We leverage this knowledge in our product development process to develop end-to-end solutions that are tailored for customers' specific industry use cases. We also place a high priority on developing those products and solutions that can cover the full value chain of specific industries and industry areas, thereby helping our customers to simplify and streamline their overall asset management.

Advanced Technology and Innovation

Our overall approach to innovation is centered around building a pipeline of ideas focused on solving our customers' biggest challenges. We continuously scan and screen the external environment for innovative ideas while enabling our organization to contribute ideas that have the potential to further evolve our product capabilities.

We recognize that utilizing innovative technology is critical to our ability to deliver the best products and solutions to our customers. As such, we seek to hire and retain top talent across STEM disciplines, which has allowed us to build and maintain what we believe is a best-in-class R&D organization. By cultivating this talent and committing resources to R&D, we can actively engage in research projects around innovative technologies that demonstrate potential for application in our workflows and product suites. We run programs that enable these teams to innovate including engagements with academia through

AspenTech Academy, hack-a-thons and innovation contests during our annual Technology Summit and carve out portions of their time to work on forward looking research projects with the mentorship and coaching of our technology leaders.

Examples of this work include the application of AI to create more innovative user experiences within our products. We also actively explore how to broaden our applications to support new user groups and markets, such as industrial data scientists.

We further collaborate with our technology partners to explore emerging technologies. For example, through our established partnership with Microsoft, we are now exploring the potential application of quantum computing technologies with Azure Quantum Elements. We believe this project can accelerate the innovation of technologies to enable a more sustainable future.

Human Capital Resources

AspenTech has approximately 3,900 employees located in 82 countries around the world — all playing a key role in enabling our success and partnering with customers to deliver value through our solutions. We are committed to our culture, core values and ongoing investment in our employees' professional and personal growth.

Management Team

AspenTech has evolved the executive team over the last 30 months to introduce capabilities and expertise that will allow us to operate successfully at scale and align with our new business structure and corporate strategy. Today, AspenTech's current executive team maintains deep expertise in each member's respective functional area as well as a proven track-record of success in operating at scale. Collectively, we believe the leadership team has experience with the processes and approaches required to support our growth and performance goals.

Diversity, Equity and Inclusion

The source of our innovation and expertise is cultivated through the diversity of our employees. Novel and impactful ideas result from people with varying backgrounds, experiences and perspectives working together. At AspenTech, diversity, equity and inclusion ("DEI") is a major initiative, combining company-led programs with employee-led activities through employee resource groups ("ERGs"). We believe these efforts are important for the well-being of our employees and have a positive impact on employee development and retention, as well as recruiting.

AspenTech's ERGs seek diversity, openness, understanding and inclusiveness to create a positive work environment. These groups are an open forum for employees with common interests and concerns to meet and support one another while also acting as a resource for leadership regarding employees and community interests, needs and policies. All ERGs are open to all employees. We believe these efforts are important to represent the importance of diversity in driving innovation and for the well-being of our employees.

Talent Management and Development

We maintain a strong commitment to learning and talent development programs for employees by building the skills of our current managers and those with ambitions to grow into management positions. Our goal is to foster a culture of lifelong learning and a desire for top performers to stay at AspenTech.

Our key programs for talent development include:

- Emerging Leaders In partnership with Cornell University, this nearly year-long course gives participants the opportunity to apply various business fundamentals to the AspenTech business and culminates in a presentation to the CEO and executive team. Since 2018, over half of program participants have been promoted, and we have improved employee retention among this group.
- Leadership 2.0 This program focuses on building the people skills of management, including motivation, communication, goal development and giving feedback. The program provides a deeper understanding of the differences between management and leadership and how to balance these two skills for a successful career at AspenTech.
- Women in Leadership Program Created to support the leadership journey of women, this program focuses on building skills as a cohort through Cornell University. Following positive initial reception to the program, we plan to expand the program in the coming year.

As of June 30, 2023, of our approximately 3,900 full-time employees, 1,875 were located in the United States. None of our employees in the United States is represented by a labor union; however, labor unions or workers' councils may represent some of our employees in certain foreign subsidiaries. We have experienced no work stoppages and believe that our employee relations are satisfactory.

Intellectual Property

Proprietary Rights

Our software is proprietary and fundamental to our business. AspenTech relies on a combination of copyright, patent, trademark, and trade secret protections granted by laws in the United States and other jurisdictions to protect our software, our brand, and all our proprietary technology from unauthorized access or use. AspenTech also includes protections in license agreements and enters into non-disclosure and confidentiality agreements with its employees, vendors, and customers to add additional legal protections to its contractual engagements. AspenTech restricts access to valuable assets such as software and source code and implements a variety of software security measures.

AspenTech has obtained or applied for patent protection with respect to some of its intellectual property and has registered or applied to register some of its trademarks in the United States and in selected other countries. As of June 30, 2023, we have 394 issued patents and pending patent applications worldwide. We will continue to develop or acquire new intellectual property and file new applications to protect our ongoing research and development activities and brands. In addition, Emerson provides us with a non-exclusive, perpetual, irrevocable, worldwide, royalty-free license to use certain intellectual property rights owned by Emerson and its subsidiaries in the operation of the OSI and SSE businesses.

We actively monitor use of our intellectual property and enforce, and will continue to enforce, our intellectual property rights against infringement, misappropriation, or other violations worldwide as deemed appropriate to protect our businesses. In the United States, we generally maintain our patents for up to 20 years from the earliest effective filing date and maintain our trademark registrations for as long as the trademarks are in use. Additionally, we consider the quality and timely delivery of our products, the services we provide to our customers, and the technical knowledge and skills of our personnel to be important components of our overall portfolio and assets.

The laws of many countries in which our products are licensed may not protect our intellectual property rights to the same extent as the laws of the United States. While we consider our intellectual property rights to be valuable, we do not believe that our competitive position in the industry depends solely on obtaining legal protection for our software products and technology. Instead, we believe that the success of our business also depends on our ability to maintain a leadership position by continuing to develop innovative software products and technology.

Our proprietary rights are subject to risks and uncertainties described under Item 1A. "Risk Factors" below.

Licenses

In connection with Heritage AspenTech's acquisition of Hyprotech Ltd. and related subsidiaries of AEA Technology plc in May 2002 and the consent decree Heritage AspenTech entered into with the Federal Trade Commission in December 2004 to resolve allegations that the acquisition was improperly anticompetitive, Heritage AspenTech and certain of our subsidiaries entered into a purchase and sale agreement with Honeywell International Inc. and certain of its subsidiaries, pursuant to which Heritage AspenTech sold intellectual property and other assets to Honeywell relating to our operator training business and Heritage AspenTech Hyprotech engineering software products. Under the terms of the transactions, Heritage AspenTech retained a perpetual, irrevocable, worldwide, royalty-free non-exclusive license to the Hyprotech engineering software and have the right to continue to develop, license and sell the Hyprotech engineering products.

In March 1982, Heritage AspenTech entered into a System License Agreement with the Massachusetts Institute of Technology, or MIT, granting Heritage AspenTech a worldwide, perpetual non-exclusive license (with the right to sublicense) to use, reproduce, distribute and create derivative works of the computer program known as "ASPEN" which provides a framework for simulating the steady-state behavior of chemical processes that Heritage AspenTech utilizes in the simulation engine for Heritage AspenTech Aspen Plus product. MIT agreed that Heritage AspenTech would own any derivative works and enhancements. MIT has the right to terminate the agreement if: Heritage AspenTech breaches the agreement and does not cure the breach within 90 days after receiving a written notice from MIT; Heritage AspenTech ceases to carry on its business; or certain bankruptcy or insolvency proceedings are commenced and not dismissed. In the event of such termination, sublicenses granted to Heritage AspenTech customers prior to termination would remain in effect.

University Relationships, Research & Scholarships

For decades, AspenTech has actively supported the development of the next generation of engineers and scientists, educating them on the tools used by asset-intensive industries to design, operate and maintain processes and assets. AspenTech software provides students with insight into the entire lifecycle of a plant with integrated software solutions for engineering operations. The technology enhances their education by delivering the tools they need to apply theoretical concepts in a hands-on manner. Students use realistic and practical simulated exercises to solve real-world problems and gain the critical skills and expertise needed to succeed in the workforce.

Over 1,300 universities in more than 80 countries utilize AspenTech software, along with more than 140,000 active student users. Through access to our applications and training modules designed specifically for students, we are helping ensure tomorrow's workforce is knowledgeable in their field and able to apply that knowledge through the latest technology.

Competition

The market for our software solutions is highly competitive and dynamic.

Our competitors include, but are not limited to: industrial software companies offering asset optimization software used in the design, optimization, and/or maintenance of assets; large global, publicly traded industrial automation companies or equipment manufacturers with software portfolios; start-up firms targeting specific applications and/or utilizing specific technologies; and solutions produced and maintained in-house by our customers.

Some of our current and potential future competitors may have greater financial, technical, marketing, and other resources than us, and some have well-established relationships with current and potential future customers of ours. While we believe we are well positioned to maintain our position in the market, we cannot guarantee that we will be able to compete successfully against existing or future competitors.

We believe our deep domain expertise in the industries we serve, our decades of experience and expertise in modeling, simulation and optimization technologies, our capacity to innovate and our technical depth are among our key competitive advantages.

Corporate Information

Aspen Technology, Inc. was formed in Delaware in 2021. Our principal executive offices are at 20 Crosby Drive, Bedford, Massachusetts 01730, and our telephone number at that address is (781) 221-6400. Our website address is http:// www.aspentech.com. The information on our website is not part of this Report on Form 10-K.

Available Information

We file reports with the Securities and Exchange Commission, or the SEC, which we make available on our website free of charge. These reports include annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, including exhibits, and amendments to such reports, each of which is provided on our website as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC. In addition, the SEC maintains a website (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including us.

Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before purchasing our common stock. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. If any of the following risks actually occurs, our business, financial condition, results of operations or cash flows would likely suffer. In that case, the trading price of our common stock could fall, and you may lose all or part of your investment in our common stock.

SUMMARY OF RISK FACTORS

Our business is subject to numerous risks and uncertainties that you should be aware of before making an investment decision, including those highlighted in the section entitled "*Risk Factors*." These risks include, but are not limited to, the following:

- The integration of Heritage AspenTech, the OSI business and the SSE business may present challenges that may not result in the anticipated benefits of the Transaction.
- AspenTech has incurred and will continue to incur transaction-related costs in connection with the Transaction and the integration of the OSI and SSE businesses.
- Emerson could engage in business and other activities that compete with us.
- After the second anniversary of the closing of the Transaction, subject to restrictions, Emerson will be permitted to transfer its shares of our common stock and acquire more shares of our common stock, which could have a negative impact on our stock price or ability to maintain Nasdaq continued listing requirements. Additionally, Emerson has the right to purchase additional securities of AspenTech pursuant to certain pre-agreed prices and procedures, which could have a negative impact on AspenTech's stock price.
- AspenTech is controlled by Emerson. The interests of Emerson may differ from the interests of other stockholders of AspenTech. Relatedly, the corporate opportunity provisions in the Stockholders Agreement could enable Emerson to benefit from corporate opportunities that might otherwise be available to us.
- Certain historical financial information of the OSI business and SSE business may not be representative of their results or financial condition if they had been operated separately from Emerson and, as a result, may not be a reliable indicator of future results.
- Actual or threatened public health crises could adversely affect our business in a material way.
- We may be unable to hire or retain personnel with the necessary skills to operate and grow our business, which could adversely affect our ability to compete.
- A significant portion of our revenue is attributable to operations outside the United States, and our operating results therefore may be materially affected by the economic, political, military, regulatory and other risks of foreign operations or of transacting business with customers outside the United States.
- The ongoing conflict in Ukraine could adversely impact our business, financial position, cash flows and results of operations in Russia and Ukraine which may in turn spread and impact our overall business, financial position, cash flows and results of operations.
- We have delayed revenue recognition in the past and may in the future be required to delay revenue recognition for portions of our license activity.
- If we fail to increase usage and product adoption by customers of our Performance Engineering, Manufacturing and Supply Chain, Asset Performance Management, Digital Grid Management, and Subsurface Science & Engineering product suites, or fail to provide innovative, market-leading solutions, or fail to retain our current customers, we may be unable to implement our growth strategy successfully, and our business could be seriously impacted.
- Our business could suffer if demand for, or usage of, our software declines for any reason, including declines due to adverse changes in the process and other capital-intensive industries.
- Unfavorable economic and market conditions or a lessening demand in the market for asset optimization software could adversely affect our operating results.
- Climate change, and the regulatory and legislative developments related to climate change, may materially adversely affect our business and financial condition.
- Fluctuations in foreign currency exchange rates could result in declines in our reported revenue and operating results.
- Competition from software offered by current competitors and new market entrants, as well as from internally developed solutions by our customers, could adversely affect our ability to sell our software products and related services and could result in pressure to price our products in a manner that reduces our margins.
- Defects or errors in our software products could impact our reputation, impair our ability to sell our products and result in significant costs to us.
- Potential strategic transactions could be difficult to consummate and integrate into our operations, and these potential strategic transactions could disrupt our business, dilute stockholder value or impair our financial results.
- If our goodwill or intangible assets become impaired, then we could be required to record a significant charge to earnings.
- We may be subject to significant expenses and damages because of product-related claims and other litigation.
- Claims that we infringe the intellectual property rights of others may be costly to defend or settle and could damage our business.
- We may not be able to protect our intellectual property rights, which could make us less competitive and cause us to lose market share.
- Our software research and development initiatives, our customer relationships, and our customers' operations could be compromised if the security of our information technology is breached as a result of a cyberattack. Additionally, security breaches or disruptions of our information technology systems from foreign state actors could adversely affect our business. Any compromise of the security of our information technology systems could have a material adverse effect on our business, operating results and financial condition, and could impact our competitive position.

- Our liquidity and ongoing access to capital could be materially and negatively affected by increased volatility in the financial and securities markets, including increased inflation and interest rates.
- Our inability to maintain or develop our strategic and technology relationships could adversely affect our business.
- Emerson is our controlling owner, which could discourage takeover attempts. If Emerson ceases to be our controlling owner, anti-takeover provisions contained in our charter and bylaws could impair attempts by a party other than Emerson to acquire a significant number of shares of our common stock.
- Our charter designates specific courts as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.
- Our common stock may experience substantial price and volume fluctuations.

You should consider carefully the risks and uncertainties described below, in this section entitled "Risk Factors" and the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, before you decide whether to purchase our common stock. The risks described above are not the only risks that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

Risks Related to Our Transaction with Emerson

The integration of Heritage AspenTech, the OSI business and the SSE business may present challenges that may not result in the anticipated benefits of the Transaction.

We are continuing to integrate a combination of businesses that were operated as independent businesses. Potential difficulties in the integration process include the following:

- the inability to successfully integrate the businesses, including operations, technologies, products and services, in a manner that permits AspenTech to achieve the cost savings and revenue synergies anticipated to result from the Transaction, which could result in the anticipated benefits of the Transaction not being realized partly or wholly in the time frame currently anticipated or at all;
- lost sales and customers as a result of certain customers of any of the businesses deciding not to do business with AspenTech, or deciding to decrease their amount of business in order to reduce their reliance on a single company;
- the necessity of coordinating geographically separated organizations, systems and facilities;
- potential unknown liabilities and unforeseen increased expenses, delays or regulatory conditions associated with the Transaction:
- integrating personnel with diverse business backgrounds and business cultures, while maintaining a focus on providing consistent, high-quality products and services;
- consolidating and rationalizing information technology platforms, cybersecurity routines and protocols and administrative infrastructures as well as accounting systems and related financial reporting activities and difficulty implementing effective internal controls over financial reporting and disclosure controls and procedures in particular; and
- preserving important relationships of the combined businesses and resolving potential conflicts that may arise.

Furthermore, we have lost and may continue to lose key employees or skilled workers. The loss of key employees and skilled workers could adversely affect our ability to successfully conduct our business because of their experience and knowledge of Heritage AspenTech's and the OSI and SSE businesses. In addition, AspenTech could be adversely affected by the diversion of management's attention and any delays or difficulties encountered in connection with the integration. The process of integrating operations could cause an interruption of, or loss of momentum in, the activities of one or more business segments. If AspenTech experiences difficulties with the integration process, the anticipated benefits of the Transaction may not be realized fully or at all, or may take longer to realize than expected. These integration matters could have an adverse effect on the business, results of operations, financial condition or prospects of AspenTech.

AspenTech has incurred and will continue to incur transaction-related costs in connection with the Transaction and the integration of the OSI and SSE businesses.

AspenTech has incurred transaction-related costs in connection with the Transaction and will continue to incur costs in connection with the integration of the OSI and SSE businesses. Many of the expenses that will be incurred, by their nature, are difficult to estimate accurately at the present time. These expenses could, particularly in the near term, reduce the cost synergies that AspenTech expects to achieve from the elimination of duplicative expenses and the realization of economies of scale and

cost synergies related to the integration of the businesses, and accordingly, any net synergies may not be achieved in the near term or at all. These integration expenses may result in AspenTech taking significant charges against earnings.

Emerson could engage in business and other activities that compete with us.

Emerson has agreed in the Stockholders Agreement entered into as part of the Transaction that until 45 days after the occurrence of one of the specified trigger events based on Emerson ceasing to beneficially own more than 50% of our outstanding common stock specified, Emerson will not compete in the business of developing, marketing and selling certain industrial software, subject to certain exceptions.

Subject to the terms of such Stockholders Agreement, Emerson or any of its subsidiaries may engage in certain activities notwithstanding that they may fall within the scope of the competing business. In addition, if we engage in activities outside the scope of the non-competition obligation under the Stockholders Agreement, Emerson will not be restricted from engaging in such activities in competition with us. To the extent that Emerson engages in the same or similar business activities or lines of business as us, or engages in business with any of our partners, customers or vendors, our ability to successfully operate and expand our business may be hampered.

After the second anniversary of the closing of the Transaction, subject to restrictions, Emerson will be permitted to transfer its shares of our common stock and acquire more shares of our common stock, which could have a negative impact on AspenTech's stock price or ability to maintain Nasdaq continued listing requirements.

For two years following the completion of the Transaction, unless Emerson ceases to beneficially own a least 20% of our outstanding common stock, Emerson will be prohibited from transferring any of its shares of our common stock other than to a controlled affiliate of Emerson, unless approved by a special committee of our board of directors (the "Board"). Following such two-year lock-up period, Emerson will be permitted, subject to certain restrictions, to transfer shares of our common stock, including in public offerings pursuant to registration rights granted by AspenTech. Any such transfer could significantly increase the number of shares of our common stock available in the market, which could cause a decrease in the price of shares of our common stock. In addition, even if Emerson does not transfer a large number of its shares of our common stock into the market, the existence of Emerson's right to transfer a large number of shares into the market may depress the price of shares of our common stock.

For two years following the completion of the Transaction, Emerson is prohibited from acquiring or seeking to acquire, directly or indirectly, additional shares of our common stock that would result in Emerson having an ownership percentage of our outstanding common stock greater than the percentage of outstanding common stock Emerson owned as of the closing of the Transaction, subject to certain exceptions. Following such two-year standstill period that will end on May 16, 2024, Emerson will be permitted, subject to certain restrictions, to acquire or seek to acquire, directly or indirectly, additional shares of our common stock which may have an adverse effect on our ability to maintain Nasdaq continued listing requirements, including requirements with respect to a minimum number of holders of the common stock. If we are unable to maintain Nasdaq continued listing requirements, we may be required to delist from Nasdaq and the price of our stock may decline.

Emerson has the right to purchase additional securities of AspenTech pursuant to certain pre-agreed prices and procedures, which could have a negative impact on AspenTech's stock price.

Emerson has the option (but not the obligation) to, among other things: (i) purchase additional securities of AspenTech in connection with securities being issued as consideration in a merger and acquisition transaction, or purchase securities of AspenTech in a public offering, or other circumstances where AspenTech securities are not being offered for cash by AspenTech, in each case at pre-agreed prices without the need for the approval of a special committee of the Board; (ii) purchase additional shares of our common stock up to its percentage maintenance share in connection with the issuance of equity awards or securities of AspenTech pursuant to any "at the market" program, on a quarterly basis and in accordance with pre-agreed prices; and (iii) purchase additional equity securities of AspenTech at pre-agreed prices to maintain Emerson's ownership of certain percentages of our outstanding common stock during certain cure periods after Emerson's ownership of our common stock falls below certain thresholds. Any such purchase could significantly increase the number of shares of our common stock outstanding, which could cause a decrease in the price of shares of our common stock. In addition, even if Emerson does not exercise its right to purchase, the existence of such right may depress the price of shares of our common stock.

AspenTech is controlled by Emerson. The interests of Emerson may differ from the interests of other stockholders of AspenTech.

Following the closing of the Transaction, Emerson beneficially owned approximately 55% of the fully diluted shares of our common stock. Under the Stockholders Agreement, Emerson will have the right to acquire additional equity securities of AspenTech pursuant to pre-agreed procedures, preemptive rights and percentage maintenance rights.

Emerson has the ability to designate and elect a majority of the directors of our Board. The Stockholders Agreement provides that, for so long as Emerson beneficially owns more than 50% of the outstanding shares of our common stock, to the extent permitted by applicable law, if so requested by Emerson, AspenTech will avail itself of available "Controlled Company" exemptions to the corporate governance listing standards of Nasdaq (in whole or in part, as requested by Emerson) that would otherwise require AspenTech to have (i) a majority of the Board consist of independent directors, (ii) a nominating/corporate governance committee that is composed solely of independent directors; and (iii) a compensation committee that is composed solely of independent directors and (ii) the compensation from the requirements that (i) the nominating/corporate governance committee be composed solely of independent directors and (ii) the compensation committee be composed solely of independent directors.

Pursuant to the Stockholders Agreement, the Board has four directors not designated by Emerson and five directors designated by Emerson.

Pursuant to the terms of the Stockholders Agreement, Emerson will have the right to consent to certain material actions of AspenTech and its subsidiaries for so long as it maintains certain ownership percentages, including over certain mergers and acquisitions, sales of assets, incurrences of indebtedness, issuances of securities and the appointment and removal of our Chief Executive Officer. For as long as Emerson beneficially owns a majority of the outstanding shares of our common stock, Emerson also will have control over all other matters submitted to stockholders for approval, including changes in capital structure, transactions requiring stockholder approval under Delaware law and corporate governance matters, subject to the terms of the Stockholders Agreement relating to Emerson's agreement to vote in favor of director nominees not designated by Emerson and to proposals by Emerson to acquire all of the shares of our common stock held by non-Emerson stockholders.

Emerson may have different interests than other holders of our common stock and may make decisions adverse to the interests of those holders.

Among other things, Emerson's control could delay, defer, or prevent a sale of AspenTech that AspenTech's other stockholders support, or, conversely, this control could result in the consummation of such a transaction that other stockholders do not support. This concentrated control could discourage a potential investor from seeking to acquire our common stock and, as a result, might impact the market price of our common stock.

The corporate opportunity provisions in the Stockholders Agreement could enable Emerson to benefit from corporate opportunities that might otherwise be available to us.

The Stockholders Agreement contains provisions related to corporate opportunities that may be of interest to both AspenTech and Emerson. These provisions provide in general that (i) a corporate opportunity offered to any individual who is a director, but not an officer or employee of AspenTech and who is also a director, officer or employee of Emerson will belong to AspenTech only if such opportunity is expressly offered to such person solely in his or her capacity as a director of AspenTech and otherwise will belong to Emerson and (ii) a corporate opportunity offered to any individual who is an officer or employee of AspenTech and also is a director, officer or employee of Emerson will belong to AspenTech and also is a director, officer or employee of Emerson will belong to Espentent to such person in his or her capacity as a director, officer or employee of Emerson, in which case it will belong to Emerson. The absence of a duty on the part of Emerson or its affiliates to present corporate opportunities to AspenTech could have a material adverse effect on our business, financial condition, results of operations or prospects if attractive corporate opportunities are allocated by Emerson to itself or its affiliates (not including AspenTech).

Certain historical financial information of the OSI business and SSE business may not be representative of their results or financial condition if they had been operated separately from Emerson and, as a result, may not be a reliable indicator of future results.

Certain historical financial information of the OSI business and SSE business included in this document has been derived from the consolidated financial statements and accounting records of Emerson and reflects all direct costs as well as an allocation of indirect costs based on assumptions and allocations made by Emerson management. The financial position, results of operations and cash flows of the OSI business and SSE business presented may be different from those that would have resulted had the OSI business and SSE business been operated separately from Emerson during the applicable periods or at the applicable dates. For example, in preparing the financial statements of the OSI business and SSE business, Emerson made allocations of costs and Emerson corporate expenses deemed to be attributable to the OSI business and SSE business. However, these costs and expenses reflect the costs and expenses attributable to the OSI business and SSE business operated as part of a larger organization and do not necessarily reflect costs and expenses that would have been incurred by the OSI business and SSE business had they been operated independently. As a result, the historical financial information of the OSI business and SSE business contained in this document may not be a reliable indicator of their future results.

Risks Related to Our Business

Actual or threatened public health crises could adversely affect our business in a material way.

As a global company, with employees, customers and partners located around the world in a variety of industries, our performance may be impacted by public health crises, including the COVID-19 pandemic, which has caused global economic uncertainty. The emergence of a public health threat could pose the risk that our employees, customers and partners may be prevented from conducting business activities at full capacity for an indefinite period, due to the spread of disease or as suggested or mandated by governmental authorities. These conditions also can affect the rate of spending by customers in the industries in which we operate (for example, materially reduced spending budgets due to oil and gas price declines and volatility) and may adversely affect our customers' willingness to purchase our solutions, delay prospective customers' purchasing decisions, reduce the value or duration of their contracts, cause our customers to request contractual concessions, or affect attrition rates, all of which could adversely affect our future sales and operating results. Finally, the conditions may lead to worker shortages, supply chain issues, inflationary pressures, and vaccine and testing requirements. We are unable to predict the future path or impact of any global or regional COVID-19 resurgences or future epidemics or pandemics or other public health crises, which could adversely affect our business, operations and financial condition, as well as the business, operations and financial condition, as well as the business, operations and financial conditions of our other customers and partners.

We may be unable to hire or retain personnel with the necessary skills to operate and grow our business, which could adversely affect our ability to compete.

Our future success depends upon our ability to attract, develop, motivate and retain highly skilled managerial, sales and marketing, technical, financial and administrative personnel necessary to guide our operations and support and grow our business. The market for this talent is highly competitive.

In addition, because of the highly technical nature of our products and services, we must attract and retain highly skilled engineering and development personnel. The technical personnel that we require to develop our products and solutions are in high demand, particularly technical personnel with a combination of AI, domain and real-time application expertise as there are comparatively fewer persons with those skills. If we are unable to attract and retain technical personnel with the requisite skills, our product and solution development efforts could be delayed, which could adversely affect our ability to compete and thereby adversely affect our revenues and profitability.

Furthermore, our ability to attract and retain employees may be affected by the COVID-19 pandemic and its effects on global workforce patterns and employee expectations regarding returning to offices, and may result in a more geographically distributed workforce and higher employee turnover than we anticipate.

In addition, recent inflationary pressure may impact our ability to attract and retain personnel potentially because of a need to increase compensation in certain areas.

All of our officers and other U.S. employees are at-will employees, meaning that they may terminate their employment relationship with us at any time, and their knowledge of our business and industry would be extremely difficult to replace. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business, financial condition and operating results may be materially adversely affected.

If we are unable to attract, develop, motivate and retain the personnel we need to develop compelling products and solutions, and guide, operate and support our business, we may be unable to successfully compete in the marketplace, which would adversely affect our revenues and profitability.

A significant portion of our revenue is attributable to operations outside the United States, and our operating results therefore may be materially affected by the economic, political, military, regulatory and other risks of foreign operations or of transacting business with customers outside the United States.

Customers outside of the United States account for a significant portion of our total revenue and will for the foreseeable future. Our operating results attributable to operations outside the United States are subject to additional risks, including:

- being subject to a wide variety of complex foreign laws, treaties and regulations and adjusting to any unexpected changes in such laws, treaties and regulations, including local labor laws;
- unexpected changes in regulatory requirements, including, for example, changes in climate regulations, changes in competition laws, or other regulatory restrictions imposed by the United States or foreign governments;
- difficulties in collecting trade accounts receivable in other countries;
- adverse tax consequences;
- the challenges of managing legal disputes in foreign jurisdictions.
- difficulties in staffing and managing foreign operations;
- limited protection for the enforcement of contract and intellectual property rights in certain countries where we may sell our products or work with suppliers or other third parties;
- potentially longer sales and payment cycles and potentially greater difficulties in collecting accounts receivable;
- costs and difficulties of customizing products for foreign countries;
- challenges in providing solutions across a significant distance, in different languages and among different cultures;
- laws and business practices favoring local competition;
- strict laws and regulations governing privacy and data security, including the European Union's General Data Protection Regulation;
- uncertainty and resultant political, financial and market instability arising from the United Kingdom's exit from the European Union;
- compliance with U.S. laws affecting activities of U.S. companies abroad, including the U.S. Foreign Corrupt Practices Act;
- international trade disputes, tariffs, embargoes, export controls, sanctions and other trade barriers or restrictions and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets;
- operating in countries with a higher incidence of corruption and fraudulent business practices;
- seasonal reductions in business activity in certain parts of the world, particularly during the summer months in Europe and at year end globally;
- · rapid changes in government, economic and political policies and conditions; and
- political or civil unrest or instability, acts of war, terrorism or epidemics and other similar outbreaks or events, such as the war between Russia and Ukraine.

While we license our products primarily through a direct sales force located throughout the world, we also leverage sales relationships with Emerson and other channel partners to market our products in certain locations. In the event that we are unable to adequately staff and maintain our foreign operations, we could face difficulties managing our international operations.

In addition, the ongoing conflict in Ukraine could adversely impact our business, financial position, cash flows and results of operations in Russia and Ukraine which may in turn spread and impact our overall business, financial position, cash flows and results of operations.

We maintain operations in Russia and license software and provide related services to customers in Russia and areas of Ukraine that are not under sanction. We have net sales of approximately \$44.6 million and \$9.9 million for fiscal 2023 and 2022, respectively, and total assets of approximately \$39.7 million and \$23.4 million as of June 30, 2023 and 2022, respectively, related to operations in Russia. As of June 30, 2023 and 2022, respectively, we had \$36.7 million and \$36.6 million of ACV in Russia.

In February of 2022, Russia invaded Ukraine and the war between the two countries could result in more widespread conflict. As a result of the conflict between Russia and Ukraine, the United States, the European Union, the United Kingdom and other governments, among others, have developed coordinated sanctions and export-control measure packages. These packages include, comprehensive financial sanctions against major Russian banks (including SWIFT cut off); designations of individuals and entities involved in Russian military activities; additional designations of Russian individuals including but not limited to those with significant business interests and government connections; and enhanced export controls and trade sanctions targeting Russia's imports of a wide range of goods as a whole, including potentially tighter controls on exports and reexports of items previously subject to only a low level of control, stricter licensing policy with respect to issuing export licenses, and/or increased use of "end-use" controls to block or impose licensing requirements on exports.

We may be required to cease or suspend operations in Russia or, should the conflict or the effects of sanctions, export control measures and business restrictions worsen, we may voluntarily elect to do so. For example, we have recently terminated all engineering services in Russia, which may impact our ability to renew existing contracts and provide support to customers. While we continue to evaluate the impact, if any, of the various sanctions, export control measures and business restrictions imposed by the United States, other governments, and financial institutions on our ability to do business in Russia and areas of Ukraine that are not under sanction, maintain contracts with vendors and pay employees in Russia, and receive payment from customers in Russia and areas of Ukraine that are not under sanction, there is no assurance that we will be able to do so in the future. Any disruption to, or suspension of, our business and operations in Russia would result in the loss of revenue from the business in Russia and would negatively impact our growth. We also may suffer reputational harm as a result of our continued operations in Russia, which may adversely impact our sales and other businesses in other countries.

We assess our operations for potential asset impairment in accordance with our accounting practices, and are periodically evaluating the impact, if any, of the various sanctions, export controls measures and business restrictions imposed by the United States, other governments and financial institutions on our ability to do business in Russia, maintain contracts with vendors and pay employees in Russia, as well as receive payment from customers in Russia or Ukraine that are not under sanction. The outcome of these assessments and their potential impact on our ability to continue to conduct business to the same extent as currently conducted will depend on how the conflict evolves and on further actions that may be taken by the United States, Russia, other governments, and others.

Furthermore, the ongoing military conflict and sanctions on Russia have resulted in adverse macroeconomic effects which have in the past and may in the future have an adverse effect on our business. For example, the war between Russia and Ukraine has already resulted in significant volatility in financial markets and depreciation of the Russian ruble and the Ukrainian hryvnia against the U.S. dollar, as well as an increase in energy and commodity prices globally. The conflict may also result in additional consequences including, but not limited to, supply shortages, further increases in prices of commodities, reduced consumer purchasing power, significant disruptions in logistics infrastructure, telecommunications services and risks relating to the availability of information technology systems and infrastructure. Other potential consequences include, but are not limited to, growth in the number of popular uprisings in the region, increased political discontent, especially in the regions most affected by the conflict or economic sanctions, increase in cyberterrorism activities and attacks, displacement of persons to regions close to the areas of conflict and an increase in the number of refugees fleeing across Europe, among other unforeseen social and humanitarian effects.

Continued conflict between Russia and Ukraine and any escalation of that conflict, could have a material adverse impact on our business, financial condition, cash flows and results of operations and could cause the market value of our securities to decline.

We have delayed revenue recognition in the past and may in the future be required to delay revenue recognition for portions of our license activity.

If our OSI business is unable to provide professional services under our customer contracts on a timely basis, which has occurred in the past, our license and solutions and professional services revenue recognition may be delayed which could adversely affect our financial results in a given period. License and solutions and professional services revenue in any quarter depend substantially upon contracts signed and services delivered in that quarter. For integrated solution contracts executed by the OSI business prior to the third quarter of fiscal 2023, we recognize revenue over time, using an input measure of progress based on the ratio of actual costs incurred to date to the total estimated cost to complete (percentage of completion accounting), until the implementation is complete. For new OSI Inc. contracts entered into on or after January 1, 2023, we account for OSI Inc. software license, hardware, maintenance, and professional services as separate and distinct performance obligations and software license revenue is recognized at a point in time when control transfers to the customer. Hardware revenue is recognized over time using percentage of completion accounting. As a result, revenue may be delayed while we meet all of the conditions necessary for revenue recognition.

Due to the nature of how we recognize revenue, if our OSI business is unable to commence and perform its contractual obligations under our integrated solution contracts executed prior to the third quarter of fiscal 2023, our revenue may be deferred into future periods. The ability of the OSI business to perform its contractual obligations is dependent on a number of factors, including, among others, its ability to hire and retain employees and subcontract to third-party ISPs as well as customer delays. In addition, changes in the estimates of anticipated costs could impact the timing of revenue recognition under percentage of completion accounting.

Given that revenue is recognized over time under the integrated solution contracts executed by the OSI business prior to the third quarter of fiscal 2023, a portion of the license and solutions revenue we report in each quarter is attributable to agreements entered into during previous quarters. Variations related to our revenue recognition may cause significant fluctuations in our results of operations and cash flows, may make it challenging for an investor to predict our performance on a quarterly basis and have prevented, and may in the future prevent, us from achieving our quarterly or annual forecasts or meeting or exceeding the expectations of research analysts or investors, which in turn may cause our stock price to decline.

If we fail to increase usage and product adoption by customers of our Performance Engineering, Manufacturing and Supply Chain, Asset Performance Management, Digital Grid Management, and Subsurface Science & Engineering product suites, or fail to provide innovative, market-leading solutions, or fail to retain our current customers, we may be unable to implement our growth strategy successfully, and our business could be seriously impacted.

Our market position and our future growth is largely dependent upon our ability to increase usage and product adoption by customers of our product suites, and to develop new software products that achieve market acceptance with acceptable operating margins. Enterprises are requiring their application software vendors to provide greater levels of functionality and broader product offerings. We must continue to enhance our current product line and develop and introduce new products and services that keep pace with increasingly sophisticated customer requirements and the technological developments of our competitors. If we fail to do so, customers may choose not to renew their contracts with us. Our business and operating results could suffer if we cannot successfully execute our strategy and drive usage and product adoption.

We are implementing an integrated software product strategy across our businesses with differentiated vertical solutions targeted at specific capital-intensive industries. We cannot ensure that our product strategy will result in new and existing products that will meet market needs and achieve significant usage and product adoption. If we fail to increase usage and product adoption or fail to develop or acquire new software products that meet the demands of our customers or our target markets, our operating results and cash flows from operations will grow at a slower rate than we anticipate and our financial condition could suffer.

In addition, we are transitioning our OSI and SSE businesses to token and/or term license models to provide enhanced flexibility and broader access to our software suite for customers and improve long-term revenue and profitability. Although our management has significant experience in such business model transitions, we may not be successful in such a transition and there is no guarantee that we will achieve the expected results; for example, if our planned model transition is not acceptable to current customers of our OSI and SSE businesses, they may choose not to continue their relationships with us. Further, we may encounter unforeseen expenses, complications and delays in the process of the transition.

Our business could suffer if demand for, or usage of, our software declines for any reason, including declines due to adverse changes in the process and other capital-intensive industries.

If demand for, or usage of, our software solutions declines for any reason, our operating results, cash flows from operations and financial position would suffer. Our business could be adversely affected by:

- any decline in demand for or usage of our software solutions, including those resulting from global supply chain disruptions;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our software solutions;
- technological innovations that our software solutions do not address;
- our inability to release enhanced versions of our software on a timely basis; and
- adverse changes in capital intensive industries or otherwise that lead to reductions, postponements or cancellations of customer purchases of our products and services, or delays in the execution of license agreement renewals in the same quarter in which the original agreements expire.

Because of the nature of their products and manufacturing processes and their global operations, companies in the process and other capital-intensive industries are subject to risk of adverse or even catastrophic environmental, safety and health accidents or incidents and are often subject to changing standards and regulations worldwide. In addition, worldwide economic downturns and pricing pressures experienced by energy, chemical, engineering and construction, and other capital-intensive industries have led to consolidations and reorganizations. In particular, a significant percentage of our revenue is derived from companies in the oil and gas sector. In the future, any reduced demand for oil due to macroeconomic factors or other reasons would likely impact the operating levels and capital spending of certain of these customers. In the past, this has resulted in, and could continue to result in, less predictable and lower demand for our products and services. Additionally, if there are any disruptions to global supply chains in many industries, such as occurred as a result of the COVID-19 pandemic, such disruptions could also impact the operating levels and capital spending of certain of our customers and result in less predictable and lower demand for our products and services. Any such adverse environmental, safety or health incident, change in regulatory standards, or economic downturn that affects the capital-intensive industries, including continued challenges and uncertainty among customers whose business is adversely affected by a shift to a greater percentage of renewable energy sources such as wind and solar, as well as general domestic and foreign economic conditions and other factors that reduce spending by companies in these industries, could impact our operating results in the future.

Unfavorable economic and market conditions or a lessening demand in the market for asset optimization software could adversely affect our operating results.

Our business is influenced by a range of factors that are beyond our control and difficult or impossible to predict. If the market for asset optimization software grows more slowly than we anticipate, demand for our products and services could decline and our operating results could be impaired.

Our overall performance depends, in part, on worldwide economic conditions. In the recent past, we have observed increased economic uncertainty in the United States and abroad. Impacts of such economic weakness include:

- falling overall demand for goods and services, leading to reduced profitability;
- reduced credit availability;
- higher borrowing costs;
- reduced liquidity;
- volatility in credit, equity and foreign exchange markets; and
- bankruptcies.

Further, the state of the global economy may deteriorate in the future. Customer demand for our products is linked to the strength of the global economy. If weakness in the global economy persists, many customers may amend their procurement strategies to delay or reduce their technology purchases. Capital expenditure and operating expense budgetary cycles are inherent in our customers' procurement strategies. These cycles are often informed by oil prices and environmental factors, including macroeconomic trends. Delay or reduction in our customers' technology purchases could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies, increased price competition or reduced use of our products by our customers. We will lose revenue if demand for our products is reduced because potential customers experience weak or deteriorating economic conditions, and our business, results of operations, financial condition and cash flow from operations would likely be adversely affected.

Climate change, and the regulatory and legislative developments related to climate change, may materially adversely affect our business and financial condition.

We must anticipate and respond to market and technological changes driven by broader trends such as decarbonization and electrification efforts in response to climate change. Market growth from the use of cleaner energy sources, as well as emissions management, energy efficiency, lower greenhouse gas refrigerant usage, and decarbonization efforts are likely to depend in part on technologies not yet deployed or widely adopted today. We may not adequately innovate or position our businesses for the adoption of technologies such as battery storage solutions, hydrogen use cases in industry, mobility, and power generation, enhanced power grid demand management, CCUS or advanced nuclear power.

These trends and the relative competitiveness of our product and service offerings will continue to be impacted by uncertain factors, such as the pace of technological developments and related cost considerations, the levels of economic growth in different markets around the world and the adoption of climate change-related policies such as carbon taxes, greenhouse gas emission reductions, incentives or mandates for particular types of energy, or policies that impact the availability of financing for certain types of projects.

Fluctuations in foreign currency exchange rates could result in declines in our reported revenue and operating results.

Some of our revenue is denominated in a currency other than the U.S. dollar, and certain of our operating expenses that are incurred outside the United States are denominated in currencies other than the U.S. dollar. Our reported revenue and operating results are subject to fluctuations in foreign exchange rates. Foreign currency risk arises primarily from the net difference between non-U.S. dollar receipts from customers outside the United States and non-U.S. dollar operating expenses

for subsidiaries in foreign countries. Currently, we anticipate that our largest exposures to foreign exchange rates exist primarily with the Euro, Japanese Yen, Pound Sterling, Chinese Yuan, Norwegian Krone, Indonesian Rupiah, Brazilian Real, Canadian Dollar, and Russian Ruble against the U.S. dollar. We cannot predict the impact of foreign currency fluctuations, and foreign currency fluctuations in the future may adversely affect our revenue and operating results. Any hedging policies we may implement in the future may not be successful, and the cost of those hedging techniques may have a significant negative impact on our operating results.

Competition from software offered by current competitors and new market entrants, as well as from internally developed solutions by our customers, could adversely affect our ability to sell our software products and related services and could result in pressure to price our products in a manner that reduces our margins.

Our markets in general are competitive and differ among our five product suites: ENG, MSC, APM, DGM, and SSE. We face challenges in selling our solutions to large companies that have internally developed their own proprietary software solutions, and we face competition from well-established vendors as well as new entrants in our markets. Many of our current and potential competitors have greater financial, technical, marketing, service and other resources than we have. As a result, these companies may be able to offer lower prices, additional products or services, or other incentives that we cannot match or offer. These competitors may be in a stronger position to respond more quickly to new technologies and may be able to undertake more extensive marketing campaigns. We believe they also have adopted and may continue to pursue more aggressive pricing policies and make more attractive offers to potential customers, employees and strategic partners. For example, some competitors may be able to initiate relationships through sales and installations of hardware and then seek to expand their customer relationships by offering asset optimization software at a discount. In addition, many of our competitors have established, and may in the future continue to establish, cooperative relationships with third parties to improve their product offerings and to increase the availability of their products in the marketplace. Competitors with greater financial resources may make strategic acquisitions to increase their ability to gain market share or improve the quality or marketability of their products.

Competition could seriously impede our ability to sell additional software products and related services on terms favorable to us. Businesses may continue to enhance their internally developed solutions, rather than investing in commercial software such as ours. Our current and potential commercial competitors may develop and market new technologies that render our existing or future products obsolete, unmarketable or less competitive. In addition, if these competitors develop products with similar or superior functionality to our products, we may need to decrease the prices for our products in order to remain competitive. If we are unable to maintain attractive pricing due to competitive pressures, our margins will be reduced and our operating results will be negatively affected. We cannot ensure that we will be able to compete successfully against current or future competitors or that competitive pressures will not materially adversely affect our business, financial condition and operating results.

Defects or errors in our software products could impact our reputation, impair our ability to sell our products and result in significant costs to us.

Our software products are complex and may contain undetected defects or errors. We may from time to time find defects in our products and we may discover additional defects in the future. We may not be able to detect and correct defects or errors before releasing products. Consequently, we or our customers may discover defects or errors after our products have been implemented. We have in the past issued, and may in the future need to issue, corrective releases of our products to remedy defects or errors. The occurrence of any defects or errors could result in:

- lost or delayed market acceptance and sales of our products;
- delays in payment to us by customers;
- product returns;
- injury to our reputation;
- diversion of our resources;
- increased service and warranty expenses or financial concessions;
- increased insurance costs; and
- legal claims, including product liability claims.

Defects and errors in our software products could result in claims for substantial damages against us and the loss of relationships with certain of our customers which could harm our results of operations and business.

Potential strategic transactions could be difficult to consummate and integrate into our operations, and these potential strategic transactions could disrupt our business, dilute stockholder value or impair our financial results.

As part of our business strategy, we from time to time seek to grow our business through acquisitions of, investments in, or partnerships with, new or complementary businesses, technologies or products that we believe can improve our ability to compete in our existing customer markets or allow us to enter new markets. For example, we recently terminated our agreement to acquire Micromine, a global leader in design and operational management solutions for the mining industry, due to uncertainty regarding the obtainment of certain regulatory approvals. The potential risks associated with acquisitions and investment transactions and partnerships include, but are not limited to:

- failure to realize anticipated returns on investment, cost savings and synergies;
- difficulty in assimilating the operations, policies and personnel of the acquired company;
- unanticipated costs or liabilities associated with, or arising from, acquisitions;
- challenges in combining product offerings and entering into new markets in which we may not have experience;
- distraction of management's attention from normal business operations;
- potential loss of key employees of the acquired company;
- difficulty implementing effective internal controls over financial reporting and disclosure controls and procedures;
- impairment of relationships with customers or suppliers;
- possibility of incurring impairment losses related to goodwill and intangible assets; and
- other issues not discovered in due diligence, which may include product quality issues or legal or other contingencies.

Acquisitions and/or investments may also result in potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, the expenditure of available cash, and amortization expenses or write-downs related to intangible assets such as goodwill, any of which could have a material adverse effect on our operating results or financial condition. Investments in, or partnerships with, immature businesses with unproven track records and technologies have an especially high degree of risk, with the possibility that we may lose our entire investment or incur unexpected liabilities. We may experience risks relating to the challenges and costs of closing a business combination or investment transaction and the risk that an announced business combination or investment transaction may not close. There can be no assurance that we will be successful in making additional acquisitions in the future or in integrating or executing on our business plan for existing or future acquisitions.

If our goodwill or intangible assets become impaired, then we could be required to record a significant charge to earnings.

We are required under generally accepted accounting principles to review our goodwill and intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill must be tested for impairment at least annually. Factors that may be considered a change in circumstances indicating that the carrying value of our reporting unit and intangible assets may not be recoverable include: a significant decline in our stock price for a sustained period; significant negative industry or economic trends; a significant change in our market capitalization relative to our net book value; significant changes in our business strategy; slower growth rates in our operations; significant underperformance relative to historical or projected future operating results; and/or other materially adverse events that have implications on the profitability of our business. We may be required to record charges to earnings during any period in which an impairment of our goodwill or intangible assets is determined which could adversely affect our results of operations.

We may be subject to significant expenses and damages because of product-related claims and other litigation.

We may be, from time to time, involved in lawsuits, claims, investigations, proceedings and threats of litigation. The amount of damages cannot be predicted with certainty, and a successful matter brought against us could materially impact our business and financial condition. Such matters, including product-related and shareholder claims, even if not successful, could damage our reputation, cause us to lose existing clients, limit our ability to obtain new clients, divert management's attention from operations, result in significant revenue loss, create potential liabilities for our clients and us, and increase insurance and other operational costs.

Claims that we infringe the intellectual property rights of others may be costly to defend or settle and could damage our business.

We cannot be certain that our software and services do not infringe patents, copyrights, trademarks or other intellectual property rights, so infringement claims might be asserted against us. In addition, we have agreed, and may agree in the future, to indemnify certain of our customers against infringement claims that third parties may assert against our customers based on use of our software or services. Such claims may have a material adverse effect on our business, may be time-consuming and

may result in substantial costs and diversion of resources, including our management's attention to our business. Furthermore, a party making an infringement claim could secure a judgment that requires us to pay substantial damages and could also include an injunction or other court order that could prevent us from selling our software or require that we re-engineer some or all of our products. Claims of intellectual property infringement also might require us to enter costly royalty or license agreements. We may be unable to obtain royalty or license agreements on terms acceptable to us or at all. Our business, operating results and financial condition could be impacted significantly if any of these events were to occur, and the price of our common stock could be adversely affected.

We may not be able to protect our intellectual property rights, which could make us less competitive and cause us to lose market share.

Our software is proprietary. Our strategy is to rely on a combination of copyright, patent, trademark and trade secret laws in the United States and other jurisdictions, and to rely on license and confidentiality agreements and software security measures to further protect our proprietary technology and brand. We obtain or apply for patent protection with respect to some of our intellectual property, but generally do not rely on patents as a principal means of protecting our intellectual property. We register or apply to register some of our trademarks in the United States and in selected other countries. We generally enter into non-disclosure agreements with our employees and customers, and restrict third-party access to our software and source code, which we regard as proprietary information. In certain cases, we may provide copies of source code to customers for the purpose of special product customization or may deposit copies of the source code with a third-party escrow agent as security for ongoing service and license obligations. In these cases, we rely on non-disclosure and other contractual provisions to protect our proprietary rights.

The steps we have taken to protect our proprietary rights may not be adequate to deter misappropriation of our technology or independent development by others of technologies that are substantially equivalent or superior to our technology. Our intellectual property rights may expire or be challenged, invalidated or infringed upon by third parties or we may be unable to maintain, renew or enter into new licenses on commercially reasonable terms. Any misappropriation of our technology or development of competitive technologies could impact our business and could diminish or cause us to lose the competitive advantages associated with our proprietary technology, and could subject us to substantial costs in protecting and enforcing our intellectual property rights, and/or temporarily or permanently disrupt our sales and marketing of the affected products or services. The laws of some countries in which our products are licensed do not protect our intellectual property rights to the same extent as the laws of the United States. Moreover, in some non-U.S. countries, laws affecting intellectual property rights are uncertain in their application, including with respect to new technologies such as AI, which can affect the scope of enforceability of our intellectual property rights.

Our software research and development initiatives, our customer relationships, and our customers' operations could be compromised if the security of our information technology is breached as a result of a cyberattack. This could have a material adverse effect on our business, operating results and financial condition, and could impact our competitive position.

We have devoted and will continue to devote significant resources to updating our software and developing new products, and our financial performance is dependent in part upon our ability to bring new products and services to market. Our customers use our software to optimize their manufacturing processes and manage asset performance, and they rely on us to provide updates and releases as part of our software maintenance and support services, and to provide remote on-line troubleshooting support. The security of our information technology environment is therefore important to our development initiatives, and an important consideration in our customers' purchasing decisions.

We rely on IT networks and systems, including the Internet, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. While we maintain cybersecurity policies and procedures (including government security clearances, access controls, data encryption, vulnerability assessments, continuous monitoring, employee training and maintenance of backup and protective systems), we cannot provide assurance that our services and databases will not be compromised or disrupted. Moreover, the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently or may be designed to remain dormant until a predetermined event and often are not recognized until launched against a target. As a result, it is possible for such vulnerabilities to remain undetected for an extended period.

Our technology networks and systems may be susceptible to damage, disruptions or shutdowns due to criminal conduct, DDoS attacks, or other advanced persistent attacks by malicious actors, including hackers and cybercriminals; failures during the process of upgrading or replacing software, databases or components; power outages; telecommunications or system failures; terrorist attacks; natural disasters; employee negligence, error or malfeasance; server or cloud provider breaches; and

computer viruses or cyberattacks. Cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to IT networks and systems to more sophisticated and targeted measures, known as advanced persistent threats, directed at our products, customers and/or third-party service providers. In addition, it is possible a security breach could result in theft of trade secrets or other intellectual property or disclosure of or access to confidential customer, supplier or employee information, including personal information.

Our policy is to follow the appropriate cybersecurity frameworks to manage and reduce cybersecurity risk. We may incur additional costs to maintain appropriate cybersecurity protections in response to evolving cybersecurity threats, and we may not be able to safeguard against all data security breaches or misuses of data. Should we be unable to prevent security breaches or other damage to our IT systems, disruptions could have an adverse effect on our operations, as well as expose us to material loss of business and revenue, litigation, liability or penalties under privacy laws, increased cybersecurity protection costs, reputational damage and product failure, and additional costs associated with responding to the service interruption or security breach, such as investigative and remediation costs, the costs of providing individuals and/or data owners with notice of the breach, legal fees, the costs of any additional fraud detection activities, or the costs of prolonged system disruptions or shutdowns. Any of these events could materially adversely impact our business and results of operations. Our customers and their operations also may be subject to cyberattacks and resulting business disruptions and losses. We seek to cap the liability to which we are exposed in the event of losses or harm to our customers, including those resulting from security incidents, but we cannot be certain that we will obtain these caps or that these caps, if obtained, will be enforced in all instances. Furthermore, the cybersecurity insurance we maintain may be inadequate or may not be available in the future on acceptable terms, or at all. In addition, our policy may not cover our remediation expenses or any claim against us for loss of data or other indirect or consequential damages. Defending any suit based on or related to any data loss or system disruption, regardless of its merit and available insurance coverage, could be costly and divert management's attention. In addition, we must comply with increasingly complex and rigorous regulatory standards enacted to protect business and personal data in the United States and elsewhere. Compliance with privacy and localization laws and regulations increases operational complexity. Failure to comply with these regulatory standards could subject us to fines and penalties, as well as legal and reputational risks, including investigations and proceedings brought against us by governmental entities or others.

Security breaches or disruptions of our information technology systems from foreign state actors could adversely affect our business.

Any cyberattacks on us or our systems could adversely affect our network systems or other operations. There may be an increased risk of cyberattacks by state actors due to the current conflict between Russia and Ukraine. Although we maintain cybersecurity policies and procedures to manage risk to our information systems, adapt our systems and processes to mitigate such threats, and plan to enhance our protections against such attacks, we may not be able to address these cybersecurity threats proactively or implement adequate preventative measures and there can be no assurance that we will promptly detect and address any such disruption or security breach, if at all.

Our liquidity and ongoing access to capital could be materially and negatively affected by increased volatility in the financial and securities markets, including increased inflation and interest rates.

Our continued access to sources of liquidity depends on multiple factors, including global macroeconomic conditions, the condition of global financial markets, the availability of sufficient amounts of financing and our operating performance. There has been increased volatility in the financial and securities markets, as well as increased inflation and interest rates, which generally has made access to capital less certain and has increased the cost of obtaining new capital. We may need to obtain equity, equity-linked, or debt financing in the future to fund our operations, including our acquisition strategy, and there is no guarantee that such debt financing will be available in the future, or that it will be available on commercially reasonable terms, in which case we may need to seek other sources of funding.

Our inability to maintain or develop our strategic and technology relationships could adversely affect our business.

We have strategic and technology relationships with other companies with which we work to offer complementary solutions and services, that market and sell our solutions, and that provide technologies that we embed in our solutions. We may not realize the expected benefits from these relationships and such relationships may be terminated by the other party. If these companies fail to perform or if a company terminates or substantially alters the terms of the relationship, we could suffer delays in product development, reduced sales or other operational difficulties and our business, results of operations and financial condition could be materially adversely affected.

Risks Related to Our Common Stock

Emerson is our controlling owner, which could discourage takeover attempts. If Emerson ceases to be our controlling owner, anti-takeover provisions contained in our charter and bylaws could impair attempts by a party other than Emerson to acquire a significant number of shares of our common stock.

Emerson and its subsidiaries beneficially own a majority of the shares of our common stock, which could discourage takeover attempts by a third party. Further, our charter and bylaws also contain provisions that may delay, defer or discourage another party from acquiring a significant number of shares of our common stock or, in the event that Emerson and its subsidiaries no longer beneficially own a majority of the shares of our common stock, control of us. Among other things, our charter and bylaws include provisions regarding:

- the ability of our Board to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of an unsolicited acquirer;
- the prohibition on us to engage in any business combination with any person who owns 15% or more of our outstanding voting stock (excluding Emerson) (an "interested stockholder") for a period of three years following the time that such stockholder became an interested stockholder unless certain conditions are met; and
- the ability of our Board to amend our bylaws, which may allow our Board to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend our bylaws to facilitate an unsolicited takeover attempt.

These provisions may discourage, in the event that Emerson and its subsidiaries no longer beneficially own a majority of the shares of our common stock, unsolicited takeover proposals that stockholders may consider to be in their best interests. Together these provisions may make the removal of management more difficult and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities, especially in the event that Emerson and its subsidiaries no longer beneficially own a majority of the shares of our common stock.

Our charter designates specific courts as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our charter, unless our Board consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for state law claims for: (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, employee or stockholder of us to us or our stockholders; (iii) any action asserting a claim arising pursuant to any provision of Delaware General Corporation Law (the "DGCL"), or our charter or bylaws; (iv) any action asserting a claim related to, involving or against us governed by the internal affairs doctrine; or (v) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL. The foregoing does not apply to claims arising under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or the rules and regulations promulgated thereunder. Our charter further provides that unless our Board consents in writing to the selection of an alternative forum, the federal district courts of the United States shall, to the fullest extent permitted by law, be the sole and exclusive forum for any complaint asserting a cause of action arising under the Securities Act or the rules and regulations promulgated thereunder (the "Federal Forum Provision", and together with the provision in the first sentence of this paragraph, the "Forum Selection Provisions").

The Forum Selection Provisions in our charter may impose additional litigation costs on stockholders in pursuing any such claims. Additionally, the Forum Selection Provisions may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of such lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. The Court of Chancery of the State of Delaware and the federal district courts of the United States may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

Section 22 of the Securities Act of 1933, as amended (the "Securities Act"), creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. While the Delaware Supreme Court ruled in March 2020 that federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court are "facially valid" under Delaware law, there is uncertainty as to whether other courts will enforce the Federal Forum Provision in or charter. If the Federal Forum Provision is found to be

unenforceable, we may incur additional costs associated with resolving claims under the Securities Act. The Federal Forum Provision may also impose additional litigation costs on stockholders who assert that the provision is not enforceable or invalid.

Our common stock may experience substantial price and volume fluctuations.

The equity markets have from time to time experienced extreme price and volume fluctuations, particularly in the high technology sector, and those fluctuations often have been unrelated to the operating performance of particular companies. In addition, the market price of our common stock may be affected by other factors, such as: (i) our financial performance; (ii) announcements of technological innovations or new products by us or our competitors; and (iii) market conditions in the computer software or hardware industries.

In the past, following periods of volatility in the market price of a public company's securities, securities class action litigation has often been instituted against that company. This type of litigation against us could result in substantial liability and costs and divert management's attention and resources.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our principal executive offices are located in leased facilities in Bedford, Massachusetts, to accommodate product development, sales, marketing, operations, finance and administrative functions. The lease for our Bedford executive offices commenced in November 2014 and is scheduled to expire in March 2025. Subject to the terms and conditions of the lease, we may extend the term of the lease for two successive terms of five years each.

We also lease office space in Medina, Minnesota and in Houston, Texas to accommodate sales, services, product development functions, marketing, operations, finance and administrative functions. Additionally, we lease office space in the United Kingdom, Shanghai, Mexico City, Canada, Australia, Singapore, Beijing, India, Moscow, Tokyo, Romania, and Bahrain, to accommodate sales, services and product development functions.

In the remainder of our other locations, the majority of our leases have lease terms of four years or less that are generally based on the number of workstations required. We believe this facilities strategy provides us with significant flexibility to adjust to changes in our business environment. We do not own any real property. We believe that our leased facilities are adequate for our anticipated future needs.

Item 3. Legal Proceedings.

None.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock currently trades on The Nasdaq Global Select Market under the symbol "AZPN."

Holders

On August 15, 2023, there were 42 holders of record of our common stock. The number of record holders does not include persons who held common stock in nominee or "street name" accounts through brokers.

Dividends

We have never declared or paid cash dividends on our common stock. We do not anticipate paying cash dividends on our common stock in the foreseeable future.

On May 16, 2022, AspenTech and certain of its subsidiaries entered into a Borrower Assignment and Accession Agreement (the "Borrower Assignment and Accession Agreement") relating to the Amended and Restated Credit Agreement dated as of December 23, 2019, as amended from time to time, among Heritage AspenTech, the other loan parties from time to time party thereto, the lenders party thereto, and JPMorgan Chase Bank, National Association ("JPMorgan"), as Administrative Agent (as previously amended, the "Amended and Restated Credit Agreement").

The Amended and Restated Credit Agreement contains affirmative and negative covenants customary for facilities of this type, including restrictions on incurrence of additional debt, liens, fundamental changes, asset sales, restricted payments (including dividends) and transactions with affiliates.

In addition, the declaration or payment of a cash or other dividend requires the consent of Emerson under the Stockholders Agreement under certain circumstances.

Any future determination relating to our dividend policy will be made at the discretion of our Board and will depend on a number of factors, including our future earnings, capital requirements, financial condition and future prospects and such other factors as our Board may deem relevant.

Purchases of Equity Securities by the Issuer

On May 5, 2023, we entered into an accelerated share repurchase program ("ASR Program") with JPMorgan to repurchase an aggregate of \$100.0 million of our common stock. For more details on of the ASR Program, refer to Note 15, "Stock Repurchases" to our Consolidated and Combined Financial Statements. During fiscal 2023 we repurchased 487,626 shares of our common stock for \$100.0 million pursuant to the ASR Program. The ASR Program settled on August 7, 2023, resulting in an additional delivery of 107,045 shares of our common stock to us.

The following is a summary of stock repurchases for each month during the fourth quarter of the year ended June 30, 2023.

Period	Total Number of Shares Purchased	A	verage Price Paid per Share	Total Number of Shares Purchased As Part of Publicly Announced Plans or Programs	V	pproximate Dollar 'alue that May Yet e Purchased Under the Plans or Programs (1)
	(In Thousands, Except Shares and per Share Data)					
April 1, 2023 to April 30, 2023						
May 1, 2023 to May 31, 2023	487,626	\$	172.57	487,626	\$	15,850
June 1, 2023 to June 30, 2023			—			15,850
Total	487,626	\$	172.57	487,626		

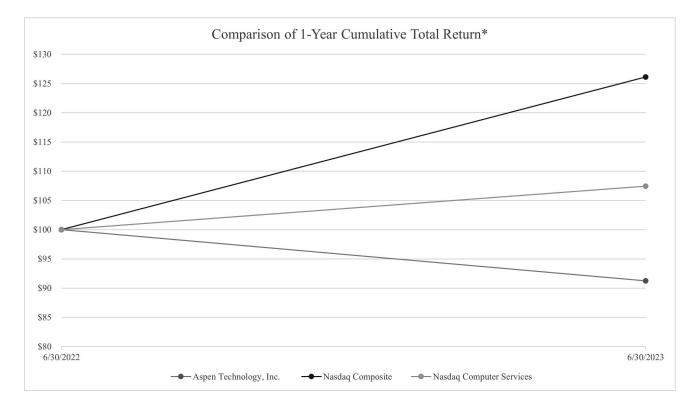
(1) On May 5, 2023, we entered into the ASR Program with JPMorgan to repurchase an aggregate of \$100.0 million of our common stock. The ASR Program settled on August 7, 2023.

On August 1, 2023, we announced that the Board approved a share repurchase authorization (the "Share Repurchase Authorization"), pursuant to which we may repurchase up to \$300.0 million in the aggregate of our outstanding shares of common stock, by means of open market transactions, block transactions, privately negotiated purchase transactions or any other purchase techniques, including 10b5-1 trading plans. The Share Repurchase Authorization will commence after the conclusion of our ASR Program.

Stock Performance Graph

Notwithstanding any statement to the contrary in any of our previous or future filings with the SEC, the following information relating to the price performance of our common stock shall not be deemed "filed" with the Commission under the Securities Exchange Act and shall not be incorporated by reference into any such filings.

The following graph compares the cumulative total return attained by holders of our common stock relative to the cumulative total return delivered by the Nasdaq Composite Index ("Nasdaq Composite") and Nasdaq Computer Services Index ("Nasdaq Computer Services"). The graph tracks the performance of a \$100 investment in our common stock, Nasdaq Composite, and Nasdaq Computer Services Index performance values, assuming the reinvestment of any dividends.



*The Transaction closed on May 16, 2022. We are presenting this comparison for fiscal 2023, our first full fiscal year as the new operating company resulting from the Transaction.

Item 6. [Reserved].

[Reserved].

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

You should read the following discussion in conjunction with our consolidated and combined financial statements and related notes beginning on page 61. In addition to historical information, this discussion contains forward-looking statements that involve risks and uncertainties. You should read "Item 1A. Risk Factors" for a discussion of important factors that could cause our actual results to differ materially from our expectations.

In connection with the Transaction, we approved a change to our fiscal year end from September 30 to June 30. References to our fiscal year 2023 are to the twelve-month period ended June 30, 2023, to our fiscal year 2022 are to the ninemonth period ended June 30, 2022 and to our fiscal year 2021 are to the twelve-month period ended September 30, 2021, unless otherwise noted. Refer to Note 1, "Operations" to our Consolidated and Combined Financial Statements for additional information.

The Transaction has been accounted for as a business combination in accordance with U.S. GAAP, with the OSI business and the SSE business treated as the "acquirer" and Heritage AspenTech treated as the "acquired" company for financial reporting purposes. Accordingly, the historical financial statements of the OSI business and the SSE business are the historical financial statements of AspenTech following the completion of the Transaction. Our historical financial results are not necessarily indicative of future financial results because Heritage AspenTech has only been included since the Closing Date.

Business Overview

We are a global leader in industrial software focused on helping customers in asset-intensive industries address the Dual Challenge. Our solutions address complex environments where it is critical to optimize across the full asset lifecycle - asset design, operation, and maintenance - enabling customers to run their assets safer, greener, longer and faster. Thousands of companies, ranging from multi-national corporations to start-ups, rely on our software to help them run their assets more profitably, resiliently, and sustainably to meet their operational excellence and sustainability goals.

We help customers solve some of their most critical challenges via our purpose-built software that combines engineering first principles, deep industry domain knowledge, and advanced technologies. We drive significant value creation through our decades of experience in modeling, simulation, and optimization technologies. The operational challenges we help our customers solve include how to maintain maximum efficiency in process operations, manage electrical grids amid the growth in renewable energy sources, ensure supply chain resiliency, reduce carbon emissions and more.

Our software also enables companies to develop new processes that can be scaled to support the energy transition and a net zero future, such as green hydrogen, biofuels, carbon capture, utilization and storage and circularity of plastics.

On October 10, 2021, Heritage AspenTech and Emerson and certain of its subsidiaries, entered into a definitive agreement pursuant to which, among other matters, Emerson and its subsidiaries contributed to Heritage AspenTech shareholders \$6,014,000,000 in cash and the OSI business and the SSE business in exchange for 55% of our outstanding common stock (on a fully diluted basis). The Transaction closed on May 16, 2022.

By combining the software capabilities, deep domain expertise and leadership of Heritage AspenTech with the OSI and SSE businesses, we expanded our served markets, augmented our expertise and sales channels, and broadened our portfolio to five product suites: ENG, MSC, APM, DGM, and SSE.

Relationship with Emerson

At the closing of the Transaction, we entered into a Stockholders Agreement with Emerson. In addition to that agreement, we also entered into a Commercial Agreement and a Transition Services Agreement related to certain operations going forward.

Pursuant to the Commercial Agreement, AspenTech granted a subsidiary of Emerson the right to distribute, on a nonexclusive basis, certain (i) existing Heritage AspenTech products, (ii) existing Emerson products transferred to AspenTech pursuant to the Transaction and (iii) future AspenTech products as mutually agreed upon by the parties during the term of the Commercial Agreement, in each case, to end-users through such subsidiary of Emerson acting as an agent, reseller or original equipment manufacturer. Pursuant to the Transition Services Agreement, Emerson provides AspenTech and its subsidiaries with certain services, including information technology, human resources and other specified services, as well as access to certain of Emerson's existing facilities, for a limited time.

Heritage AspenTech

Heritage AspenTech was founded over 40 years ago with a focus on industrial process efficiency and optimization. As a global leader in asset optimization software, Heritage AspenTech combines decades of modeling and operations expertise with big data, AI, and advanced analytics. Heritage AspenTech's unique asset lifecycle approach and market-leading solutions help customers achieve new levels of efficiency, accelerate innovation and reduce emissions and waste, without compromising safety.

Heritage AspenTech has developed its applications to design and optimize industrial operations across three principal business areas: engineering, manufacturing and supply chain, and asset performance management. Heritage AspenTech is a recognized technology leader in providing process optimization and asset performance management software for each of these business areas. With its mission to digitally transform the industries we serve by optimizing their assets to run safer, greener, longer and faster, Heritage AspenTech is also a global leader in helping companies achieve their sustainability goals while achieving operational excellence.

Customers use our solutions to help advance sustainability technology pathways in improving resource efficiencies, such as energy, water or feedstock; supporting energy transition and decarbonization initiatives, including integrating renewable and alternative energy sources, such as biofuels; innovating new approaches for the hydrogen economy and carbon capture; and, enabling recycling efficiencies for waste reduction throughout operations with advanced simulation and scale-up solutions.

OSI Business (Digital Grid Management)

Our OSI business offers operational technology (OT) solutions that enable electric, gas, and water utilities and asset operators to manage and optimize the digital grid, incorporating all types of generation, industrial cogeneration, transmission, distribution, and microgrids. Utilities, industry, and institutions use OSI solutions to transform and digitize the grid to seamlessly incorporate renewable energy and storage, to achieve reliability, maximize cybersecurity, and minimize peak loading.

Our OSI business' energy management solution (EMS) monitors, controls, and optimizes the increasingly interconnected transmission networks and generation fleets to help manage grid stability and ensure security and regulatory compliance. Our advanced distribution management solution (ADMS), distributed energy resource management solution (DERMS) and Outage Management offerings provide system resiliency, efficiency, and safety by monitoring, controlling and modeling the distribution network as utilities seek to increase reliability, predict and react to increasingly dynamics supply and demand patterns, resolve outages faster and in a more automated manner, and manage field service digitally.

SSE Business (Subsurface Science & Engineering)

Our SSE business is a leading provider of geoscience and modeling software for optimization across subsurface engineering and operations. With over 30 years of technology experience in geophysics, petrophysics, geological and reservoir modeling, SSE software empowers decision makers to reduce uncertainty, improve confidence, minimize risk, and support responsible asset management. Used extensively by the global energy industry, SSE solutions also have applications that extend into geothermal energy, and carbon capture and storage.

Our SSE business provides end-to-end workflows from seismic analysis and interpretation to reservoir and production simulation and from asset appraisal to operational planning and execution, to optimize production and utilization and minimize energy use, water use, and fugitive emissions. SSE software is also employed to screen and assess oil and saline aquifer reservoirs for CO_2 sequestration and to monitor CO_2 storage.

Business Segments

Prior to the Transaction, the Industrial Software Business had two operating and reportable segments: OSI Inc. and the SSE business. The Transaction resulted in the creation of a third operating and reportable segment: Heritage AspenTech. During the three months ended September 30, 2022, we completed certain integration activities and changes to our organizational structure that triggered a change in the composition of our operating and reportable segments. As a result, beginning with the interim period ended September 30, 2022, AspenTech is comprised of a single operating and reportable segment. Accordingly, we have restated our operating and reportable segment information for fiscal 2022 and 2021. Our chief operating decision maker is our President and Chief Executive Officer.

Recent Events

On May 5, 2023, we entered into a share repurchase program for up to \$100.0 million of our outstanding shares of common stock in fiscal years 2023 and 2024, subject to the terms of the program. The program includes the ASR Program to repurchase up to \$100.0 million of AspenTech's common stock. The ASR Program settled on August 7, 2023.

On July 27, 2022, we announced that we entered into a definitive agreement to acquire Mining Software Holdings Pty Ltd ("Micromine"), a global leader in design and operational management solutions for the metals and mining industry, from private equity firm Potentia Capital and other sellers for AU \$900.0 million in cash (approximately \$623.0 million USD based on foreign currency exchange rate at the time of announcement). We previously intended to finance the transaction primarily through debt financing under the Emerson Credit Agreement (described below). In connection with the agreement to purchase Micromine, and to mitigate the impact of the foreign currency exchange associated with the transaction, we also entered into foreign currency forward contracts on August 2, 2022 that settled on February 6, 2023. We entered into an additional foreign currency forward contract on February 6, 2023 that ultimately terminated on June 21, 2023.

On July 28, 2023, we entered into the Plantweb Optics Analytics Assignment and License Agreement with Emerson for the purchase of Emerson's Plantweb Optics Analytics software and the perpetual and royalty-free licensing of other Emerson intellectual property for \$12.5 million, paid on July 28, 2023.

On August 1, 2023, we announced the termination of the agreement to purchase Micromine. We, along with the sellers of Micromine, had been waiting to secure a final Russian regulatory approval as a condition to the closing of the transaction. As this process continued, the timing and requirements necessary to get this approval became increasingly unclear. This lack of clarity on the potential for, and timing of, a successful review led us and the sellers of Micromine to this mutual course of action.

On August 1, 2023, we announced that the Board approved a share repurchase authorization (the "Share Repurchase Authorization"), pursuant to which we may repurchase up to \$300.0 million in the aggregate of our outstanding shares of common stock, by means of open market transactions, block transactions, privately negotiated purchase transactions or any other purchase techniques, including 10b5-1 trading plans. The Share Repurchase Authorization will commence after the conclusion of our ASR Program.

On August 18, 2023, the Emerson Credit Agreement was terminated in connection with the termination of the agreement to purchase Micromine.

Key Components of Operations

Revenue

We generate revenue primarily from the following sources:

License and Solutions Revenue. We sell our software products to end users primarily under fixed term licenses. We also sell integrated solutions to our end users under perpetual software licenses along with professional services and hardware by OSI. For customer contracts entered into by the OSI business on or after January 1, 2023 we account for the OSI software license, hardware, maintenance, and professional services as separate and distinct performance obligations. See Note 2, "Significant Accounting Policies" to our Consolidated and Combined Financial Statements for more information.

Maintenance Revenue. We provide customers technical support, software assurance patch management services and the right to receive any when-and-if available updates to software. Our technical support services are provided from our customer support centers throughout the world, as well as via email and through our support website.

Services and Other Revenue. We provide training and professional services to our customers. Our professional services are focused on implementing our technology in order to improve customers' plant performance and gain better operational data. Customers who use our professional services typically engage us to provide those services over periods of up to 24 months. We charge customers for professional services on a time-and-materials or fixed-price basis. We provide training services to our customers, including on-site, Internet-based and customized training.

Cost of Revenue

Cost of License and Solutions. Our cost of license revenue consists of (i) royalties, (ii) amortization of capitalized software and intangible assets associated with developed technology, and (iii) distribution fees.

Cost of Maintenance. Our cost of maintenance revenue consists primarily of personnel-related costs of providing our customers technical support, software assurance patch management services and the right to receive any when-and-if available updates to software.

Cost of Services and Other. Our cost of services and other revenue consists primarily of personnel-related and external consultant costs associated with providing our customers professional services and training.

Operating Expenses

Selling and Marketing Expenses. Selling and marketing expenses consist primarily of the personnel and travel expenses related to the effort expended to license our products and services to current and potential customers, as well as for overall management of customer relationships. Marketing expenses include expenses needed to promote our company and our products and to conduct market research to help us better understand our customers and their business needs, and expenses resulted from amortization of intangible assets associated with customer relationships and backlog.

Research and Development Expenses. Research and development expenses consist primarily of amortization of developed technology, personnel expenses related to the creation of new software products, enhancements and engineering changes to existing products.

General and Administrative Expenses. General and administrative expenses include the personnel expenses of corporate and support functions, such as executive leadership and administration groups, finance, legal, human resources and corporate communications, and other costs, such as outside professional and consultant fees, amortization of intangible assets associated with certain purchased software, and the provision for bad debt on accounts receivable.

Restructuring Costs. Restructuring costs were related to the undertaking of certain restructuring transactions in accordance with the restructuring plan attached to the Transaction Agreement to separate the OSI business and the SSE business from Emerson's other business activities and to consolidate such separated business under a holding company, which was contributed to AspenTech as part of the Transaction.

Other Income and Expenses

Interest Income (Expense). Interest income is recorded for financing components under Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606) or Topic 606. When a contract includes a significant financing component, we generally receive the majority of the customer consideration after the recognized and increase interest income by a corresponding amount. Interest income also includes interest earned on the Company's receivable balances under the cash pooling arrangements and debt agreements with Emerson and on the interest-bearing cash balances held at our designated financial institutions worldwide. Interest expense is primarily related to outstanding borrowings under our Amended and Restated Credit Agreement and payable balances under the cash pooling arrangements and balances under the cash pooling arrangements with Emerson.

Other (Expense) Income, Net. Other (expense) income, net is comprised primarily of unrealized gains and losses on foreign currency forward contracts and unrealized and realized foreign currency exchange gains and losses generated from the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our entities.

Provision for Income Taxes. Provision for income taxes is comprised of domestic and foreign taxes. We record interest and penalties related to income tax matters as a component of income tax expense. Our effective income tax rate may fluctuate

between fiscal years and from quarter to quarter due to items arising from discrete events, such as tax benefits from the disposition of employee equity awards, settlements of tax audits and assessments and tax law changes. Our effective income tax rate is also impacted by, and may fluctuate in any given period because of, the composition of income in foreign jurisdictions where tax rates differ.

Change in Fiscal Year

On the Closing Date, we changed our fiscal year end from September 30 to June 30. As a result, our fiscal year 2023 results of operations, cash flows, and all transactions impacting stockholders' equity presented in this Annual Report on Form 10-K are for the twelve-month period ended June 30, 2023 whereas those same items for our fiscal year 2022 are for the nine-month period ended June 30, 2022 and for our fiscal year 2021 are for the twelve-month period ended September 30, 2021, unless otherwise noted. As such, the Company's fiscal year 2022, or fiscal 2022, refers to the period from October 1, 2021 to June 30, 2022.

This Annual Report on Form 10-K also includes unaudited consolidated and combined statements of operations and cash flows for the twelve months ended June 30, 2022; see Note 23, "Transition Period Comparative Data" to our Consolidated and Combined Financial Statements for further information.

The discussion below in the Results of Operations section provides a comparison for the twelve months ended June 30, 2023 to the unaudited twelve months ended June 30, 2022.

Key Business Metrics

Background

We utilize key business metrics to track and assess the performance of our business. We have identified the following set of appropriate business metrics in the context of our evolving business:

- Annual Contract Value
- Total Contract Value
- Bookings

We also use the following non-GAAP metrics in addition to GAAP measures to track our business performance:

- Free cash flow
- Non-GAAP operating income

We make these measures available to investors and none of these metrics should be considered as an alternative to any measure of financial performance calculated in accordance with GAAP.

Annual Contract Value

Annual contract value (ACV) is an estimate of the annual value of our portfolio of term license and software maintenance and support (SMS) contracts, the annual value of SMS agreements purchased with perpetual licenses, and the annual value of standalone SMS agreements purchased with certain legacy term license agreements, which have become an immaterial part of our business.

Comparing ACV for different dates can provide insight into the growth and retention rates of our recurring software business because ACV represents the estimated annual billings associated with our recurring license and maintenance agreements at any point in time. Management uses the ACV business metric to evaluate the growth and performance of our business as well as for planning and forecasting purposes. We believe that ACV is a useful business metric to investors as it provides insight into the growth component of our software business.

ACV generally increases as a result of new term license and SMS agreements with new or existing customers, renewals or modifications of existing term license agreements that result in higher license fees due to a contractually-agreed price

escalation or an increase in the number of tokens (units of software usage) or products licensed, or an increase in the value of licenses delivered.

ACV is adversely affected by term license and SMS agreements that are renewed at a lower entitlement level or not renewed, a decrease in the value of licenses delivered, and, to a lesser extent, by customer agreements that become inactive during the agreement's term because, in our determination, amounts due (or which will become due) under the agreement are not collectible. As ACV is an estimate of annual billings, it will generally not include contracts with a term of less than one year. Because ACV represents all other active term software and SMS agreements, it may include amounts under agreements with customers that are delinquent in paying invoices, that are in bankruptcy proceedings, are subject to termination by the customer or where payment is otherwise in doubt.

As of June 30, 2023, customer agreements representing approximately 84% of our ACV (by value) were denominated in U.S. dollars. For agreements denominated in other currencies, we use a fixed historical exchange rate to calculate ACV in dollars rather than using current exchange rates, so that our calculation of growth in ACV is not affected by fluctuations in foreign currencies. We have not applied this methodology retroactively for the OSI business software amounts delivered prior to October 2020, but do not believe this to have a material impact on our reported ACV metric due to the high USD-denominated concentration of the OSI business. As of June 30, 2023, approximately 96% of OSI Inc. ACV was denominated in USD.

For term license agreements that contain professional services or other products and services, we have included in ACV the portion of the invoice reflective of the relative fair value of the term license rather than the portion of the invoice attributed to the term license as outlined in the agreement. We believe that this methodology more accurately allocates any discounts or premiums to the different elements of the agreement.

We estimate that the pro forma ACV of AspenTech grew by approximately 11.8% during fiscal 2023, from \$791.2 million as of June 30, 2022 to \$884.9 million as of June 30, 2023. We estimate that pro forma ACV grew by approximately 7.8% during fiscal 2022, from \$733.8 million as of June 30, 2021 to \$791.2 million as of June 30, 2022.

Total Contract Value

Total Contract Value ("TCV") is the aggregate value of all payments received or to be received under all active term license and perpetual SMS agreements, including maintenance and escalation. TCV of AspenTech was \$3.6 billion and \$3.2 billion as of June 30, 2023 and 2022, respectively.

Bookings

Bookings is the total value of customer term license and perpetual license SMS contracts signed and delivered in the current period, less the value of such contracts signed in the current period where the initial licenses and SMS agreements are not yet deemed delivered, plus term license contracts and perpetual license SMS contracts signed in a previous period for which the initial licenses are deemed delivered in the current period.

The bookings of AspenTech was \$1.078 billion during the twelve-month period ended June 30, 2023, compared to \$937.9 million and \$906.7 million during the nine-month period ended June 30, 2022 and the twelve-month period ended September 30, 2021, respectively. The change in bookings is related to the timing of renewals.

Non-GAAP Business Metrics

We use a non-GAAP measure of free cash flow to analyze cash flows generated from our operations. Management believes that this financial measure is useful to investors because it permits investors to view our performance using the same tools that management uses to gauge progress in achieving our goals. We believe this measure is also useful to investors because it is an indication of cash flow that may be available to fund investments in future growth initiatives or to repay borrowings under the Amended and Restated Credit Agreement, and it is a basis for comparing our performance with that of our competitors. The presentation of free cash flow is not meant to be considered in isolation or as an alternative to cash flows from operating activities as a measure of liquidity.

The following table provides a reconciliation of GAAP net cash provided by operating activities to free cash flow for the indicated periods (in thousands):

	 Year Ended June 30, 2023		Nine Months Ended June 30, 2022		Year Ended tember 30, 2021
		(Doll	ars in Thousands)		
Net cash provided by operating activities (GAAP)	\$ 299,209	\$	28,962	\$	54,800
Purchase of property, equipment, and leasehold improvements	(6,577)		(2,263)		(6,185)
Payments for capitalized computer software development costs	(366)		(508)		—
Free cash flow (non-GAAP) ⁽¹⁾	\$ 292,266	\$	26,191	\$	48,615

(1) For the interim period beginning January 1, 2023, we no longer exclude acquisition and integration planning related payments from our computation of free cash flow. Free cash flow for all prior periods presented has been revised to the current period computation methodology.

Non-GAAP income from operations excludes certain non-cash and non-recurring expenses, and is used as a supplement to income from operations presented on a GAAP basis. We believe that non-GAAP income from operations is a useful financial measure because removing certain non-cash and other items provides additional insight into recurring profitability and cash flow from operations.

The following table presents our (loss) from operations, as adjusted for stock-based compensation expense, amortization of intangible assets, and other items, such as the impact of acquisition and integration planning related fees, for the indicated periods (in thousands):

	Year Ended June 30,				Year Ended September 30,		Twelve-Mo 2023 Compa Month Pe	red to Nine-	Nine-Month Period 202 Compared to Twelve- Month Period 2021		
		2023	_	2022		2021	\$	%	\$	%	
GAAP income (loss) from operations	\$	(183,065)	\$	36,157	\$	(60,439)	\$(219,222)	(606.3)%	\$ 96,596	(159.8)%	
Plus:											
Stock-based compensation		84,850		15,763		1,744	69,087	438.3	14,019	803.8	
Amortization of intangible assets ⁽¹⁾		485,486		116,743		120,330	368,743	315.9	(3,587)	(3.0)	
Acquisition and integration planning related fees		7,556		3,749		6,102	3,807	101.5	(2,353)	(38.6)	
Non-GAAP income from operations	\$	394,827	\$	172,412	\$	67,737	\$ 222,415	129.0 %	\$ 104,675	154.5 %	

(1) The Company has elevated amortization of intangible assets following the close of the Transaction with Emerson. As a result, the Company expects its amortization of intangibles assets to remain elevated for the next several years as the related asset balance is amortized over the respective expected useful lives of the intangible assets.

Results of Operations

The following table sets forth the results of operations and the period-over-period percentage change for the twelvemonths ended June 30, 2023 and 2022, and the nine-month periods ended June 30, 2022 and 2021. A discussion regarding our financial condition and results of operations for the year ended June 30, 2023 compared to the year ended June 30, 2022 is presented below. A discussion regarding our financial condition and results of operations for the nine-month period ended June 30, 2022 compared to the nine-month period ended June 30, 2021, can be found under Item 7 in our Transition Report on Form 10-KT for the fiscal year ended June 30, 2022, filed with the SEC on August 25, 2022.

		Twelve Months Ended June 30,				Nine Months H	Ende	d June 30,	Twelve-Month Period 2023	Nine Month Period 2022 Compored to	
(Dollars in Thousands)		2023		2022		2022		2021	Compared to 2022 %	Compared to 2021 %	
			(1	unaudited)							
Revenue:											
License and solutions	\$	669,185	\$	322,804	\$	278,589	\$	136,699	107.3 %	103.8 %	
Maintenance		316,911		128,321		103,786		68,027	147.0	52.6	
Services and other		58,082		31,186		22,921		18,899	86.2	21.3	
Total revenue		1,044,178		482,311		405,296		223,625	116.5	81.2	
Cost of revenue:											
License and solutions		279,564		159,646		125,258		90,793	75.1	38.0	
Maintenance		36,650		19,265		15,030		14,376	90.2	4.5	
Services and other		57,375		21,005		16,108		14,321	173.1	12.5	
Total cost of revenue		373,589		199,916		156,396		119,490	86.9	30.9	
Gross profit		670,589		282,395		248,900		104,135	137.5	139.0	
Operating expenses:											
Selling and marketing		482,656		133,463		108,463		78,311	261.6	38.5	
Research and development		209,347		79,840		64,285		44,091	162.2	45.8	
General and administrative		161,651		46,496		39,878		26,021	247.7	53.3	
Restructuring costs		—		324		117		2,267	(100.0)	(94.8)	
Total operating expenses		853,654		260,123		212,743		150,690	228.2	41.2	
(Loss) income from operations		(183,065)		22,272		36,157		(46,555)	(922.0)	(177.7)	
Other (expense) income, net		(29,418)		(1,048)		310		(4,000)	2,707.1	(107.8)	
Interest income, net		31,917		3,222		3,494		157	890.6	2,125.5	
(Loss) income before provision for income taxes		(180,566)		24,446		39,961		(50,398)	(838.6)	(179.3)	
(Benefit) for income taxes		(72,806)		(17,498)		(13,185)		(40,992)	316.1	(67.8)	
Net (loss) income	\$	(107,760)	\$	41,944	\$	53,146	\$	(9,406)	(356.9)%	(665.0)%	

The following table sets forth the results of operations as a percentage of total revenue for certain financial data for the years ended June 30, 2023 and 2022, and the nine-month periods ended June 30, 2022 and 2021.

	Twelve Months Ende	ed June 30,	Nine Months Ended June 30,			
(% of Revenue)	2023	2022	2022	2021		
_		(unaudited)				
Revenue:						
License and solutions	64.1 %	66.9 %	68.7 %	61.1 %		
Maintenance	30.4	26.6	25.6	30.4		
Services and other	5.5	6.5	5.7	8.5		
Total revenue	100.0	100.0	100.0	100.0		
Cost of revenue:						
License and solutions	26.8	33.1	30.9	40.6		
Maintenance	3.5	4.0	3.7	6.4		
Services and other	5.5	4.4	4.0	6.4		
Total cost of revenue	35.8	41.5	38.6	53.4		
Gross profit	64.2	58.5	61.4	46.6		
Operating expenses:						
Selling and marketing	46.2	27.7	26.8	35.0		
Research and development	20.0	16.6	15.9	19.7		
General and administrative	15.5	9.6	9.8	11.6		
Restructuring costs		0.1		1.0		
Total operating expenses	81.7	54.0	52.5	67.3		
(Loss) income from operations	(17.5)	4.6	8.9	(20.8)		
Other (expense) income, net	(2.8)	(0.2)	0.1	(1.8)		
Interest income, net	3.1	0.7	0.9	0.1		
(Loss) income before provision for income taxes	(17.2)	5.1	9.9	(22.5)		
(Benefit) for income taxes	(7.0)	(3.6)	(3.3)	(18.3)		
Net (loss) income	(10.2)%	8.7 %	13.2 %	(4.2)%		

Revenue

Total revenue for the twelve-month period ended June 30, 2023 was \$1.0 billion, an increase of \$561.9 million, or 116.5% compared with the twelve-month period ended June 30, 2022. The increase reflected the Heritage AspenTech acquisition pursuant to the Transaction which contributed \$760.8 million of revenue during the twelve-month period ended June 30, 2023.

License and Solutions Revenue

License and solutions revenue includes primarily term software licenses sold by Heritage AspenTech and SSE and integrated solutions sold by OSI Inc. License and solutions revenue changes are due to sales to new customers or the loss of existing customers, the timing of multi-year term license renewals, new offerings to existing customers, and the timing of progress on integrated solutions.

The increase in license and solutions revenue of \$346.4 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, was primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in license and solutions revenue of \$366.2 million. License and solutions revenue from SSE increased by \$12.9 million, which was primarily driven by an increase in license sales during the twelve-month period ended June 30, 2023, while license and solutions revenue from OSI decreased \$32.8 million due to changes in estimates and contract modifications, associated with certain integrated solution projects, that resulted in a reduction of revenue.

Maintenance Revenue

Maintenance revenue includes technical support, software assurance patch management services and the right to receive any when-and-if available updates to software. Maintenance revenue changes as a result of adding new term or perpetual software license customers, the timing of maintenance renewals for existing perpetual software license customers, the scope of maintenance offerings customers subscribe to, and the escalation of annual payments.

The increase in maintenance revenue of \$188.6 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, was primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in maintenance revenue of \$193.8 million. Maintenance revenue from OSI increased by \$6.8 million due to the completion and timing of certain integrated solution projects, while maintenance revenue from SSE decreased by \$12.0 million, primarily attributable to the expiration of certain customers' maintenance renewals.

Services and Other Revenue

Services and other revenue includes professional services that are not considered part of an integrated software solution, in addition to training services. Time-and-materials contracts are based upon hours worked and contractually agreed-upon hourly rates. Fixed-price engagements recognize revenue using the proportional performance method by comparing the costs incurred to the total estimated project cost.

Services and other revenue increased by \$26.9 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in services and other revenue of \$26.9 million.

Cost of Revenue

Cost of License and Solutions Revenue

Cost of license and solutions revenue increased by \$119.9 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in cost of license and solutions revenue of \$124.0 million. License gross profit margin was 58.2% for the twelve-month period ended June 30, 2023, compared to 50.5% for the twelve-month period ended June 30, 2022. The improvement on gross profit margin in fiscal 2023 was attributable to the Heritage AspenTech acquisition pursuant to the Transaction, which contributed a higher gross profit margin on a weighted average basis as compared to the prior fiscal year.

Cost of Maintenance Revenue

Cost of maintenance revenue increased by \$17.4 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in cost of maintenance revenue of \$21.1 million. This was offset by a \$3.8 million decrease in cost of maintenance revenue due to reduced compensation expenses resulting from a prior restructuring. Maintenance gross profit margin was 88.4% during the twelve-month period ended June 30, 2023, compared to 85.0% for the twelve-month period ended June 30, 2022.

Cost of Services and Other Revenue

The timing of revenue and expense recognition on professional service arrangements can impact the comparability of cost and gross profit margin of professional services revenue from year to year. For example, revenue from fixed-price engagements is recognized using the proportional performance method based on the ratio of costs incurred to the total estimated project costs.

Cost of services and other revenue increased by \$36.4 million during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022, primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in cost of services and other revenue of \$36.4 million. Service and other revenue gross profit margin was 1.2% for the twelve-month period ended June 30, 2023 and 32.6% for the twelve-month period ended June 30, 2022.

Gross Profit

For further discussion of subscription and software gross profit and services and other gross profit, please refer to the "Cost of License and Solutions Revenue," "Cost of Maintenance Revenue," and "Cost of Services and Other Revenue" sections above.

Gross profit increased by \$388.2 million during the twelve-month period ended June 30, 2023 as compared to the twelvemonth period ended June 30, 2022. Gross profit margin increased to 64.2% during the twelve-month period ended June 30, 2023 compared to 58.6% in the twelve-month period ended June 30, 2022 primarily due to the acquisition of Heritage AspenTech pursuant to the Transaction.

Operating Expenses

Selling and Marketing Expense

Selling and marketing expense was \$482.7 million for the twelve-month period ended June 30, 2023, an increase of \$349.2 million as compared to the twelve-month period ended June 30, 2022. The increase was primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in selling and marketing expense of \$355.7 million, primarily related to amortization of intangible assets of \$257.8 million. This was partially offset by a decrease of \$6.5 million in selling and marketing expenses due to fewer headcount and compensation expenses.

Research and Development Expense

Research and development expense was \$209.3 million for the twelve-month period ended June 30, 2023, an increase of \$129.5 million as compared to the twelve-month period ended June 30, 2022. The increase was primarily due to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in research and development expense of \$120.9 million, and an increase of \$8.7 million in research and development expenses as a result of greater headcount and compensation expenses.

General and Administrative Expense

The increase of \$115.2 million in general and administrative expense during the twelve-month period ended June 30, 2023 as compared to the twelve-month period ended June 30, 2022 was primarily related to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase in general and administrative expense of \$117.6 million, an increase of \$2.8 million as a result of greater compensation and consulting expenses, partially offset by a \$5.2 million decrease due to reduced personnel and facilities expenses as a result of the Heritage AspenTech acquisition pursuant to the Transaction.

Restructuring Costs

Restructuring costs were less than \$0.1 million during the twelve-month period ended June 30, 2023, a decrease of \$0.3 million compared with the twelve-month period ended June 30, 2022.

Non-Operating (Expense)

Other (Expense), Net

Other (expense), net was \$29.4 million for the twelve-month period ended June 30, 2023, an increase of \$28.4 million compared to the twelve-month period ended June 30, 2022. This increase was primarily related to the realized loss on foreign currency forward contracts. See Note 17, "Derivatives", to the Consolidated and Combined Financial Statements for further discussion of the foreign current forward contracts.

Interest Income, Net

Interest income, net was \$31.9 million for the twelve-month period ended June 30, 2023, an increase of \$28.7 million as compared to the twelve-month period ended June 30, 2022. The increase was primarily attributable to the Heritage AspenTech acquisition pursuant to the Transaction, which represented an increase of \$26.9 million resulting from interest income earned on our long-term term revenue contracts.

Provision (Benefit) for Income Taxes

The effective tax rate for the periods presented is primarily the result of income earned in the United States taxed at U.S. federal and state statutory income tax rates, income earned in foreign tax jurisdictions taxed at the applicable rates, as well as the impact of permanent differences between book and tax income.

Our effective tax rate was 40.3% and (71.6)% for the twelve-month periods ended June 30, 2023 and 2022, respectively.

We recognized income tax benefits of \$72.8 million for the twelve-month period ended June 30, 2023 compared to \$17.5 million for the twelve-month period ended June 30, 2022. Our tax benefits for the twelve-month period ended June 30, 2023 was favorably impacted primarily by the Foreign-Derived Intangible Income ("FDII") deduction, the benefit from the deduction of state taxes, the difference in foreign tax rates, and the change in valuation allowance on certain jurisdictions, offset by Global Intangible Low-Taxed Income ("GILTI"), stock-based compensation, and return to provision adjustment. The tax benefits for the twelve-month period ended June 30, 2022 was favorably impacted primarily by the FDII deduction and the benefit from the remeasurement of state deferred taxes related to the Transaction.

As of June 30, 2023, we maintained a valuation allowance in the United States primarily for certain deferred tax assets related to the investment in a joint venture and on state R&D credits. We also maintained a valuation allowance on certain foreign subsidiary tax attributes, primarily net operating loss carryforwards and other deferred tax assets because it is more likely than not that a benefit will not be realized. As of June 30, 2023 our total valuation allowance was \$16.0 million.

Liquidity and Capital Resources

Resources

As of June 30, 2023 and 2022, our principal sources of liquidity consisted of \$241.2 million and \$449.7 million in cash and cash equivalents, respectively.

We believe our existing cash on hand and cash flows generated by operations are sufficient for at least the next 12 months to meet our operating requirements, including those related to salaries and wages, working capital, capital expenditures, and other liquidity requirements associated with operations. We may need to raise additional funds if we decide to make one or more acquisitions of businesses, technologies or products. If additional funding for such purposes is required beyond existing resources and our Amended and Restated Credit Agreement described below, we may not be able to affect a receivable, equity or debt financing on terms acceptable to us or at all.

Bridge Facility

On July 27, 2022, the Company entered into the \$475.0 million Bridge Facility with JPMorgan to finance the Micromine acquisition. The Bridge Facility was entered into under the existing Amended and Restated Credit Agreement. The Company could have elected that each incremental borrowing under the Bridge Facility bear interest at a rate per annum equal to (a) the Alternate Base Rate ("ABR"), plus the applicable margin or (b) the Adjusted Term Secured Overnight Financing Rate ("SOFR"), plus the applicable margin.

On December 23, 2022, the Company terminated the Bridge Facility and entered into the Emerson Credit Agreement, which provides for an aggregate term loan commitment of \$630.0 million.

On August 18, 2023, the Emerson Credit Agreement was terminated in connection with the termination of the agreement to purchase Micromine. No amounts were outstanding under the Emerson Credit Agreement as of or subsequent to June 30, 2023 through the termination date.

Refer to Note 19, "Related-Party Transactions", to our Consolidated and Combined Financial Statements for further discussion of the Emerson Credit Agreement.

Amended and Restated Credit Agreement

The Amended and Restated Credit Agreement provides for a \$200.0 million secured revolving credit facility and a \$320.0 million secured term loan facility.

On January 17, 2023, the Company paid off the outstanding balance of our existing term loan facility of \$264.0 million, plus accrued interest.

For a more detailed description of the Amended and Restated Credit Agreement, see Note 13, "Debt" to our Consolidated and Combined Financial Statements.

Cash Balance and Cash Flows

Our cash and cash equivalents were \$241.2 million and \$449.7 million as of June 30, 2023 and 2022, respectively.

Operating cash flows for the fiscal year ended June 30, 2023 was \$299.2 million as compared to \$29.0 million for the nine-month period ended June 30, 2022. The increase was primarily attributable to the acquisition of Heritage AspenTech as part of the Transaction.

The table below summarizes our operating and free cash flow (in thousands).

	Year Ended June 30, 2023			ine Months Ended June 30, 2022	Year Ended September 30, 2021	
Net cash provided by operating activities (GAAP)	\$	299,209	\$	28,962	\$	54,800
Purchase of property, equipment, and leasehold improvements		(6,577)		(2,263)		(6,185)
Payments for capitalized computer software development costs		(366)		(508)		—
Free cash flow (non-GAAP) ⁽¹⁾	\$	292,266	\$	26,191	\$	48,615

(1) Effective January 1, 2023, we no longer exclude acquisition and integration planning related payments from our computation of free cash flow. Free cash flow for all prior periods presented has been revised to the current period computation methodology.

Contractual Obligations and Requirements

Our contractual obligations, which consisted of borrowings, interest, and fees under our Amended and Restated Credit Agreement, operating lease commitments for our headquarters and other facilities, royalty obligations, equity method investments, deferred acquisition payments, and standby letters of credit and other obligations, were as follows as of June 30, 2023 (in thousands):

	Payments due by Period									
		Total	Less	than 1 Year	1	to 3 Years	3	8 to 5 Years		More than 5 Years
Contractual Cash Obligations:										
Operating leases ⁽¹⁾	\$	76,639	\$	14,811	\$	17,583	\$	12,693	\$	31,552
Royalty obligations		15,347		3,456		5,647		4,788		1,456
Equity method investments		2,673		2,673						
Deferred acquisition payments		8,273		8,273						
Other purchase obligations		54,679		42,031		12,571		77		_
Total contractual cash obligations	\$	157,611	\$	71,244	\$	35,801	\$	17,558	\$	33,008
Other Commercial Commitments:										
Standby letters of credit		38,992		26,091		6,303		3,520		3,078
Total commercial commitments	\$	196,603	\$	97,335	\$	42,104	\$	21,078	\$	36,086

(1) The \$76.6 million of contractual obligations includes rent and fixed fees for all of our operating leases, including those not recognized on the balance sheet.

We are not currently a party to any other material purchase contracts related to future capital expenditures.

The standby letters of credit secured our performance on professional services contracts, certain facility leases and potential liabilities as of June 30, 2023. The letters of credit expire at various dates through fiscal 2030.

The above table does not reflect a liability for uncertain tax positions of \$9.1 million as of June 30, 2023. We estimate that none of this amount will be paid within the next year and we are currently unable to reasonably estimate the timing of payments for the remainder of the liability.

Effects of Inflation

We do not believe that inflation has had a material impact on our business or operating results during the periods presented. However, inflation may in the future have an impact on our ability to execute on our acquisition strategy. Inflationary costs could adversely affect our business, financial condition and results of operations. In addition, increased inflation has had, and may continue to have, an effect on interest rates. Increased interest rates may adversely affect our borrowing rate and our ability to obtain, or the terms under which we can obtain, any potential additional funding.

Critical Accounting Estimates and Judgments

Our consolidated and combined financial statements are prepared in accordance with GAAP. The preparation of our financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. The most significant areas where management judgments and estimates impact the primary consolidated and combined financial statements are described below. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

For further information on our significant accounting policies, refer to Note 2, "Significant Accounting Policies," to our Consolidated and Combined Financial Statements.

Revenue Recognition

In accordance with ASC 606, Revenue from Contracts with Customers, we account for a customer contract when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable that we will collect substantially all of the consideration to which we are entitled to. We evaluate our contracts with customers to identify the promised goods or services and recognize revenue for the identified performance obligations at the amount we expect to be entitled to in exchange for those goods or services. A performance obligation is a promise in a contract to transfer a distinct good or service to a customer. Revenue is recognized when, or as, performance obligations are satisfied, and control has transferred to the customer.

We disaggregate our revenue into three categories: (i) license and solutions, (ii) maintenance and (iii) services and other.

License and solutions

License and solutions revenue is primarily derived from term software licenses. It also includes OSI perpetual and term software licenses sold, along with professional services and recognized as revenue in one performance obligation. See Note 3, "Revenue from Contracts with Customers" and Note 22, "Segment and Geographic Information," to our Consolidated and Combined Financial Statements for additional information about our revenues disaggregated by region, and type of performance obligation.

Term software license revenue is recognized at a point in time when control transfers to the customer, which generally aligns with the first day of the contractual term.

Prior to the third quarter of fiscal 2023, OSI software licenses were primarily sold with professional services and hardware to form an integrated solution for the customer. The professional services and hardware sold with the license significantly customized the underlying functionality and usability of the software. As such, neither the license, hardware, nor professional services were considered distinct within the context of the contract and were therefore considered a single performance obligation. Because the integrated solution had no alternative use to us and we held an enforceable right to payment, revenue was recognized over time (typically one to two years) using an input measure of progress based on the ratio of actual costs incurred to date to the total estimated cost to complete. For integrated solution contracts executed prior to the third quarter of fiscal 2023, revenue continues to be recognized over time until the implementation is complete.

At the start of the third quarter of fiscal 2023, we completed a series of business transformation activities relating to OSI products and services in conjunction with its ongoing integration activities. As part of a change in the related go-to-market strategy, we have invested in tools and processes to simplify and streamline the implementation services to significantly reduce

the complexity and interdependency associated with its software. In addition, we have identified and trained several third-party ISPs to operate autonomously and directly with OSI customers to implement its products.

Accordingly, effective January 1, 2023 following the completion of these business transformation activities, for all new OSI contracts, we account for the OSI software license, hardware, maintenance, and professional services as separate and distinct performance obligations. Software license revenue is recognized at a point in time when control transfers to the customer, which generally aligns with the first day of the contractual term. Hardware revenue is recognized at the point in time when control transfers to the customer, which generally occurs upon delivery. The recognition of maintenance revenue at OSI is unchanged. Maintenance revenue continues to be recognized ratably over the maintenance term. Professional services revenue is recognized over time (typically one to two years) using the proportional performance method by comparing the costs incurred to the total estimated project costs.

Maintenance

Software maintenance is recognized ratably over the maintenance term and includes technical support, software assurance patch management services and the right to receive any when-and-if available updates to the software. For term software licenses, maintenance is included with the license. For perpetual software licenses, maintenance is initially sold with the license and subsequently sold separately, both primarily on an annual basis. Software maintenance does not significantly modify or otherwise depend on other performance obligations within the contracts and therefore is accounted for as a separate performance obligation. For maintenance sold with the integrated solution, the maintenance term begins once implementation is complete.

Services and other

All of our businesses offer services, which consist of professional services and training.

Professional service revenue is provided to customers on a time-and-materials ("T&M") or fixed-price basis. The obligation to provide professional services is generally satisfied over time, with the customer simultaneously receiving and consuming the benefits as we satisfy our performance obligation. Professional service revenue is recognized by measuring progress toward the completion of our obligations. We recognize professional services revenue for our T&M contracts based upon hours worked at contractually agreed-upon hourly rates. Fixed-price engagements recognize revenue using the proportional performance method by comparing the costs incurred to the total estimated project cost. The use of the proportional performance method depends on our ability to reliably estimate the costs to complete a project. Historical experience is used as a basis for future estimates to complete current projects. Additionally, we believe that costs are the best available measure of performance. Out-of-pocket expenses which are reimbursed by customers are recorded as revenue.

Training services provided to customers include on-site, internet-based and customized training. These services are considered separate performance obligations as they do not significantly modify, integrate or otherwise depend on other performance obligations included in a contract. Revenue is recognized as the customer consumes the benefits of the services we provide.

Contracts with Multiple Performance Obligations

We allocate total contract consideration to each distinct performance obligation in an arrangement on a relative standalone selling price basis. The standalone selling price reflects the price that would be charged for a specific product or service if it was sold separately in similar circumstances and to similar customers.

When two or more contracts are entered into at or near the same time with the same customer, we evaluate the facts and circumstances associated with the negotiation of those contracts. Where the contracts are negotiated as a package, we will account for them as a single arrangement and allocate the consideration for the combined contracts among the performance obligations accordingly.

When available, we use directly observable transactions to determine the standalone selling prices for performance obligations. If directly observable data is not available when software licenses are sold together with software maintenance in a bundled arrangement, we estimate a standalone selling price for these distinct performance obligations using relevant information, including our overall pricing objectives and strategies, historical pricing data, market consideration and other factors.

Contract Modifications

We sometimes enter into agreements to modify previously executed contracts, which constitute contract modifications. We assess each of these contract modifications to determine (i) if the additional products and services are distinct from the products and services in the original arrangement; and (ii) if the amount of consideration expected for the added products and services reflects the standalone selling price of those products and services, as adjusted for contract-specific circumstances. A contract modification meeting both criteria is accounted for as a separate contract. A contract modification not meeting both requirements is considered a change to the original contract and is accounted for on either (i) a prospective basis as a termination of the existing contract and the creation of a new contract or (ii) a cumulative catch-up basis.

Contract Assets and Contract Liabilities

Payment terms and conditions vary by contract type. Terms generally include a requirement of payment annually over the term of the license arrangement. During the majority of each customer contract term, the amount invoiced is generally less than the amount of revenue recognized to date, primarily because we transfer control of the performance obligation related to the software license at the inception of the contract term, and the allocation of contract consideration to the license performance obligation is a significant portion of the total contract consideration. Therefore, our contracts often result in the recording of a contract asset throughout the majority of the contract term. We record a contract asset when revenue recognized on a contract exceeds the billings.

We record accounts receivable when it has the unconditional right to issue an invoice and receive payment regardless of whether revenue has been recognized. If revenue is not yet recognizable and we have a right to invoice or have received consideration, a contract liability is recorded to defer the revenue until recognition is appropriate. If revenue is recognizable in advance of the right to invoice, and the right to consideration is conditional on something other than the passage of time, a contract asset is recorded until invoicing occurs.

We defer unearned maintenance and service revenue when it has the right to invoice, with recognition of the revenue recognized over the support period. Contract assets and contract liabilities are presented net at the contract level for each reporting period.

Payment Terms

We generally receive payment from a customer after the performance obligation related to the term license has been satisfied, and therefore, our contracts with terms greater than one year generally contain a significant financing component. The significant financing component is calculated utilizing an interest rate that derives the net present value of the performance obligations delivered on an upfront basis based on the allocation of consideration. We have instituted a customer portfolio approach in assigning interest rates. The rates are determined at contract inception and are based on the credit characteristics of the customers within each portfolio.

Perpetual software licenses, sold along with professional services and hardware as an integrated solution, generally require payments from the customer aligned with progress milestones in the contract. Payment terms on invoiced amounts are typically net 30 days. We do not offer return rights for our products and services in the ordinary course of business, and contracts generally do not include customer acceptance clauses.

Goodwill and Other Intangibles Impairment Testing

Assets and liabilities acquired in business combinations are accounted for using the acquisition method and recorded at their respective fair values. Goodwill represents the excess of consideration paid over the net assets acquired and is assigned to the reporting unit that acquires the business. During the nine-month period ended June 30, 2022, we voluntarily changed the date of our annual goodwill impairment test from last day of September to the last day of May due to the Transaction and subsequent change in our fiscal year-end. We test goodwill between tests if events or circumstances indicate a reporting unit's fair value may be less than its carrying value. If an initial qualitative assessment indicates it is more likely than not goodwill may be impaired, it is evaluated by comparing the reporting unit's estimated fair value to its carrying value. An impairment charge would be recorded for the amount by which the carrying value of the reporting unit exceeds the estimated fair value. Estimated fair values are developed primarily under an income approach that discounts estimated future cash flows using risk-adjusted interest rates, as well as earnings multiples or other techniques as warranted. As of the May 31, 2023 annual impairment testing date, the carrying value of our stockholders' equity exceeded our market capitalization. Accordingly, to further validate the reasonableness of the initial qualitative assessment and evaluation, a reconciliation of our market capitalization to the carrying value of our stockholders' equity was performed by calculating an implied control premium. We

concluded that the implied control premium was reasonable based on an assessment performed, which included a comparison to actual control premiums realized in recent comparable market transactions. If our stock price declines and is sustained, further evaluation would be necessary and an impairment of our goodwill may result. No goodwill impairment was recorded for fiscal 2023, 2022, or 2021.

With the exception of certain trade names, all of our identifiable intangible assets are subject to amortization on a straight-line basis over their estimated useful lives. Identifiable intangibles consist of intellectual property such as patented and unpatented technology and trademarks, customer relationships and capitalized software. Identifiable intangible assets are also subject to evaluation for potential impairment if events or circumstances indicate the carrying value may not be recoverable.

Valuation of Assets and Liabilities Acquired in a Business Combination

The accounting for a business combination requires the excess of the purchase price for an acquisition over the net book value of assets acquired to be allocated to identifiable assets, including intangible assets. We engaged an independent thirdparty valuation specialist to assist in the determination of the fair value of intangible assets related to the acquisitions of Heritage AspenTech and OSI. This included the use of certain assumptions and estimates, including the projected revenue for the customer relationship and developed technology intangible asset and the obsolescence rate for the developed technology intangible asset. Although we believe the assumptions and estimates to be reasonable and appropriate, they require judgement and are based on experience and historical information obtained from Heritage AspenTech and OSI.

Recent Accounting Pronouncements

Refer to Note 2 (p) "New Accounting Pronouncements Adopted in Fiscal 2023 and 2022" and Note 2 (q) "Recently Issued Accounting Pronouncements," to our Consolidated and Combined Financial Statements for information about recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

In the ordinary course of conducting business, we are exposed to certain risks associated with potential changes in market conditions. These market risks include changes in currency exchange rates and interest rates which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, if considered appropriate, we may enter into derivative financial instruments such as forward currency exchange contracts.

Foreign Currency Risk

During fiscal 2023 and 2022, approximately 9% and 17% of our total revenue, respectively, was denominated in a currency other than the U.S. dollar. In addition, certain of our operating costs incurred outside the United States are denominated in currencies other than the U.S. dollar. We conduct business on a worldwide basis and as a result, a portion of our revenue, earnings, net assets, and net investments in foreign affiliates is exposed to changes in foreign currency exchange rates. We measure our net exposure for cash balance positions and for cash inflows and outflows in order to evaluate the need to mitigate our foreign exchange risk. We may enter into foreign currency forward contracts to minimize the impact related to unfavorable exchange rate movements. Our largest exposures to foreign currency exchange rates exist primarily with the Euro, Japanese Yen, Pound Sterling, Chinese Yuan, Norwegian Krone, Indonesian Rupiah, Brazilian Real, Canadian Dollar, and Russian Ruble.

During fiscal 2023 and fiscal 2022, we recorded net foreign currency losses (gains) of \$4.1 million and \$(0.3) million, respectively, related to the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our operating units. Our analysis of operating results transacted in various foreign currencies indicated that a hypothetical 10% change in the foreign currency exchange rates could have increased or decreased the consolidated and combined results of operations by approximately \$14.3 million and \$6.0 million for fiscal 2023 and 2022, respectively.

Interest Rate Risk

We place our investments in money market instruments. Our analysis of our investments and interest rates at June 30, 2023 indicated that a hypothetical 100 basis point increase or decrease in interest rates would not have a material impact on the fair value of our investments determined in accordance with an income-based approach utilizing portfolio future cash flows discounted at the appropriate rates.

Investment Risk

We own an interest in a limited partnership investment fund. The primary objective of this partnership is investing in equity and equity-related securities (including convertible debt) of venture growth- stage businesses. We account for the investment in accordance with Topic 323, *Investments - Equity Method and Joint Ventures*. Our total commitment under this partnership is 5.0 million CAD (\$3.7 million USD). Under the conditions of the equity method investment, unfavorable future changes in market conditions could lead to a potential loss up to the full value of our 5.0 million CAD (\$3.7 million USD) commitment. To date, payments to the partnership totaled 3.5 million CAD (\$2.7 million USD) and represents the fair value of our investment as of June 30, 2023. The investment is recorded in non-current assets in our consolidated and combined balance sheet.

Item 8. Financial Statements and Supplementary Data.

The following consolidated and combined financial statements specified by this Item, together with the report thereon of KPMG LLP, are presented following Item 15 of this Annual Report on Form 10-K:

Financial Statements:

Report of Independent Registered Public Accounting Firm

- Consolidated and Combined Statements of Operations for the fiscal year ended June 30, 2023, the nine-month period ended June 30, 2022 and fiscal year ended September 30, 2021
- Consolidated and Combined Statements of Comprehensive (Loss) Income for the fiscal year ended June 30, 2023, the nine-month period ended June 30, 2022 and fiscal year ended September 30, 2021

Consolidated and Combined Balance Sheets as of June 30, 2023 and 2022

Consolidated and Combined Statements of Stockholders' Equity for the fiscal year ended June 30, 2023, the ninemonth period ended June 30, 2022 and fiscal year ended September 30, 2021

Consolidated and Combined Statements of Cash Flows for the fiscal year ended June 30, 2023, the nine-month period ended June 30, 2022 and fiscal year ended September 30, 2021

Notes to Consolidated and Combined Financial Statements

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act, as of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures. In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily applies its judgment in evaluating and implementing possible controls and procedures. The effectiveness of our disclosure controls and procedures is also necessarily limited by the staff and other resources available to us and the geographic diversity of our operations. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2023, our disclosure controls and procedures were effective.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of our Consolidated and Combined Financial Statements, as well as reasonable assurance with respect to safeguarding our assets from unauthorized use or disposition.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement presentation and other results of such systems.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting as of June 30, 2023. In making this evaluation, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013). Management's evaluation included reviewing the documentation of its controls, evaluating the design effectiveness of controls and testing their operating effectiveness. Based on the evaluation, management concluded that as of June 30, 2023, our internal controls over financial reporting were effective.

KPMG LLP, an independent registered public accounting firm, audited the consolidated and combined financial statements included in this Annual Report on Form 10-K and has issued an attestation report on our internal control over financial reporting as of June 30, 2023. Its report is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the fourth fiscal quarter ended June 30, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

During the three months ended June 30, 2023, none of our directors or officers adopted, made certain modifications or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions That Prevent Inspection

Not applicable

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The complete response to this Item regarding the backgrounds of our executive officers and directors and other information required by Items 401, 405, 406 and 407 of Regulation S-K will be contained in our definitive proxy statement for our 2023 Annual Meeting of Stockholders under the sections captioned "Proposal One: Election of Directors," "Executive Officers of the Registrant," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Information Regarding the Board and Corporate Governance and is incorporated by reference herein.

Our executive officers and directors and their positions at the Company as of June 30, 2023, are as follows:

Name	Age	Position at the Company	Principal Occupation
Antonio J. Pietri	57	President and Chief Executive Officer; Director	-
Chantelle Breithaupt	50	Senior Vice President and Chief Financial Officer	-
Mark Mouritsen	55	Senior Vice President, Chief Legal Officer and Secretary	-
Patrick M. Antkowiak	63	Director	President, CEM Technology Advisors, LLC and former Chief Strategy and Technology Officer and CVP, Northrop Grumman Corporation
Robert E. Beauchamp	63	Director	Advisor to Chief Executive Officer and General Counsel of BMC Software, Inc. and former President and Chief Executive Officer, BMC Software, Inc.
Thomas F. Bogan	71	Director	Retired Vice Chairman, Workday, Inc. and former Executive Vice President of Workday's Planning Business Unit
Karen M. Golz	69	Director	Retired Partner and former Global Vice Chair, Japan, Ernst & Young LLP
Ram R. Krishnan	52	Director	Executive Vice President & Chief Operating Officer, Emerson Electric Co.
Arlen R. Shenkman	52	Director	President and Chief Financial Officer, Boomi, Inc.
Jill D. Smith	65	Director	Retired President, Chief Executive Officer, and director, Allied Minds plc and former Chair, Chief Executive Officer and President of DigitalGlobe Inc.
Robert M. Whelan, Jr.	71	Director	Founder of Whelan & Co.

Item 11. Executive Compensation.

Certain information required under this Item 11 will appear under the sections entitled "Director Compensation," "Compensation Discussion and Analysis," "Executive Compensation," "Human Capital Committee Interlocks and Insider Participation," "Human Capital Committee Report," and "Employment and Change in Control Agreements" in our definitive proxy statement for our 2023 Annual Meeting of Stockholders, and is incorporated herein by reference.

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

Certain information required under this Item 12 will appear under the sections entitled "Beneficial Ownership of Common Stock" and "Compensation Discussion and Analysis - Securities Authorized for Issuance under Equity Compensation Plans" in our definitive proxy statement for our 2023 Annual Meeting of Stockholders, and is incorporated herein by reference.

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

Certain information required under this Item 13 will appear under the sections entitled "Information Regarding the Board and Corporate Governance" and "Related-Party Transactions" in our definitive proxy statement for our 2023 Annual Meeting of Stockholders, and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services.

Certain information required under this Item 14 will appear under the section entitled "Independent Registered Public Accountants" in our definitive proxy statement for our 2023 Annual Meeting of Stockholders, and is incorporated herein by reference.

Item 15. Exhibits and Financial Statement Schedules.

(a)(1) Financial Statements

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(a)(2) Exhibits

The exhibits listed in the accompanying exhibit index are filed or incorporated by reference as part of this Annual Report on Form 10-K.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Aspen Technology, Inc.:

Opinions on the Consolidated and Combined Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated and combined balance sheets of Aspen Technology, Inc. and subsidiaries (the Company) as of June 30, 2023 and 2022, the related consolidated and combined statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for the year ended June 30, 2023, nine months ended June 30, 2022 and year ended September 30, 2021, and the related notes (collectively, the consolidated and combined financial statements). We also have audited the Company's internal control over financial reporting as of June 30, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated and combined financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 30, 2023 and 2022, and the results of its operations and its cash flows for the year ended June 30, 2023, nine months ended June 30, 2022 and year ended September 30, 2021, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2023 based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated and combined financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated and combined financial statements included performing procedures to assess the risks of material misstatement of the consolidated and combined financial statements, whether due to error or fraud, and performing procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated and combined financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated and control over financial reporting included obtaining an understanding of internal control over financial reporting assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matter

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

Sufficiency of audit evidence over revenue

As discussed in Note 2 to the consolidated and combined financial statements and disclosed in the consolidated and combined statements of operations, the Company recorded \$669.2 million of license and solutions revenue for the year ended June 30, 2023, a portion of which related to the Heritage AspenTech business, consisting primarily of term software license sales. In addition, the Company recognized \$316.9 million of maintenance revenue for the year ended June 30, 2023, a portion of which related to the Heritage AspenTech business.

We identified the evaluation of sufficiency of audit evidence over term software license and maintenance revenue related to the Heritage AspenTech business as a critical audit matter. Subjective auditor judgment was required to evaluate the nature and extent of procedures obtained over these revenue streams because the Company uses a complex set of manual and automated procedures and systems to generate data to process and record its revenue transactions, including interfaces between multiple information technology (IT) applications. IT professionals with specialized skills and knowledge were also required to assess the Company's IT systems used in the revenue recognition process.

The following are the primary procedures we performed to address this critical audit matter. We applied auditor judgment to determine the nature and extent of procedures to be performed over term software license and maintenance revenue related to the Heritage AspenTech business. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's revenue recognition process, including certain manual and automated controls related to processing and recording of term software license and maintenance revenue. We involved IT professionals with specialized skills and knowledge, who assisted in the testing of certain general IT controls and IT application controls, including data interfaces and IT system-generated reports used by the Company in its revenue recognition process. On a sample basis, we also tested certain Heritage AspenTech term software license and maintenance revenue transactions by comparing the recorded amounts to underlying documentation, including contracts with customers. In addition, we evaluated the sufficiency of audit evidence obtained over term software license and maintenance revenue for Heritage AspenTech by assessing the results of procedures performed, including the nature and extent of such evidence.

/s/ KPMG LLP

We have served as the Company's auditor since 2021.

Boston, Massachusetts August 21, 2023

CONSOLIDATED AND COMBINED STATEMENTS OF OPERATIONS

	Year Ended June 30, 2023		Months Ended une 30, 2022	Sep	Year Ended tember 30, 2021
	 (Dollars and Sha	res in T	housands, Excep	t Per S	Share Data)
Revenue:					
License and solutions	\$ 669,185	\$	278,589	\$	180,914
Maintenance	316,911		103,786		92,562
Services and other	58,082		22,921		27,164
Total revenue	 1,044,178		405,296		300,640
Cost of revenue:					
License and solutions	279,564		125,258		125,181
Maintenance	36,650		15,030		18,610
Services and other	 57,375		16,108		19,219
Total cost of revenue	373,589		156,396		163,010
Gross profit	670,589		248,900		137,630
Operating expenses:					
Selling and marketing	482,656		108,463		103,311
Research and development	209,347		64,285		59,646
General and administrative	161,651		39,878		32,638
Restructuring costs			117		2,474
Total operating expenses	853,654		212,743		198,069
(Loss) income from operations	(183,065)		36,157		(60,439)
Other (expense) income, net	(29,418)		310		(5,359)
Interest income, net	31,917		3,494		(115)
(Loss) income before provision for income taxes	(180,566)		39,961		(65,913)
(Benefit) for income taxes	(72,806)		(13,185)		(45,305)
Net (loss) income	\$ (107,760)	\$	53,146	\$	(20,608)
Net (loss) income per common share:	 				
Basic	\$ (1.67)	\$	1.30	\$	(0.57)
Diluted	\$ (1.67)	\$	1.30	\$	(0.57)
Weighted average shares outstanding:					
Basic	64,621		40,931		36,308
Diluted	64,621		41,008		36,308

CONSOLIDATED AND COMBINED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

	Year Ended June 30, 2023			lonths Ended e 30, 2022	-	ear Ended mber 30, 2021
			(Dollars	in Thousands)		
Net (loss) income	\$	(107,760)	\$	53,146	\$	(20,608)
Other comprehensive income (loss):						
Foreign currency translation adjustments		7,548		289		122
Pension, net of tax benefit (expense) of: 2023, \$146; 2022, \$(176); 2021, \$(288)		(524)		807		723
Total other comprehensive income		7,024		1,096		845
Comprehensive (loss) income	\$	(100,736)	\$	54,242	\$	(19,763)

CONSOLIDATED AND COMBINED BALANCE SHEETS

		June 30,		
		2023		2022
	(Dolla	ars in Thousands Share	, Excep Data)	
ASSETS				
Current assets:				
Cash and cash equivalents	\$	241,209	\$	449,725
Accounts receivable, net		122,789		111,027
Current contract assets, net		367,539		428,833
Prepaid expenses and other current assets		27,728		23,461
Receivables from related parties		62,375		16,941
Prepaid income taxes		11,424		17,503
Total current assets		833,064		1,047,490
Property, equipment and leasehold improvements, net		18,670		17,148
Goodwill		8,330,811		8,266,809
Intangible assets, net		4,659,657		5,112,781
Non-current contract assets, net		536,104		428,232
Contract costs		15,992		5,473
Operating lease right-of-use assets		67,642		78,286
Deferred tax assets		10,638		4,937
Other non-current assets		13,474		8,766
Total assets	\$	14,486,052	\$	14,969,922
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	20,299	\$	21,416
Accrued expenses and other current liabilities		99,526		90,123
Due to related parties		22,019		4,111
Current operating lease liabilities		12,928		7,191
Income taxes payable		46,205		6,768
Current borrowings				28,000
Current contract liabilities		151,450		143,327
Total current liabilities		352,427		300,936
Non-current contract liabilities		30,103		21,081
Deferred tax liabilities		957,911		1,145,408
Non-current operating lease liabilities		55,442		71,933
Non-current borrowings, net				245,647
Other non-current liabilities		19,240		15,560
Stockholders' equity:		,		,
Common stock, 0.0001 par value—Authorized—600,000,000 shares Issued— 64,952,868 shares at June 30, 2023 and 64,425,378 shares at June 30, 2022 Outstanding— 64,465,242 shares at June 30, 2023 and 64,425,378 shares at June 30, 2022		6		6
Additional paid-in capital		13,194,028		13,107,570
(Accumulated deficit) retained earnings		(41,391)		66,369
Accumulated other comprehensive income (loss)		2,436		(4,588)
Treasury stock, at cost- 487,626 shares of common stock at June 30, 2023 and none at		(84,150)		(4,500)
		(04.1.00)		
June 30, 2022 Total stockholders' equity		13,070,929		13,169,357

CONSOLIDATED AND COMBINED STATEMENTS OF STOCKHOLDERS' EQUITY

			Common S	tock			Treasu	ry Stock	
	Net Parent Investment	Accumulated Other Comprehensive (Loss) Income	Number of Shares	Par Value	Additional Paid-in Capital	(Accumulated Deficit) Retained Earnings	Number of Shares	Cost	Total Stockholders' Equity
			(Doll	ars in Th	ousands, Excej	ot Share Data))		
Balance September 30, 2020	\$ 244,357	\$ (6,529)		\$ —	<u>\$ </u>	\$		\$ _	\$ 237,828
Net loss	(20,608)		_	_		_	_	_	(20,608)
Net transfer from Emerson	1,553,281		—	—		—	—	—	1,553,281
Other comprehensive income		845							845
Balance September 30, 2021	\$ 1,777,030	\$ (5,684)		\$ —	<u>\$ </u>	<u>\$ </u>		<u>\$ </u>	\$ 1,771,346
Net loss prior to Transaction	(13,223)	—	_	_	—	_	_	_	(13,223)
Net transfer from Emerson	5,971,995	—	—	—	—	—	—	—	5,971,995
Recapitalization as a result of the Transaction	(7,735,802)	_	64,305,618	6	13,092,917		_	_	5,357,121
Net income subsequent to the Transaction	_	_	_	_	—	66,369	_	_	66,369
Other comprehensive income	_	1,096	_	_	_		_	_	1,096
Issuances of shares of common stock subsequent to the Transaction	_	_	61,292	_	5,621	_	_	_	5,621
Issuance of restricted stock units and net share settlement relating to withholding taxes	_	_	58,468	_	(5,632)	_	_	_	(5,632)
Stock-based compensation	—	—	_	_	14,664	_	_	_	14,664
Balance June 30, 2022	\$ _	\$ (4,588)	64,425,378	\$ 6	\$13,107,570	\$ 66,369	_	\$ —	\$ 13,169,357
Net loss						(107,760)			(107,760)
Other comprehensive income	_	7,024	_	_	_	_		_	7,024
Issuances of shares of common stock	_	_	365,937	_	36,046		_	_	36,046
Issuance of restricted stock units and net share settlement relating to withholding taxes	_		161,553	_	(18,588)	_	_	_	(18,588)
Repurchase of common stock	_	_	_	_	(15,850)	_	487,626	(84,150)	(100,000)
Stock-based compensation					84,850		_		84,850
Balance June 30, 2023	\$	\$ 2,436	64,952,868	\$ 6	\$13,194,028	\$ (41,391)	487,626	\$ (84,150)	\$ 13,070,929

CONSOLIDATED AND COMBINED STATEMENTS OF CASH FLOWS

	Year Ended June 30, 2023	Nine Months Ended June 30, 2022	Year Ended September 30, 2021	
	(Dollars in Thousand	s)	
Cash flows from operating activities: Net (loss) income	\$ (107,760)	\$ 53,146	\$ (20,608)	
	\$ (107,700)	\$ 55,140	\$ (20,008)	
Adjustments to reconcile net (loss) income to net cash provided by operating activities:	401 410	110.020	125 (42	
Depreciation and amortization	491,419	119,930	125,642	
Reduction in the carrying amount of right-of-use assets	13,869	5,915	5,515	
Net foreign currency losses (gains)	4,079	(306)	5,525	
Net realized loss on settlement of foreign currency forward contracts	26,176	15 7(2	1 744	
Stock-based compensation	84,850	15,763	1,744	
Deferred income taxes	(192,926)	(79,021)	(57,086)	
Provision for uncollectible receivables	7,827	794	(145)	
Other non-cash operating activities	(228)	228	165	
Changes in assets and liabilities:	((2.12.0)	
Accounts receivable	(25,538)	11,204	(5,476)	
Contract assets	(21,658)		(17,868)	
Contract costs	(10,165)	(4,992)	—	
Lease liabilities	(13,655)	(5,558)	(4,673)	
Prepaid expenses, prepaid income taxes, and other assets	7,625	(8,776)	1,553	
Accounts payable, accrued expenses, income taxes payable and other liabilities	18,315	(23,674)	(1,740)	
Contract liabilities	16,979	22,431	22,252	
Net cash provided by operating activities	299,209	28,962	54,800	
Cash flows from investing activities:				
Purchase of property, equipment and leasehold improvements	(6,577)	(2,263)	(6,185)	
Proceeds from sale of property and equipment	—	91	_	
Payments for business acquisitions, net of cash acquired	(72,498)	(5,571,931)	(1,588,802)	
Net payments for settlement of foreign currency forward contracts	(26,176)	_	_	
Payments for equity method investments	(700)	(24)	_	
Payments for capitalized computer software development costs	(366)	(508)	_	
Purchase of other assets	(1,000)	(553)	5	
Net cash (used in) investing activities	(107,317)	(5,575,188)	(1,594,982)	
Cash flows from financing activities:	· · ·			
Issuance of shares of common stock	36,736	5,702	_	
Repurchases of common stock	(100,000)	_	_	
Payment of tax withholding obligations related to restricted stock	(20,836)	(1,676)	_	
Deferred business acquisition payments	(1,363)	(1,200)		
Repayments of amounts borrowed under term loan	(276,000)	(6,000)	_	
Net transfers (to) from Parent Company	(19,933)	())	1,551,537	
Payments of debt issuance costs	(2,375)	- ,- ,		
Net cash (used in) provided by financing activities	(383,771)	5,968,821	1,551,537	
Effect of exchange rate changes on cash and cash equivalents	(16,637)	1,417	(141)	
(Decrease) increase in cash and cash equivalents	(208,516)	424,012	11,214	
Cash and cash equivalents, beginning of period	449,725	25,713	14,499	
Cash and cash equivalents, end of period	\$ 241,209		\$ 25,713	
Supplemental disclosure of cash flow information:	¢,209	¢,,,20	\$ 20,710	
Income taxes paid, net	\$ 79,819	\$ 84,997	\$ 9,600	
Interest paid	13,615	237	693	
Supplemental disclosure of non-cash activities:	15,015	251	093	
Change in purchases of property, equipment and leasehold improvements included in				
accounts payable and accrued expenses	\$ (915)	\$ (363)	\$ 483	
Lease liabilities arising from obtaining right-of-use assets	1,345	280	219	
	,			

NOTES TO CONSOLIDATED AND COMBINED FINANCIAL STATEMENTS

1. Organization and Basis of Presentation

Aspen Technology, Inc., together with its subsidiaries ("AspenTech" or "Company"), is a leading industrial software company that develops solutions to address complex industrial environments where it is critical to optimize the asset design, operations and maintenance lifecycle. Through the Company's unique combination of product capabilities and deep domain expertise and award-winning innovation, customers across diverse end markets in capital-intensive industries can improve their operational excellence while achieving sustainability goals.

On October 10, 2021, Emerson Electric Co. ("Emerson" or "Parent Company") entered into a definitive agreement (the "Transaction Agreement") with AspenTech Corporation (f/k/a Aspen Technology, Inc.) ("Heritage AspenTech") to contribute the Emerson industrial software business (the "Industrial Software Business"), along with \$6.014 billion in cash, to create AspenTech (the "Transaction"). The Industrial Software Business included Open Systems International, Inc. ("OSI Inc.") and the Geological Simulation Software business ("GSS"), which the Company has renamed as Subsurface Science & Engineering ("SSE"). The Transaction closed on May 16, 2022 ("Closing Date"). Emerson owns 55% of AspenTech on a fully diluted basis as of June 30, 2023.

On December 23, 2022, the Company entered into a credit agreement with Emerson (the "Emerson Credit Agreement"), which will provide for an aggregate term loan commitment of \$630.0 million. Refer to Note 19, "Related-Party Transactions", for further discussion of the Emerson Credit Agreement.

On July 27, 2022, the Company entered into a definitive agreement to acquire Mining Software Holdings Pty Ltd ("Micromine") for AU\$900.0 million in cash (approximately \$623.0 million based on exchange rates when the acquisition was initially announced). Micromine is a global leader in design and operational management solutions for the metals and mining industry. The Company intended to finance the transaction primarily through debt financing under the Emerson Credit Agreement.

On August 1, 2023, the Company announced the termination of the agreement to purchase Micromine due to uncertainty regarding the obtainment of certain regulatory approvals.

The Company operates globally in 82 countries as of June 30, 2023.

Basis of Presentation

The accompanying consolidated and combined financial statements include the accounts of Aspen Technology, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

The Company has prepared the accompanying consolidated and combined financial statements pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC") and in accordance with generally accepted accounting principles in the United States ("GAAP").

The Transaction was accounted for as a business combination in accordance with GAAP, with the Industrial Software Business treated as the "acquirer" and Heritage AspenTech treated as the "acquired" company for financial reporting purposes. On the Closing Date, the Company changed its fiscal year end from September 30 to June 30. The consolidated and combined financial statements for the year ended June 30, 2023 comprise the results of the Industrial Software Business and Heritage AspenTech ("fiscal 2023" or "fiscal year 2023"). The consolidated and combined financial statements for the nine months ended June 30, 2022 comprise the results of the Industrial Software Business and Heritage AspenTech ("fiscal 2022" or "fiscal 2022" or "fiscal 2022"). The consolidated and combined financial statements for the vear ended September 30, 2022 ("fiscal 2022" or "fiscal year 2022"). The consolidated and combined financial statements for the year ended September 30, 2021 comprise the results of the Industrial Software Business only and do not include the results of Heritage AspenTech ("fiscal 2021" or "fiscal year 2021"). This Annual Report on Form 10-K also includes an unaudited consolidated and combined statements of operations and cash flows for the comparable period of July 1, 2021 to June 30, 2022; see Note 23, "Transition Period Comparative Data" for further information.

The preparation of financial statements and related disclosures in conformity with GAAP requires us to make judgments, assumptions, and estimates that affect the amounts reported in the consolidated and combined financial statements and accompanying notes. The actual results that the Company experiences may differ materially from its estimates.

Certain reclassifications have been made to the amounts in prior periods in order to conform to the current period's presentation. The Company has evaluated subsequent events through the date that the financial statements were issued.

Russia and Ukraine

The Company maintains operations in Russia and licenses software and provides related services to customers in Russia and areas of Ukraine that are not under sanction. The Company had net sales of approximately \$44.6 million and \$9.9 million for fiscal 2023 and 2022, respectively, and total assets of approximately \$39.7 million and \$23.4 million as of June 30, 2023 and 2022, respectively, related to operations in Russia.

The Company may be required to cease or suspend operations in Russia or, should the conflict or the effects of sanctions, export control measures and business restrictions worsen, the Company may voluntarily elect to do so. For example, the Company has recently terminated all engineering services in Russia, which may impact the ability to renew existing contracts and provide support to customers. While the Company continues to evaluate the impact, if any, of the various sanctions, export control measures and business restrictions imposed by the United States, other governments, and financial institutions on the ability to do business in Russia and areas of Ukraine that are not under sanction, maintain contracts with vendors and pay employees in Russia, and receive payment from customers in Russia and areas of Ukraine that are not under sanction of, the Company's business and operations in Russia would result in the loss of revenue from the business in Russia and would negatively impact growth. The Company may also suffer reputational harm as a result of continued operations in Russia, which may adversely impact sales and other businesses in other countries.

2. Significant Accounting Policies

(a) Revenue Recognition

In accordance with ASC 606, *Revenue from Contracts with Customers*, the Company accounts for a customer contract when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable that the Company will collect substantially all of the consideration to which they are entitled to. The Company evaluates its contracts with customers to identify the promised goods or services and recognizes revenue for the identified performance obligations at the amount the Company expects to be entitled to in exchange for those goods or services. A performance obligation is a promise in a contract to transfer a distinct good or service to a customer. Revenue is recognized when, or as, performance obligations are satisfied, and control has transferred to the customer.

The Company disaggregates its revenue into three categories: (i) license and solutions, (ii) maintenance and (iii) services and other.

License and solutions

License and solutions revenue is primarily derived from the sale of term software licenses. It also includes revenue derived from the sale of perpetual and term software licenses, along with professional services, sold by OSI Inc. See Note 3, "Revenue from Contracts with Customers" and Note 22, "Segment and Geographic Information," for additional information about the Company's revenues disaggregated by region and type of performance obligation.

Term software license revenue is recognized at a point in time when control transfers to the customer, which generally aligns with the first day of the contractual term.

Prior to the third quarter of fiscal 2023, OSI Inc. software licenses were primarily sold with professional services and hardware to form an integrated solution for the customer. The professional services and hardware sold with the license significantly customized the underlying functionality and usability of the software. As such, neither the license, hardware, nor professional services were considered distinct within the context of the contract and were therefore considered a single performance obligation. Because the integrated solution had no alternative use to the Company and the Company held an

enforceable right to payment, revenue was recognized over time (typically one to two years) using an input measure of progress based on the ratio of actual costs incurred to date to the total estimated cost to complete. For integrated solution contracts executed prior to the third quarter of fiscal 2023, revenue continues to be recognized over time until the implementation is complete.

At the start of the third quarter of fiscal 2023, the Company completed a series of business transformation activities relating to OSI Inc. products and services in conjunction with its ongoing integration activities. As part of a change in the related go-to-market strategy, the Company has invested in tools and processes to simplify and streamline the implementation services to significantly reduce the complexity and interdependency associated with its software. In addition, the Company has identified and trained several third-party implementation service partners to operate autonomously and directly with OSI Inc. customers to implement its products.

Accordingly, effective January 1, 2023 following the completion of these business transformation activities, for all new OSI Inc. contracts, the Company accounts for the OSI Inc. software license, hardware, maintenance, and professional services as separate and distinct performance obligations. Software license revenue is recognized at a point in time when control transfers to the customer, which generally aligns with the first day of the contractual term. Hardware revenue is recognized at the point in time when control transfers to the customer, which generally occurs upon delivery. The recognition of maintenance revenue at OSI Inc. is unchanged and continues to be recognized ratably over the maintenance term as discussed further below. Professional services revenue is recognized over time (typically one to two years) using the proportional performance method by comparing the costs incurred to the total estimated project costs as discussed further below.

Maintenance

Software maintenance revenue is recognized ratably over the maintenance term and includes technical support, software assurance patch management services and the right to receive any when-and-if available updates to the software. For term software licenses, maintenance is included with the license. For perpetual software licenses, maintenance is initially sold with the license and subsequently sold separately, both primarily on an annual basis. Software maintenance does not significantly modify or otherwise depend on other performance obligations within the contracts and therefore is accounted for as a separate performance obligation. For maintenance sold with an integrated solution by OSI Inc., the maintenance term begins once implementation is complete.

Services and other

Services and other revenue is derived from the sale of professional services and training.

Professional service revenue, when not sold as part of an integrated solution by OSI Inc., is provided to customers on a time-and-materials ("T&M") or fixed-price basis. The obligation to provide professional services is generally satisfied over time, with the customer simultaneously receiving and consuming the benefits as the Company satisfies its performance obligation. Professional service revenue is recognized by measuring progress toward the completion of the Company's obligations. The Company recognizes professional services revenue for its T&M contracts based upon hours worked at contractually agreed-upon hourly rates. Fixed-price engagements recognize revenue using the proportional performance method by comparing the costs incurred to the total estimated project cost. The use of the proportional performance method depends on the Company's ability to reliably estimate the costs to complete a project. Historical experience is used as a basis for future estimates to complete current projects. Additionally, the Company believes that costs are the best available measure of performance. Out-of-pocket expenses which are reimbursed by customers are recorded as revenue.

Training services provided to customers include on-site internet-based and customized training. These services are considered separate performance obligations as they do not significantly modify, integrate or otherwise depend on other performance obligations included in a contract. Revenue is recognized as the customer consumes the benefits of the services the Company provides.

Contracts with Multiple Performance Obligations

The Company allocates total contract consideration to each distinct performance obligation in an arrangement on a relative standalone selling price basis. The standalone selling price reflects the price that would be charged for a specific product or service if it was sold separately in similar circumstances and to similar customers.

When two or more contracts are entered into at or near the same time with the same customer, the Company evaluates the facts and circumstances associated with the negotiation of those contracts. Where the contracts are negotiated as a package, the

Company will account for them as a single arrangement and allocate the consideration for the combined contracts among the performance obligations accordingly.

When available, the Company uses directly observable transactions to determine the standalone selling prices for performance obligations. If directly observable data is not available when software licenses are sold together with software maintenance in a bundled arrangement, the Company estimates a standalone selling price for these distinct performance obligations using relevant information, including the Company's overall pricing objectives and strategies, historical pricing data, market consideration and other factors.

Contract Modifications

The Company sometimes enters into agreements to modify previously executed contracts, which constitute contract modifications. The Company assesses each of these contract modifications to determine (i) if the additional products and services are distinct from the products and services in the original arrangement; and (ii) if the amount of consideration expected for the added products and services reflects the standalone selling price of those products and services, as adjusted for contract-specific circumstances. A contract modification meeting both criteria is accounted for as a separate contract. A contract modification not meeting both requirements is considered a change to the original contract and is accounted for on either (i) a prospective basis as a termination of the existing contract and the creation of a new contract or (ii) a cumulative catch-up basis.

Contract Assets and Contract Liabilities

Payment terms and conditions vary by contract type. Terms generally include a requirement of payment annually over the term of the license arrangement. During the majority of each customer contract term, the amount invoiced is generally less than the amount of revenue recognized to date, primarily because the Company transfers control of the performance obligation related to the software license at the inception of the contract term, and the allocation of contract consideration to the license performance obligation is a significant portion of the total contract consideration. Therefore, the Company's contracts often result in the recording of a contract asset throughout the majority of the contract term. The Company records a contract asset when revenue recognized on a contract exceeds the billings.

The Company records accounts receivable when it has the unconditional right to issue an invoice and receive payment regardless of whether revenue has been recognized. If revenue is not yet recognizable and the Company has a right to invoice or has received consideration, a contract liability is recorded to defer the revenue until recognition is appropriate. If revenue is recognizable in advance of the right to invoice, and the right to consideration is conditional on something other than the passage of time, a contract asset is recorded until invoicing occurs.

The Company defers unearned maintenance and service revenue when it has the right to invoice, with recognition of the revenue recognized over the support period. Contract assets and contract liabilities are presented net at the contract level for each reporting period.

Payment Terms

The Company generally receives payment from a customer after the performance obligation related to the term license has been satisfied, and therefore, its contracts with terms greater than one year generally contain a significant financing component. The significant financing component is calculated utilizing an interest rate that derives the net present value of the performance obligations delivered on an upfront basis based on the allocation of consideration. The Company has instituted a customer portfolio approach in assigning interest rates. The rates are determined at contract inception and are based on the credit characteristics of the customers within each portfolio.

Perpetual software licenses, sold along with professional services and hardware as an integrated solution, generally require payments from the customer aligned with progress milestones in the contract. Payment terms on invoiced amounts are typically net 30 days. The Company does not offer return rights for its products and services in the ordinary course of business, and contracts generally do not include customer acceptance clauses.

(b) Management Estimates

The preparation of the consolidated and combined financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that could affect the reported amounts of assets, liabilities, revenue and expenses for the periods presented. Actual results could differ from those estimates.

(c) Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk are principally cash and cash equivalents, contract assets, and accounts receivable. The Company's cash is held in financial institutions and its cash equivalents are invested in money market funds that the Company believes to be of high credit quality.

Concentration of credit risk with respect to contract assets and accounts receivables is limited to certain customers to which the Company makes substantial sales. To reduce risk, the Company assesses the financial strength of the Company's customers. The Company does not require collateral or other security in support of its contact assets and accounts receivables. At June 30, 2023 and 2022, the Company had no customer receivable balances that represented 10% or more of its total accounts receivable.

(d) Cash and Cash Equivalents

Cash and cash equivalents are reflected on the consolidated and combined balance sheets and consist of highly liquid investments with original maturities of three months or less.

(e) Foreign Currency Translation

The determination of the functional currency of subsidiaries is based on the subsidiaries' financial and operational environment. Gains and losses from foreign currency translation related to entities whose functional currency is not the Company's reporting currency are credited or charged to accumulated other comprehensive income included in stockholders' equity in the consolidated and combined balance sheets. In all instances, foreign currency transaction and remeasurement gains or losses are credited or charged to the consolidated and combined statements of operations as incurred as a component of other income (expense), net. There were net foreign currency transaction and remeasurement losses of \$4.1 million in fiscal 2023, gains of \$0.3 million in fiscal 2022, and losses of \$5.5 million in fiscal 2021.

(f) Fair Value Measurement

Accounting Standards Codification (ASC) 820, *Fair Value Measurement*, establishes a formal hierarchy and framework for measuring certain financial statement items at fair value, and requires disclosures about fair value measurements and the reliability of valuation inputs. Under ASC 820, measurement assumes the transaction to sell an asset or transfer a liability occurs in the principal or at least the most advantageous market for that asset or liability. Within the hierarchy, Level 1 instruments use observable market prices for the identical item in active markets and have the most reliable valuations. Level 2 instruments are valued through broker/dealer quotation or through market-observable inputs for similar items in active markets, including forward and spot prices, interest rates and volatilities. Level 3 instruments are valued using inputs not observable in a active market, such as Business-developed future cash flow estimates, and are considered the least reliable.

(g) Business Combinations

Identifying the acquirer in a business combination is based on the concept of 'control'. Normally, where an acquisition is affected by an exchange of equity interests, the shareholders of the entity that issues securities (the legal parent entity) retain the majority holding in the combined group.

The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value. Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date.

Assets and liabilities acquired in business combinations are accounted for using the acquisition method and recorded at their respective fair values. Goodwill represents the excess of consideration paid over the net assets acquired and is assigned to the reporting unit that acquires the business.

The Company uses its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The Company's estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill. In addition, uncertain tax positions, tax-related valuation allowances and pre-acquisition contingencies are initially recorded in connection with a business combination as of the acquisition date. The Company continues to collect information and reevaluates these estimates and assumptions quarterly and records any adjustments to the Company's preliminary estimates to goodwill provided that the Company is within the measurement period. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the Company's consolidated and combined statement of operations.

Acquisition-related costs are expensed as incurred and included in operating expenses. The majority of acquisition-related costs incurred by Heritage AspenTech incurred prior to or in connection with the closing of the Transaction are not included within the accompanying consolidated and combined statements of operations.

(h) Intangible Assets

Intangible Assets Acquired in a Business Combination

ASC 805, *Business Combinations*, requires the identification of acquired intangible assets as part of a business combination. Acquired intangible assets generally consist of intellectual property such as technology and trademarks, customer relationships and backlog. The methods used to value such intangible assets require the use of estimates including forecast performance discount rates and customer attrition rates. Future results are impacted by the amortization periods adopted and changes to the estimated useful lives would result in different effects on the consolidated and combined statements of operations.

Computer Software Developed for Internal Use

Computer software developed for internal use is capitalized in accordance with ASC 350-40, *Intangibles Goodwill and Other—Internal Use Software*. The Company capitalizes costs incurred to develop internal-use software during the application development stage after determining software technological requirements and obtaining management approval for funding projects probable of completion. In fiscal 2023, 2022 and 2021, there were no capitalized direct labor costs associated with the Company's development of software for internal use.

Computer Software Developed for Sale

Computer software developed for sale is capitalized in accordance with ASC 985-20, *Software - Costs of Software to Be Sold, Leased, or Marketed.* Capitalization of computer software development costs begins upon establishing technological feasibility defined as meeting specifications determined by the program design. Amortization of capitalized computer software development costs is provided on a product-by-product basis using the greater of (a) the amount computed using the ratio that current gross revenue for a product bear to total of current and anticipated future gross revenue for that product or (b) the straight-line method, beginning upon commercial release of the product, and continuing over the remaining estimated economic life of the product, not to exceed three years. Total computer software costs capitalized and total amortization expense charged to operations were not material for fiscal 2023, 2022 or 2021.

Amortization Expense

All of the Company's identifiable finite-lived intangible assets are subject to amortization on a straight-line basis over their estimated useful lives. Each period, the Company evaluates the estimated remaining useful life of its intangible assets and whether events or changes in circumstances warrant a revision to the remaining period of amortization.

Amortization expenses associated with developed technology and capitalized costs relating to computer software developed for sale are included in cost of revenue, while amortization expenses associated with customer relationships and backlog are included in the selling and marketing. Amortization expenses associated with computer software developed for internal use are included in each respective financial statement caption based on which business function the software is attributable to. Each period, the Company evaluated the estimated remaining useful lives of intangible assets to determine whether events or changes in circumstances warrant a revision to the remaining period of amortization. Intangible assets are removed from the accounts when fully amortized and no longer in use.

(i) Property, Equipment and Leasehold Improvements

The Company records investments in leasehold improvements and equipment at cost. Depreciation is recorded using the straight-line method over estimated service lives, which for equipment is three years to 10 years and for leasehold improvements, the remaining term of the lease or the life of the underlying asset, whichever is shorter.

(j) Impairment Assessment

Finite-lived Intangible Assets and Long-lived Assets

The Company evaluates finite-lived intangible assets and long-lived assets for possible impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. This includes but is not limited to significant adverse changes in business climate, market conditions or other events that indicate an asset's carrying amount may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate. If the undiscounted cash flows used in the test for recoverability are less than the carrying amount of these assets, the carrying amount of such assets is reduced to fair value.

Goodwill and Indefinite-lived Intangible Assets

The Company evaluates and tests the recoverability of its: (i) goodwill, and (ii) indefinite-lived intangible assets (which consists entirely of the trademark associated with the Heritage AspenTech acquisition), for impairment at least annually on May 31 of each fiscal year or more often if and when circumstances indicate that goodwill or the indefinite-lived intangible asset may not be recoverable. The Company first assesses qualitative factors to determine whether the existence of events or circumstances indicates that it is more likely than not that the fair value of a reporting unit or fair value of an indefinite-lived intangible asset is less than its carrying amount. If the Company determines based on this assessment that it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount. If the Company determines based on this assessment that it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount. If the Company determines based on this assessment that it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, the Company performs the impairment test. The first step requires the Company to determine the fair value of the reporting unit or fair value of an indefinite-lived intangible asset and compare it to the carrying amount of the reporting unit, including goodwill, or carrying amount of the indefinite-lived intangible asset. If the fair value exceeds the carrying amount, no impairment loss is recognized. However, if the carrying amount of the reporting unit or indefinite-lived intangible asset exceeds its fair value, the goodwill of the reporting unit is impaired or the indefinite-lived intangible asset is impaired.

Fair value of a reporting unit is determined using a combined weighted average of a market-based approach (utilizing fair value multiples of comparable publicly traded companies) and an income-based approach (utilizing discounted projected cash flows). In applying the income-based approach, the Company would be required to make assumptions about the amount and timing of future expected cash flows, growth rates and appropriate discount rates. The amount and timing of future cash flows would be based on the Company's most recent long-term financial projections. The discount rate the Company would utilize would be determined using estimates of market participant risk-adjusted weighted-average costs of capital and reflect the risks associated with achieving future cash flows.

There were no impairments of intangible assets, long-lived assets or goodwill during fiscal 2023, 2022 and 2021, respectively.

(k) Leases

The Company leases offices and equipment under operating lease arrangements. The Company determines whether an arrangement is, or contains, a lease at contract inception. An arrangement contains a lease if the Company has the right to direct the use of and obtain substantially all of the economic benefits of an identified asset. Right-of-use assets and lease liabilities are recognized at lease commencement based on the present value of lease payments over the lease term. Leases with an initial term of 12 months or less are not recognized on the balance sheet and are recorded as short-term lease expense. The discount rate used to calculate present value is the Company's incremental borrowing rate based on the lease term and the economic environment of the applicable country or region.

Certain leases have renewal options or options to terminate prior to lease expiration, which are included in the measurement of right-of-use assets and lease liabilities when it is reasonably certain they will be exercised. The Company has elected to account for lease and non-lease components as a single lease component for its office facilities. Some lease arrangements include payments that are adjusted periodically based on actual charges incurred for common area maintenance, utilities, taxes and insurance, or changes in an index or rate referenced in the lease. The fixed portion of these payments is included in the measurement of right-of-use assets and lease liabilities at lease commencement, while the variable portion is recorded as variable lease expense. The Company's leases do not contain material residual value guarantees or restrictive covenants.

(1) Derivatives and Hedging

The Company utilizes derivative instruments to manage exposures to foreign currency exchange rate risks. The primary objective of holding derivatives is to reduce the volatility of cash flows associated with changes in foreign currency exchange rates. The Company's derivatives expose it to credit risk to the extent that the counterparties may be unable to meet the terms of the agreement. The Company seeks to mitigate such risks by limiting its counterparties to major financial institutions. In addition, the potential risk of loss with any one counterparty resulting from this type of credit risk is monitored. Management does not expect material losses as a result of defaults by counterparties.

The Company accounts for derivative transactions in accordance with ASC Topic 815, *Derivatives and Hedging*, and recognizes derivatives instruments as either assets or liabilities in the consolidated and combined balance sheet and measures those instruments at fair value. The Company's foreign currency forward contracts as described in Note 17 "Derivatives" do not qualify for hedge accounting. Accordingly, the changes in fair value of the derivative transactions are presented in earnings.

(m) Comprehensive (Loss) Income

Comprehensive (loss) income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Comprehensive (loss) income and its components for fiscal 2023, 2022 and 2021 are disclosed in the accompanying consolidated and combined statements of comprehensive (loss) income.

(n) Accounting for Stock-Based Compensation

Substantially all stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period.

(o) Income Taxes

Deferred income taxes are recognized based on temporary differences between the financial statement and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using the statutory tax rates and laws expected to apply to taxable income in the years in which the temporary differences are expected to reverse. Valuation allowances are provided against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income and the timing of the temporary differences becoming deductible. Management considers, among other available information, scheduled reversals of deferred tax liabilities, projected future taxable income, limitations of availability of net operating loss carryforwards, and other matters in making this assessment.

The Company does not provide deferred taxes on unremitted earnings of foreign subsidiaries since they intend to indefinitely reinvest either currently or sometime in the foreseeable future. Unrecognized provisions for taxes on undistributed earnings of foreign subsidiaries, which are considered indefinitely reinvested, are not material to its consolidated and combined financial position or results of operations. The Company is continuously subject to examination by the Internal Revenue Service (the "IRS"), as well as various state and foreign jurisdictions. The IRS and other taxing authorities may challenge certain deductions and credits reported by the Company on its income tax returns. In accordance with provisions of ASC 740, an entity should recognize a tax benefit when it is more-likely-than-not, based on the technical merits, that the position would be sustained upon examination by a taxing authority. The amount to be recognized, if the more-likely-than-not threshold was passed, should be measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. Furthermore, any change in the recognition, de-recognition or measurement of a tax position should be recorded in the period in which the change occurs. The Company accounts for interest and penalties related to uncertain tax positions as part of the provision for income taxes.

(p) Loss Contingencies

The Company accrues estimated liabilities for loss contingencies arising from claims, assessments, litigation and other sources when it is probable that a liability has been incurred and the amount of the claim assessment or damages can be reasonably estimated. The Company believes it has sufficient accruals to cover any obligations resulting from claims, assessments or litigation that have met these criteria.

(q) Research and Development Expense

The Company charges research and development expenditures to expense as the costs are incurred. Research and development expenses consist primarily of personnel expenses related to the creation of new products, enhancements and engineering changes to existing products and costs of acquired technology prior to establishing technological feasibility.

(r) Net Parent Investment

The net parent investment balance included in the consolidated and combined balance sheets represents Emerson's historical investment in the Industrial Software Business, the Industrial Software Business's accumulated net earnings after income taxes, and the net effect of transactions with Emerson prior to the Transaction.

(s) New Accounting Pronouncements Adopted in Fiscal 2023 and 2022

There were no new accounting pronouncements adopted in fiscal 2023.

Effective October 1, 2021, the Company adopted the following accounting standard updates which had no impact or an immaterial impact on the Company's consolidated and combined financial statements. These included:

• Updates to ASC 805, *Business Combinations*, which clarify the accounting for contract assets and liabilities assumed in a business combination. In general, these updates will result in contract assets and liabilities being recognized at their historical amounts under ASC 606, rather than at fair value in accordance with the general requirements of ASC 805.

• Updates to ASC 740, *Income Taxes*, which require the recognition of a franchise tax that is partially based on income as an income-based tax with any incremental amount as a non-income-based tax. These updates also make certain changes to intra-period tax allocation principles and interim tax calculations.

• Adoption of ASC 321, *Investments - Equity Securities*, ASC 323, Investments- Equity Method and Joint Ventures, and ASC 815, Derivatives and Hedging, which clarify when equity method of accounting should be applied or discontinued based on observable transactions.

(t) Recently Issued Accounting Pronouncements

Recently issued accounting pronouncement that will be applicable to the Company are not expected to have a material impact on the Company's consolidated and combined financial statements.

3. Revenue from Contracts with Customers

Contract Assets and Contract Liabilities

The contract assets are subject to credit risk and reviewed in accordance with ASC 326, *Financial Instruments-Credit Losses*. The Company monitors the credit quality of customer contract asset balances on an individual basis, at each reporting date, through credit characteristics, geographic location, and the industry in which they operate. The Company recognizes an impairment on contract assets if, subsequent to contract inception, it becomes probable payment is not collectible. An allowance for expected credit loss reflects losses expected over the remaining term of the contract asset and is determined based upon historical losses, customer-specific factors, and current economic conditions. The potential impact of credit losses on contract assets was immaterial as of June 30, 2023. The Company's contract assets and contract liabilities were as follows as of June 30, 2023 and 2022:

		June 30,				
	2023		2022			
	(Dollar:	(Dollars in Thousands)				
Contract assets	903,64	.3	857,065			
Contract liabilities	(181,55	3)	(164,408)			
	\$ 722,09	0 \$	692,657			

The majority of the Company's contract balances are related to arrangements where revenue is recognized at a point in time and payments are made according to a contractual billing schedule. The change in the net contract asset balance during

fiscal 2023 was primarily due to greater revenue recognition as compared to billings. Revenue recognized during fiscal 2023 included \$113.8 million that was included in the beginning contract liability balance.

Contract Costs

The Company pays commissions for new product sales and implementation services as well as for renewals of existing contracts. Commissions paid to obtain renewal contracts are not commensurate with the commissions paid for new product sales or implementation services, and therefore, a portion of the commissions paid for new contracts and implementation services relate to future renewals and are therefore deferred and amortized over an estimated period of benefit of four years to eight years.

The Company accounts for new product sales commissions using a portfolio approach and allocates the cost of commissions in proportion to the allocation of transaction price of license and maintenance performance obligations, including assumed renewals. Commissions allocated to the license and license renewal components are expensed at the time the license revenue is recognized. Commissions allocated to maintenance are capitalized and amortized on a straight-line basis over a period of four years to eight years for new contracts, reflecting the Company's estimate of the expected period that they will benefit from those commissions.

Amortization of capitalized contract costs is included in selling and marketing expenses in the Company's statement of operations.

Transaction Price Allocated to Remaining Performance Obligations

The following table includes the aggregate amount of the transaction price allocated as of June 30, 2023 to the performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period:

Year Ended June 30,														
		2024		2025		2026		2027		2028	Т	hereafter		Total
			(Dollars in Thousands)											
License and solutions	\$	173,439	\$	93,226	\$	29,501	\$	7,872	\$	762	\$	585	\$	305,385
Maintenance		303,462		205,930		153,905		110,455		64,004		29,818		867,574
Services and other		79,903		17,743		10,519		3,802		2,251		2,456		116,674
Total		556,804		316,899		193,925		122,129		67,017		32,859		1,289,633

Disaggregated Revenue Information

The table below reflects disaggregated revenues by business for fiscal 2023, 2022 and 2021:

	 Year Ended June 30, 2023		onths Ended e 30, 2022	Year Ended ember 30, 2021
		(Dollars	in Thousands)	
Heritage AspenTech	\$ 760,802	\$	173,810	\$
SSE	120,092		88,272	127,388
OSI Inc.	163,284		143,214	173,252
Total	\$ 1,044,178	\$	405,296	\$ 300,640

The Company did not have any customer that accounted for 10 percent or more of the Company's revenues for fiscal 2023, 2022 and 2021, respectively.

4. Acquisitions

Inmation Software GmbH

On August 29, 2022, the Company completed the acquisition of inmation Software GmbH ("Inmation") for total cash consideration of \$87.2 million. The purchase price consisted of \$78.9 million of cash paid at closing and an additional \$8.3 million to be held back until August 2023 as security for certain representations, warranties, and obligations of the sellers. The holdback is recorded in accrued expenses and other current liabilities in the consolidated and combined balance sheets. The total cash acquired from Inmation was approximately \$6.4 million resulting in a net cash payment of \$72.5 million. The Company recognized goodwill of \$63.0 million (none of which is expected to be tax deductible) and identifiable intangible assets of \$31.5 million, primarily consisting of developed technology and customer relationships, with a useful life of approximately five years for developed technology and seven years for customer relationships. The fair values of assets acquired and liabilities assumed represent the preliminary fair value estimates, and are subject to subsequent adjustments as the Company obtains additional information during the measurement period and finalizes its fair value estimates.

Inmation's revenue and net loss included in the Company's consolidated and combined income statement from the acquisition date to June 30, 2023 were \$4.9 million and \$5.0 million, respectively. Results included amortization of developed technology and customer relationships of \$4.8 million.

Prior to the closing date, Inmation was considered a related party to AspenTech as Emerson, through one of its subsidiaries, held an equity-method investment in Inmation. At the time of close, \$17.6 million was paid to Emerson in exchange for all of its shares in Inmation, with another \$2.0 million to be paid 12 months after the close.

Heritage AspenTech

On October 10, 2021, Emerson entered into the Transaction with Heritage AspenTech to contribute the Industrial Software Business comprised of OSI and SSE, along with \$6.014 billion in cash, to create AspenTech. On the Closing Date, Emerson owned 55% of the outstanding common shares of AspenTech on a fully diluted basis, while the stockholders of Heritage AspenTech owned the remaining 45%. The acquisition-date fair value of the purchase consideration totaled \$11.19 billion, which was determined as follows (in thousands):

Fair value of Heritage AspenTech common stock (66,662,482 common shares)	\$ 11,085,971
Stock-based compensation awards attributable to pre-combination service	102,305
Total purchase consideration	\$ 11,188,276

The fair value of the shares of Heritage AspenTech common stock was determined based on the closing market price of Heritage AspenTech common stock on the Closing Date. The Company also replaced Heritage AspenTech equity awards with AspenTech equity awards. As a result, the portion of the aggregate fair-value of the replacement awards attributable to the precombination service period was included in the computation of the fair value of consideration transferred. See Note 14, "Stock-Based Compensation". Of the total cash contribution of \$6.014 billion made by Emerson to the Industrial Software Business, \$5.846 billion was paid in cash to the holders of Heritage AspenTech common stock at \$87.69 per share (on a fully diluted basis), with \$168.3 million of cash remaining on AspenTech's consolidated and combined balance sheet as of the Closing Date which is not included in the allocation of purchase consideration above. Additionally, the holders of Heritage AspenTech common stock received 27,998,104 shares of AspenTech common stock, with an aggregate fair value of \$5.240 billion.

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed on the Closing Date.

	Amount
	(Dollars in Thousands)
Cash and cash equivalents	\$ 273,728
Accounts receivable	43,163
Current and non-current contract assets	730,548
Intangible assets	4,390,667
Other net assets acquired	66,753
Total asset acquired (excluding Goodwill)	5,504,859
Accounts payable, accrued expenses, and other current liabilities	56,005
Current and non-current deferred revenue	62,319
Current and non-current borrowings under credit agreement	282,000
Deferred income taxes	1,078,463
Other net liabilities assumed	62,279
Total liabilities assumed	1,541,066
Net identifiable assets acquired	3,963,793
Goodwill	7,224,483
Net assets acquired	\$ 11,188,276

Of the \$4.39 billion of acquired intangible assets, \$430.0 million was assigned to registered trademarks that are not subject to amortization and were recognized at fair value on the acquisition date. The remaining \$3.96 billion of acquired intangible assets are being amortized straight-line over their estimated useful lives. The definite-lived intangible assets include acquired developed technology of \$1.35 billion (10-year useful life), customer relationships of \$2.3 billion (15-year useful life), and backlog of \$310.0 million (three-year useful life).

The \$7.2 billion of goodwill is attributable primarily to expected synergies and the assembled workforce. \$34.0 million of the goodwill is expected to be deductible for income tax purposes. During the year ended June 30, 2023, the Company recorded purchase price allocation adjustments that increased goodwill by \$1.7 million.

Heritage AspenTech's revenue and earnings included in the Company's consolidated and combined statement of operations from the acquisition date to the period ending June 30, 2022 are \$173.8 million and \$71.8 million, respectively.

Pro forma Financial Information (Unaudited)

The following unaudited pro forma consolidated financial results of operations are presented as if the Heritage AspenTech acquisition occurred on October 1, 2020. The unaudited pro forma information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved had the acquisition occurred as of that time.

	Ionths Ended e 30, 2022		Year Ended Tember 30, 2021		
	(Dollars in Thousands)				
Total revenue	\$ 819,098	\$	1,031,065		
Net income (loss)	\$ 18,193	\$	(55,410)		

OSI Inc.

On October 1, 2020, the Industrial Software Business completed the acquisition of OSI Inc. for approximately \$1.589 billion net of cash acquired. The Industrial Software Business recognized goodwill of \$967.4 million (none of which is expected to be tax deductible) and identifiable intangible assets of \$783.4 million, primarily technology, customer relationships, and trademarks with a weighted-average useful life of approximately 11 years.

The purchase price of the OSI Inc. acquisition was allocated to assets and liabilities as follows:

	(Dollar	rs in Thousands)
Accounts receivable	\$	24,782
Current contract assets		41,454
Other current assets		3,576
Property, equipment and leasehold improvements		7,153
Intangible assets		783,400
Operating lease right-of-use assets and other		28,182
Total assets acquired (excluding Goodwill)		888,547
Accounts payable		1,321
Current contract liabilities		24,041
Accrued expenses and other current liabilities		11,885
Operating lease liability		28,388
Deferred income taxes		192,592
Non-current contract liabilities		7,701
Other non-current liabilities		1,200
Total liabilities assumed		267,128
Net identifiable assets acquired		621,419
Goodwill		967,383
Net assets acquired	\$	1,588,802

OSI Inc.'s revenue and earnings included in the Company's consolidated and combined income statement from the acquisition date to the first reporting period ending on September 30, 2021 were \$173.3 million and a net loss of \$46.4 million, respectively. The results included first-year pretax acquisition accounting charges related to backlog and deferred revenue of \$30.4 million and \$13.7 million, respectively. Results also included amortization of technology, customer relationships, and trademarks of \$66.5 million.

5. Intangible Assets

Intangible assets consist of the following as of June 30, 2023 and 2022:

	Developed Technology		rademarks	Customer Relationships and Backlog		Capitalized Software and Other		Total
June 30, 2023:			(Dolla	ars in Thousand	ls)		
Gross carrying amount	\$ 1,903,599	\$	464,400	\$	3,082,541	\$	11,526	\$ 5,462,066
Less: Accumulated amortization	(341,964)		(13,821)		(437,673)		(8,951)	(802,409)
Net carrying amount	\$ 1,561,635	\$	450,579	\$	2,644,868	\$	2,575	\$ 4,659,657

	Developed Technology				R	Customer Relationships and Backlog		Capitalized Software and Other		Total
June 30, 2022:				(Dolla	rs in Thousand	s)			
Gross carrying amount	\$ 1	1,882,037	\$	464,400	\$	3,072,738	\$	10,149	\$	5,429,324
Less: Accumulated amortization		(153,758)		(9,379)		(144,888)		(8,518)		(316,543)
Net carrying amount	\$ 1	1,728,279	\$	455,021	\$	2,927,850	\$	1,631	\$	5,112,781

Of the total intangible assets net carrying amount of \$4.7 billion at June 30, 2023, \$430.0 million relates to the registered trademarks associated with the Heritage AspenTech acquisition that are not subject to amortization.

The increase in the intangible asset gross carrying amount from June 30, 2022 was primarily due to the Inmation acquisition. See Note 4, "Acquisitions." Total intangible asset amortization expense for fiscal 2023, 2022 and 2021 was \$485.9 million, \$116.7 million and \$120.3 million, respectively. The significant increase in amortization expense for fiscal 2023 was due to a full year of amortization expense associated with the Heritage AspenTech acquisition.

Based on intangible asset balances as of June 30, 2023, expected future amortization expense is as follows:

<u>Year Ended June 30,</u>	Amortization Expense
	(Dollars in Thousands)
2024	\$ 486,701
2025	473,317
2026	382,641
2027	382,083
2028	370,722
Thereafter	2,134,193
Total	\$ 4,229,657

6. Goodwill

The changes in the carrying amount of goodwill during fiscal 2023 and 2022 were as follows:

	Carrying Value
	(Dollars in Thousands)
Balance, September 30, 2021	\$ 1,044,383
Acquisition of Heritage AspenTech	7,222,799
Foreign currency translation	(373)
Balance, June 30, 2022	8,266,809
Acquisition of Inmation	63,026
Purchase accounting adjustment from Heritage AspenTech acquisition	1,684
Foreign currency translation	(708)
Balance, June 30, 2023	\$ 8,330,811

Reporting Units

In accordance with ASC 350, *Intangibles - Goodwill and Other*, the Company determined its reporting units based upon whether discrete financial information is available and if management regularly reviews the operating results of the component. As of June 30, 2022, the Company was comprised of three operating and reportable segments and reporting units: OSI, Inc., SSE and Heritage AspenTech. During the three months ended September 30, 2022, the Company completed certain integration activities and changes to its organizational structure that triggered a change in the composition of its operating and reportable segments. As a result, beginning with the interim period ended September 30, 2022, the Company is now comprised of a single operating and reportable segments. See Note 22 "Segment and Geographic Information" for further information on the change to the Company's operating and reportable segments. In conjunction with the change in operating and reportable segments, the Company also changed the composition of its reporting units. Beginning with the interim period ended September 30, 2022, the Company and reportable segments of its reporting units. Beginning with the interim period ended September 30, 2022, the company and reportable segments, the company is now comprised of a single reporting units. Beginning with the interim period ended September 30, 2022, the Company and reportable segments of its reporting units. Beginning with the interim period ended September 30, 2022, the Company is now comprised of a single reporting units. Beginning with the interim period ended September 30, 2022, the Company is now comprised of a single reporting units. Beginning with the interim period ended September 30, 2022, the Company is now comprised of a single reporting unit. The Company performed goodwill impairment assessments on each reporting unit immediately before and after the change in organizational structure and concluded that there was no goodwill impairment.

Goodwill Impairment Test

The carrying value of the Company's goodwill was \$8.3 billion as of June 30, 2023. The Company performed its annual goodwill impairment test on May 31, 2023, which included a qualitative assessment and evaluation of the relevant events and circumstances that would materially impact the fair value of its reporting unit. Based on this qualitative assessment and evaluation, the Company does not believe it is more likely than not that the fair value of its reporting unit was less than its carrying amount. As such, the Company did not recognize any goodwill impairment losses in fiscal 2023. There were also no impairment losses recognized during fiscal 2022 and 2021.

7. Restructuring Costs

Restructuring expenses were \$0.0 million, \$0.1 million, and \$2.5 million respectively, for 2023, 2022, and 2021.

SSE severance in 2021 related to a restructuring action to reduce 39 positions and transfer responsibilities to Emerson shared-service centers. OSI Inc. restructuring expense in 2021 related mostly to severance and resulted from a reduction in force, mainly in Asia.

8. Leases

The Company has operating leases primarily for corporate offices, and other operating leases for data centers and certain equipment. The Company determines whether an arrangement is or contains a lease based on facts and circumstances present at the inception of the arrangement. The Company recognizes lease expense on a straight-line basis over the lease term. The Company's leases have remaining lease terms of less than one year to approximately 12 years, some of which include options to extend the leases for up to five years, and some of which include the option to terminate the leases upon advanced notice of 60 days or more. If the Company is reasonably certain they will exercise an option to extend or terminate the lease, the time period covered by the extension or termination option is included in the lease term.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected lease term. The interest rate implicit in the lease contracts is typically not readily determinable. As such, the Company utilizes the appropriate incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term at an amount equal to the lease payments in a similar economic environment. Certain adjustments to the right-of-use asset may be required for items such as incentives received. The Company has lease agreements with lease and non-lease components, which are accounted for combined as one lease component.

Operating lease costs are recognized on a straight-line basis over the term of the lease. The components of total lease expense for fiscal 2023, 2022, and 2021 were as follows:

	ear Ended ine 30, 2023	Nine Months Ended June 30, 2022			Year Ended eptember 30, 2021
		s in Thousands)			
Operating lease expense	\$ 17,417	\$	4,769	\$	6,365
Variable lease expense	\$ 813	\$	518	\$	797
Short term lease expense	\$ 125	\$	723	\$	889

The following table summarizes the balances of the Company's operating lease right-of-use assets and operating lease liabilities as of June 30, 2023 and 2022:

		June 30,			
	2023	2023 2022			
	(Doll	(Dollars in Thousands)			
Operating lease right-of-use assets	\$ 67,	542 \$	78,286		
Current operating lease liabilities	\$ 12,	928 \$	7,191		
Non-current operating lease liabilities	\$ 55,	442 \$	71,933		

The weighted-average remaining lease term for operating leases was nine years and the weighted-average discount rate was 3.0% as of June 30, 2023 and 2022, respectively.

The following table represents the future maturities of the Company's operating lease liabilities as of June 30, 2023:

Year Ending June 30,	(Dollars in Thousands)
2024	\$ 14,409
2025	10,472
2026	7,327
2027	6,578
2028	6,085
Thereafter	32,179
Total lease payments	77,050
Less: imputed interest	(8,680)
	\$ 68,370

9. Fair Value

The Company determines fair value by utilizing a fair value hierarchy that ranks the quality and reliability of the information used in its determination. Fair values determined using "Level 1 inputs" utilize unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Fair values determined using "Level 2 inputs" utilize data points that are observable, such as quoted prices, interest rates and yield curves for similar assets and liabilities.

Cash equivalents are reported at fair value utilizing quoted market prices in identical markets, or "Level 1 Inputs." The Company's cash equivalents consist of short-term money market instruments.

Equity method investments are reported at fair value calculated in accordance with the market approach, utilizing market consensus pricing models with quoted prices that are directly or indirectly observable, or "Level 2 Inputs."

The following table summarizes financial assets and liabilities measured and recorded at fair value on a recurring basis in the accompanying consolidated and combined balance sheets as of June 30, 2023 and 2022, segregated by the level of the valuation inputs within the fair value hierarchy utilized to measure fair value:

	Fa	Fair Value Measurements at Reporting Date Using,				
		Quoted Prices in Active Markets for Identical Assets (Level 1 Inputs)		her Observable puts		
	(Le			2 Inputs)		
		(Dollars in Thousands)				
June 30, 2023						
Cash equivalents	\$	132,918	\$			
Equity method investments		_		2,673		
June 30, 2022						
Cash equivalents	\$	2,998	\$			
Equity method investments				1,761		

Financial instruments not measured or recorded at fair value in the accompanying consolidated and combined financial statements consist of accounts receivable, accounts payable and accrued liabilities. The estimated fair value of these financial instruments approximates its carrying value. The estimated fair value of the borrowings under the Amended and Restated Credit Agreement (described below in Note 13, "Debt") approximates its carrying value due to the floating interest rate.

10. Accounts Receivable

The Company's accounts receivable, net of the related allowance for doubtful accounts, were as follows as of June 30, 2023 and 2022:

	Ju	June 30,			
	2023	2023 2022			
	(Dollars in	(Dollars in Thousands)			
Accounts receivable, gross	\$ 129,887	\$	112,216		
Allowance for doubtful accounts	(7,098))	(1,189)		
Account receivable, net	\$ 122,789	\$	111,027		

11. Property, Equipment and Leasehold Improvements

Property, equipment and leasehold improvements in the accompanying consolidated and combined balance sheets consist of the following:

		June 30,			
	2023 20		2022		
	(Dollars in Thousand			nds)	
Property, equipment and leasehold improvements, at cost:					
Computer equipment, furniture & fixtures	\$	26,918	\$	27,465	
Leasehold improvements		8,544		7,158	
Construction in progress		1,658		493	
Property, equipment and leasehold improvements, at cost		37,120		35,116	
Accumulated depreciation		(18,450)	_	(17,968)	
Property, equipment and leasehold improvements, net	\$	18,670	\$	17,148	

Property and equipment are stated at cost. The Company records depreciation using the straight-line method over their estimated useful lives, as follows:

Asset Classification	Estimated Useful Life
Computer equipment	three years
Furniture and fixtures	10 years
Leasehold improvements	Life of lease or asset, whichever is shorter

Depreciation expense was \$5.5 million, \$3.2 million and \$5.3 million for fiscal 2023, 2022 and 2021, respectively.

12. Accrued Expenses and Other Liabilities

Accrued expenses and other current liabilities in the accompanying consolidated and combined balance sheets consist of the following:

	June 30,				
	2023 2			2022	
		(Dollars in	Thousan	ousands)	
Compensation-related	\$	62,162	\$	62,813	
Acquisition related		8,984		5,799	
Professional fees		6,265		4,448	
Accrued taxes		3,065		4,102	
Royalties and outside commissions		654		2,773	
Other		18,396		10,188	
Total accrued expenses and other current liabilities	\$	99,526	\$	90,123	

Other non-current liabilities in the accompanying consolidated and combined balance sheets consist of the following:

	 June 30,		
	2023		2022
	(Dollars in	Thousan	ds)
Uncertain tax positions	\$ 9,139	\$	3,593
Accrued pension	5,917		1,345
Asset retirement obligations	830		831
Other	 3,354		9,791
Total other non-current liabilities	\$ 19,240	\$	15,560

13. Debt

Bridge Facility

On July 27, 2022, the Company entered into a \$475.0 million senior unsecured bridge facility (the "Bridge Facility") with JPMorgan Chase Bank, N.A. ("JPMorgan"), as Administrative Agent, to finance the Micromine acquisition. The Bridge Facility was entered into under the existing Amended and Restated Credit Agreement dated as of December 23, 2019, with JPMorgan ("Amended and Restated Credit Agreement"). The Company may elect that each incremental borrowing under the Bridge Facility bear interest at a rate per annum equal to (a) the Alternate Base Rate ("ABR"), plus the applicable margin or (b) the Adjusted Term Secured Overnight Financing Rate ("SOFR"), plus the applicable margin.

As consideration for JPMorgan's agreement to act as administrative agent for the Bridge Facility, the Company is required to pay a fee of \$50,000 per annum, payable on the closing date of the loan and every anniversary thereof during the term of the loan.

For the year ended June 30, 2023, the Company paid a total of \$2.4 million in fees to JPMorgan to secure the Bridge Facility.

On December 23, 2022, the Company terminated the Bridge Facility, and at the same time entered into the Emerson Credit Agreement, which will provide for an aggregate term loan commitment of \$630.0 million. There were no amounts outstanding under the Bridge Facility at the time it was terminated. Refer to Note 19, "Related-Party Transactions", for further discussion of the Emerson Credit Agreement.

Amended and Restated Credit Agreement

The Company also has an Amended and Restated Credit Agreement with JPMorgan that provides for a \$200.0 million secured revolving credit facility and a \$320.0 million secured term loan facility.

On January 17, 2023, the Company paid off the outstanding balance of its existing JPMorgan term loan facility of \$264.0 million, plus accrued interest.

There were no amounts outstanding under the revolving credit facility at either June 30, 2023 and 2022. Any outstanding balances of the indebtedness under the revolving credit facility mature on December 23, 2024.

The Amended and Restated Credit Agreement contains customary affirmative and negative covenants, including restrictions on incurrence of additional debt, liens, fundamental changes, asset sales, restricted payments (including dividends) and transactions with affiliates. There are also financial covenants measured at the end of each fiscal quarter including a maximum leverage ratio of 3.50 to 1.00 and a minimum interest coverage ratio of 2.50 to 1.00. As of June 30, 2023, the Company was in compliance with these covenants.

14. Stock-Based Compensation

Emerson Performance Shares and Restricted Stock Units

Certain employees of the Industrial Software Business participate in Emerson stock-based compensation plans, and were granted performance share and restricted stock units. Compensation expense is recognized based on Emerson's cost of the awards under ASC 718, *Compensation- Stock Compensation*. All awards granted under these stock-based compensation plans

are based on Emerson's common stock and are not indicative of the results that the Industrial Software Business would have experienced as a separate and independent business for the periods presented. Stock-based compensation expense reflected in the Company's financial statements relating to these awards was \$1.8 million, \$1.1 million, and \$1.7 million for fiscal 2023, 2022 and 2021, respectively.

Heritage AspenTech Equity Incentive Awards

Pursuant to the terms of the Transaction Agreement, each outstanding option to purchase shares of Heritage AspenTech common stock, whether vested or unvested, that was unexercised as of immediately prior to the Closing Date was converted into an option to acquire shares of AspenTech. Each converted option is subject to the same terms and conditions as applied to the original option. In addition, each outstanding award of restricted stock units with respect to shares of Heritage AspenTech common stock that were unvested as of immediately prior to the Closing Date was converted into an award of restricted stock units with respect to shares of AspenTech. Each converted restricted stock unit is also subject to the same terms and conditions as applied to the original restricted stock unit.

Immediately prior to the Closing Date, Heritage AspenTech had 1,326,860 stock options to purchase common stock (stock options) and 504,386 restricted stock units (RSUs) outstanding, which were converted to 1,165,494 AspenTech stock options and 453,397 AspenTech RSUs after the Closing Date.

ASC 805 requires the Company to determine the fair value of the AspenTech share-based payment awards related to the replacement of the Heritage AspenTech share-based payment awards, and allocate the total fair value based on the services that are attributable to the pre- and post-combination service periods, respectively. The portion that is attributable to the pre- combination service period was considered part of the consideration transferred for Heritage AspenTech and included as part of the purchase price. The portion that is attributable to the post-combination service period is being recognized as stock-based compensation expense in the post-combination consolidated financial statements over the remaining requisite service period.

The fair value of the replacement awards that are attributable to pre- and post-combination services was as follows:

	Pre-			ost-combination portion	
	(Dollars in Thousands)			nds)	
Restricted stock units	\$	22,422	\$	61,898	
Stock options		79,883		34,752	
Total	\$	102,305	\$	96,650	

AspenTech Equity Incentive Awards

Omnibus Plan

On May 16, 2022, the stockholders of the Company approved the Aspen Technology, Inc. 2022 Omnibus Incentive Plan (the "Omnibus Plan"). The Omnibus Plan was previously approved by the Company's board of directors, subject to stockholders' approval. The Omnibus Plan permits the grant of restricted stock, restricted stock units, stock options (incentive stock options and nonqualified stock options), stock appreciation rights, performance awards, cash-based awards and other stock-based awards. A total of 4,564,508 shares of the Company's common stock is available for grants under the Omnibus Plan, subject to adjustment under certain circumstances described in the Omnibus Plan.

Option awards have been granted with an exercise price equal to the market closing price of the Company's stock on the trading day prior to the grant date. Those options generally vest over four years and expire within seven years or 10 years of grant. RSUs generally vest over four years.

Employee Stock Purchase Plan

On May 16, 2022, the stockholders of AspenTech approved the Aspen Technology, Inc. 2022 Employee Stock Purchase Plan (the "ESPP"). The ESPP was previously approved by AspenTech's board of directors, subject to stockholders' approval. A total of 184,010 shares of AspenTech common stock is available for grants under the ESPP, subject to adjustment under certain circumstances described in the ESPP.

The ESPP permits eligible employees to purchase a limited amount of common stock as defined in the ESPP through payroll deductions at a purchase price equal to 85% of the lower of (a) the fair market value of the common stock on the first

trading day of each ESPP offering period and (b) the fair market value of the common stock on the last day of each six-month offering period.

As of June 30, 2023, there were 154,174 shares of common stock available for issuance under the ESPP.

Stock Compensation Accounting

The Company's stock-based compensation is accounted for as awards of equity instruments. Its policy is to issue new shares upon the exercise of vested stock awards.

The Company utilized the Black-Scholes option valuation model for estimating the fair value of options granted. The Black-Scholes option valuation model incorporates assumptions regarding expected stock price volatility, the expected life of the option, the risk-free interest rate, dividend yield and the market value of its common stock. The expected stock price volatility is determined based on its stock's historic prices over a period commensurate with the expected life of the award. The expected life of an option represents the period for which options are expected to be outstanding as determined by historic option exercises and cancellations. The risk-free interest rate is based on the U.S. Treasury yield curve for notes with terms approximating the expected life of the options granted. The expected dividend yield is zero, based on the Company's history and expectation of not paying dividends on common shares. The Company recognized stock-based compensation expense on a straight-line basis, net of forfeitures as they occur, over the requisite service period for time-vested awards.

The Company utilized the Black-Scholes option valuation model with the following weighted average assumptions:

	Year Ended J	une 30,
	2023	2022
Risk-free interest rate	3.4 %	3.0 %
Expected dividend yield	None	None
Expected life (in years)	4.8	5.2
Expected volatility factor	38.2 %	36.1 %

The stock-based compensation expense and its classification in the accompanying consolidated and combined statements of operations for fiscal 2023, 2022 and 2021 was as follows:

	 Year Ended June 30, 2023		Nine Months Ended June 30, 2022		Ended er 30, 2021
		(Dollars in	Thousands)		
Recorded as expenses:					
Cost of license and solutions	\$ 3,565	\$	1,351	\$	
Cost of maintenance	1,893		344		
Cost of service and other	1,995		282		
Selling and marketing	16,202		2,850		—
Research and development	21,790		3,507		—
General and administrative	 39,405		7,429		1,744
Total stock-based compensation	\$ 84,850	\$	15,763	\$	1,744

A summary of stock option and RSU activity under all equity plans in fiscal 2023 and 2022 is as follows:

		Stock (Restricted St	ock Units		
	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in 000's)	Shares	Weighted Average Grant Date Fair Value
Outstanding at September 30, 2021	_	\$ —	_	\$ —	— \$	· —
Issuance of replacement awards	1,165,494	101.44			453,397	166.30
Issuance of non-replacement awards	76,056	193.55			124,226	193.70
Settled (RSUs)					(87,930)	188.32
Exercised	(62,250)	93.32				
Cancelled / Forfeited	(3,447)	138.78			(5,149)	184.62
Outstanding at June 30, 2022	1,175,853	\$ 120.03	7.06	\$ 75,597	484,544	S 188.45
Granted	208,361	205.46			257,773	201.59
Settled (RSUs)					(244,161)	193.72
Exercised	(347,238)	96.12				
Cancelled / Forfeited	(31,150)	178.39			(41,788)	194.48
Outstanding at June 30, 2023	1,005,826	\$ 144.17	6.44	\$ 32,935	456,368	5 192.55
Exercisable at June 30, 2023	643,086	\$ 125.00	5.42	\$ 29,872		
Vested and expected to vest at June 30, 2023	983,744	\$ 143.36	6.39	\$ 32,719	390,284	5 192.37

The weighted average estimated fair value of option awards granted during fiscal 2023 and 2022 was \$79.02 and \$71.90, respectively.

During fiscal 2023 and 2022, the weighted average grant-date fair value of RSUs granted was \$201.59 and \$193.70, respectively. During fiscal 2023 and 2022, the total fair value of vested shares from RSU grants amounted to \$50.5 million and \$46.6 million, respectively.

As of June 30, 2023, the total future unrecognized compensation cost related to stock options and RSUs was \$23.4 million and \$47.6 million, respectively, and are expected to be recorded over a weighted average period of 2.26 years and 2.54 years, respectively.

During fiscal 2023 and 2022, the weighted average exercise price of stock options granted was \$205.46 and \$193.35, respectively. The total intrinsic value of options exercised during fiscal 2023 and 2022 was \$42.8 million and \$18.7 million, respectively. The Company received \$45.0 million and \$23.0 million in cash proceeds from issuances of shares of common stock during fiscal 2023 and 2022, respectively. The Company paid \$18.0 million and \$16.0 million for withholding taxes on vested RSUs during fiscal 2023 and 2022, respectively.

At June 30, 2023, common stock reserved for future issuance under equity compensation plans was 4.0 million shares.

15. Stock Repurchases

On May 5, 2023, the Company entered into an accelerated share repurchase program ("ASR Program") with JPMorgan to repurchase an aggregate of \$100.0 million of the Company's common stock. Pursuant to the terms of the ASR Program, the Company made an initial payment to JPMorgan and received an initial delivery of 487,626 shares of the Company's common stock, which represents approximately 80% of the total number of shares of the Company's common stock expected to be purchased under the ASR Program. Under the ASR Program, upon settlement, the Company will either receive additional shares of common stock from JPMorgan or be required to deliver additional shares of common stock or cash to JPMorgan. The final number of shares the Company will repurchase will be based on the average of the daily volume-weighted average prices of the Company's common stock during the term of the ASR Program. Cash settlement is not mandatory pursuant to the terms of the ASR Program, and the Company intends to settle the ASR Program with the issuance of shares.

The \$100.0 million payment made to JPMorgan was recognized as a reduction to stockholders' equity, consisting of a \$84.1 million increase in treasury stock, which represents the value of the initial 487,626 shares received upon initial settlement, and a \$15.9 million decrease to additional-paid-in-capital. The amount recognized in additional-paid-in-capital represents the trade-date value of the stock held by JPMorgan pending final settlement of the ASR Program, which is an equity-classified forward purchase contract on the Company's own common stock. The ASR Program settled on August 7, 2023, resulting in an additional delivery of 107,045 shares of the Company's common stock.

16. Net Income Per Share

Basic income per share is determined by dividing net income by the weighted average common shares outstanding during the period. Diluted income per share is determined by dividing net income by diluted weighted average shares outstanding during the period. Diluted weighted average shares reflect the dilutive effect, if any, of potential common shares. To the extent their effect is dilutive, employee equity awards and other commitments to be settled in common stock are included in the calculation of diluted net income per share based on the treasury stock method.

Prior to the Transaction, the Industrial Software Business did not have any shares of common stock outstanding. Accordingly, net loss per share for fiscal 2022 and 2021 has been calculated using weighted average shares outstanding (basic and diluted) assuming the number of shares of common stock issued to Emerson on the closing date of the Transaction were issued on October 1, 2020.

The calculations of basic and diluted net income per share and basic and dilutive weighted average shares outstanding are as follows:

	Year Ended June 30, 2023		Nine Months Ended June 30, 2022		Year Ended tember 30,2021
(Dollars and Shares in Thousands, Except per Share Data)					
Net (loss) income	\$	(107,760)	\$	53,146	\$ (20,608)
Weighted average shares outstanding		64,621		40,931	36,308
Dilutive impact from:					
Employee equity awards		_		77	
Dilutive weighted average shares outstanding		64,621		41,008	36,308
Income per share					
Basic	\$	(1.67)	\$	1.30	\$ (0.57)
Dilutive	\$	(1.67)	\$	1.30	\$ (0.57)

For fiscal year 2023 and 2022, certain employee equity awards were anti-dilutive based on the treasury stock method. The following employee equity awards were excluded from the calculation of dilutive weighted average shares outstanding because their effect would be anti-dilutive as of June 30, 2023 and 2022:

	Year Ende	d June 30,
	2023	2022
	(Shares in T	'housands)
nployee equity awards	1,312	65

17. Derivatives

In connection with the agreement to purchase Micromine, the Company entered into a series of foreign currency forward contracts during fiscal 2023 to mitigate the impact of foreign currency exchange associated with the forecasted payment of the purchase price. On June 21, 2023, the Company terminated all outstanding foreign currency forward contracts. As a result, the Company recognized net realized losses of \$26.2 million for the year ended June 30, 2023, included in other (expense) income, net on the consolidated and combined statements of operations related to these contracts. There are no outstanding forward currency forward contracts, or any other derivative contracts, as of June 30, 2023.

18. Income Taxes

(Loss) income before provision for income taxes consists of the following:

	Year Ended June 30, 2023										Year Ended September 30, 2021	
			(Dollars in	Thousands)								
Domestic	\$	(201,620)	\$	29,905	\$	(86,550)						
Foreign		21,054		10,056		20,637						
(Loss) income before provision for income taxes	\$	(180,566)	\$	39,961	\$	(65,913)						

The (benefit) for income taxes shown in the accompanying consolidated and combined statements of operations is composed of the following:

		Year Ended June 30, 2023		Nine Months Ended June 30, 2022		Year Ended ember 30, 2021
			(Dolla	rs in Thousands)		
Federal—						
Current	\$	112,181	\$	59,162	\$	2,702
Deferred		(184,400)		(70,046)		(48,043)
State—						
Current		6,333		4,385		1,004
Deferred		(7,301)		(10,431)		(4,980)
Foreign—						
Current		9,293		3,465		4,191
Deferred	_	(8,912)		280		(179)
	\$	(72,806)	\$	(13,185)	\$	(45,305)

The (benefit) for income taxes differs from that based on the federal statutory rate due to the following:

	 Year Ended June 30, 2023	Nine Months Ended June 30, 2022		Year Ended September 30, 20	
		(Dollars in	Thousands)		
Taxes at U.S. statutory rate (21%)	\$ (37,919)	\$	8,392	\$	(13,842)
State and local taxes, net of federal tax benefit	(1,762)		(7,003)		(3,141)
Foreign derived intangible income (FDII)	(36,436)		(17,150)		
Global Intangible Low-Taxed Income (GILTI)	3,027		446		
Foreign taxes and rate differences	(2,943)		2,669		1,181
Uncertain tax positions	405		(2,556)		(2,522)
Stock-based compensation	4,828		152		
Return to Provision	4,070		498		
Tax credits	(396)		(3,385)		(523)
Change in valuation allowance	(5,680)		5,287		(27,953)
Other	 		(535)		1,495
(Benefit) for income taxes	\$ (72,806)	\$	(13,185)	\$	(45,305)

The Company's tax benefit for the fiscal 2023 was favorably impacted primarily by the Foreign-Derived Intangible Income ("FDII") deduction, the benefit from the deduction of state taxes, the difference in foreign tax rates, and the change in valuation allowance on certain jurisdictions, offset by Global Intangible Low-Taxed Income ("GILTI"), stock-based compensation, and return to provision adjustment. Assuming certain requirements are met, the FDII deduction is a benefit for U.S. companies that sell their products or services to customers for use outside the U.S.

Net deferred tax liabilities consist of the following at June 30, 2023 and 2022:

	June 30,			
	2023	2022		
	(Dollars in Thousands)			
Deferred tax assets:				
Federal, state and foreign credits	\$ 7,171 \$	\$ 10,162		
Net operating loss carryforwards	10,720	11,557		
Deferred revenue	15,962	11,783		
Other reserves and accruals	22,346	23,429		
Intangible assets	19,369	19,215		
Capitalized research and development	46,693	2,479		
Property, leasehold improvements and other basis differences	4,186	5,135		
Other temporary differences	2,660	3,615		
Total gross deferred tax assets	129,107	87,375		
Valuation allowance	(15,995)	(24,110)		
Total net deferred tax assets	113,112	63,265		
Deferred tax liabilities:				
Intangible assets	(1,005,672)	(1,099,532)		
Contract assets and costs	(41,643)	(91,298)		
Deferred revenue	(3,315)	(1,092)		
Property, leasehold improvements, and other basis differences	(5,820)	(7,634)		
Other temporary differences	(3,935)	(4,180)		
Total gross deferred tax liabilities	(1,060,385)	(1,203,736)		
Net deferred tax (liabilities)	\$ (947,273)	\$ (1,140,471		

Reflected in the deferred tax assets above at June 30, 2023, the Company has foreign net operating loss carryforwards of \$45.3 million, with unlimited carryforwards, federal and state research & development (R&D) credits of \$6.7 million and foreign R&D credits of \$0.5 million which begin to expire in 2027.

The Company's valuation allowance for deferred tax assets was \$16.0 million and \$24.1 million as of June 30, 2023 and 2022, respectively. The significant items of the valuation allowance as of June 30, 2023 are attributable to a reserve against foreign deferred tax assets of \$3.2 million, foreign net operating losses of \$5.7 million and state R&D credits of \$6.4 million.

For fiscal 2023, the Company's income tax provision included amounts determined under the provisions of ASC 740 intended to satisfy additional income tax assessments, including interest and penalties, that could result from any tax return positions for which the likelihood of sustaining the position on audit does not meet a threshold of "more likely than not." Tax liabilities were recorded as a component of their income taxes payable and other non-current liabilities. The ultimate amount of taxes due will not be known until examinations are completed and settled or the audit periods are closed by statutes.

At June 30, 2023, the amount of unrecognized tax benefits, excluding interest and penalties is \$7.6 million. Upon being recognized, \$7.6 million would reduce the effective tax rate. A reconciliation of the reserve for uncertain tax positions, excluding interest and penalties, is as follows:

	Year Ended June 30,				
		2023		2022	
		(Dollars in	Thousand	ls)	
Beginning balance	\$	6,716	\$	8,032	
Additions for current year tax positions		1,011		396	
Additions for prior year tax positions		1,657		1,761	
Reductions for prior year tax positions				(2,250)	
Reductions for settlements with tax authorities					
Reductions for expirations of statute of limitations		(1,823)		(1,223)	
Uncertain tax positions, excluding interest and penalties, end of year	\$	7,561	\$	6,716	

The Company's policy is to recognize interest and penalties related to income tax matters as provision for (benefit from) income taxes. As of June 30, 2023, the Company had approximately \$1.1 million of accrued interest and \$0.5 million of penalties related to uncertain tax positions. The total amount of uncertain tax positions, including interest and penalties, is \$9.1 million. The Company recorded a benefit for interest and penalties of approximately \$(0.2) million during fiscal 2023 mainly due to expirations of statute of limitations. It is reasonably possible as of June 30, 2023 that the liability for unrecognized tax benefits for the uncertain tax position will decrease by approximately \$1.5 million over the next twelve-month period.

The Company is subject to income tax in many jurisdictions outside the United States. The Company is no longer under examination by the taxing authority regarding any U.S. federal income tax returns for fiscal years prior to 2020. Its operations in certain jurisdictions remain subject to examination for tax years 2014 to 2022, some of which are currently under audit by local tax authorities. The resolutions of these audits are not expected to be material to its consolidated and combined financial statements.

19. Related-Party Transactions

The Company utilizes some aspects of Emerson's centralized treasury function to manage the working capital and financing needs of its business operations. This function oversees a cash pooling arrangement which sweeps certain Company cash accounts into pooled Emerson cash accounts on a daily basis. Pooled cash and nontrade balances attributable to Emerson have been presented as receivables from related parties or due to related parties in the consolidated and combined financial statements of the Company.

Before the closing of the Transaction, the Industrial Software Business was charged for costs directly attributable to the SSE business and OSI Inc. and was allocated a portion of Emerson's costs, including general corporate costs, information technology costs, insurance and other benefit costs, and shared service and other costs. All of these costs are reflected in the Company's consolidated and combined financial statements. Management believes the methodologies and assumptions used to allocate these costs are reasonable.

At the closing of the Transaction, Emerson and the Company entered into a transition service agreement ("TSA") for the provision of certain transitionary services from Emerson to AspenTech. Pursuant to the TSA, Emerson provides AspenTech and its subsidiaries with certain services, including information technology, human resources and other specified services, as well as access to certain of Emerson's existing facilities. TSA related activities have been recorded as cost of goods sold or operating expenses from related parties and resulting balances have been presented as receivable from or due to related parties in the consolidated and combined financial statements presented.

Receivables from related parties and due to related parties reported in the consolidated and combined balance sheets as of June 30, 2023 and 2022 include the following:

		June 30,			
	2	2023	2022		
		(Dollars in Thousands)			
Interest bearing receivables from related parties	\$	61,948 \$	16,122		
Trade receivables from related parties		427	819		

Interest bearing payables to related parties	21,866	2,028
Trade payables to related parties	153	2,083

Allocations and charges from Emerson are as follows:

	Year Ended June 30, 2023				-	'ear Ended mber 30,2021
			(Dollars	in Thousands)		
Corporate costs	\$	—	\$	3,212	\$	5,536
Information technology		2,949		1,684		1,908
Insurance and other benefits				446		1,263
Shared services and other		5,571		10,294		9,300

Corporate costs, human resources, and insurance and other benefits are recorded in general and administrative expenses and information technology, facility charges, and shared services and other are allocated to cost of goods sold and operating expenses based on systematic methods.

Before the closing of the Transaction, OSI Inc. and the SSE business engaged in various transactions to sell software and purchase goods in the ordinary course of business with affiliates of Emerson. At the closing, the Company and Emerson entered into a commercial agreement to allow Emerson to distribute software and services from AspenTech (the "Commercial Agreement"). Pursuant to the Commercial Agreement as amended from time to time in accordance with the Stockholders Agreement, AspenTech will grant Emerson the right to distribute, on a non-exclusive basis, certain (i) existing Heritage AspenTech products, (ii) existing Emerson products being transferred to AspenTech pursuant to the Transaction Agreement and (iii) future AspenTech products as mutually agreed upon, in each case, to end-users through Emerson acting as an agent, reseller or original equipment manufacturer. Commercial Agreement related activities have been recorded as revenues and expenses from related parties and resulting trade balances have been presented as trade receivables from related parties in the consolidated and combined financial statements presented. Revenue from Emerson are as follows:

	 Year Ended Nine Months Ended June 30, 2023 June 30, 2022		d Year Ended September 30, 202	
		(Dollars in Thousand	s)	
Revenue from Emerson affiliates	\$ 30	\$ —	- \$	2
Purchases from Emerson affiliates	445	2,337	,	241

Emerson Share Maintenance Rights

Immediately following the closing of the Transaction, Emerson beneficially owned 55% of the fully diluted shares of AspenTech common stock. Emerson has the right to acquire additional equity securities of AspenTech pursuant to pre-agreed procedures and rights in order to maintain its ownership interest. No additional shares of common stock, or any other equity securities of AspenTech, were issued by the Company to Emerson subsequent to the closing of the Transaction through June 30, 2023.

Business combination with related party

The Inmation acquisition completed on August 29, 2022 was considered a related party transaction. Refer to Note 4, "Acquisitions", for further discussion.

Credit agreement with related party

On December 23, 2022, the Company entered into the Emerson Credit Agreement with Emerson, which provides for an aggregate term loan commitment of \$630.0 million. Under the terms of the Agreement, the Company will use the proceeds from borrowings under the Agreement to pay in part the cash consideration for funding the Micromine acquisition and pay the fees and expenses incurred in connection with the Emerson Credit Agreement.

Principal outstanding under the Emerson Credit Agreement bears interest at a rate per annum equal to Term SOFR Rate (as such term is defined in Emerson Credit Agreement) plus an amount ranging from 1.25% to 1.75%.

Any term loan made under the Emerson Credit Agreement is unsecured and matures on the fifth anniversary of the date the term loan is funded. The Company is permitted to prepay the term loan in whole or in part upon provision of notice in accordance with the Emerson Credit Agreement. Upon an event of default (as such term is defined in the Emerson Credit Agreement), the loan may become due and payable in full upon provision of notice in accordance with the Emerson Credit Agreement.

In addition, the Emerson Credit Agreement includes a mandatory prepayment provision if at any time Emerson fails to beneficially own more than 40% of AspenTech common stock for a period of more than 30 consecutive days and Emerson provides us written notice requiring us to prepay the term loan. In such an event, the Company would have no less than either 30 days or 180 days from the date of such notice, depending upon the circumstances giving rise to the decrease in Emerson's ownership interest, to prepay the term loan.

The Emerson Credit Agreement contains affirmative and negative covenants customary for facilities of this type, including restrictions on incurrence of additional debt, liens, fundamental changes, asset sales, restricted payments and transactions with affiliates. The Agreement also contains financial covenants regarding maintenance as of the end of each fiscal quarter of a maximum leverage ratio of 3.50 to 1.00 and a minimum interest coverage ratio of 2.50 to 1.00. As of June 30, 2023, the Company was in compliance with all the loan covenants.

There was no amount outstanding under the Emerson Credit Agreement at June 30, 2023.

On August 18, 2023, the Emerson Credit Agreement was terminated in connection with the termination of the agreement to purchase Micromine. No amounts were outstanding under the Emerson Credit Agreement subsequent to June 30, 2023 through the termination date.

20. Commitments and Contingencies

The Company accrues estimated liabilities for loss contingencies arising from claims, assessments, litigation and other sources when it is probable that a liability has been incurred and the amount of the claim assessment or damages can be reasonably estimated. The Company believes it has sufficient accruals to cover any obligations resulting from claims, assessments or litigation that have met these criteria.

There were no known contingent liabilities (including guarantees, taxes and other claims) that management believes will be material in relation to the Company's consolidated and combined financial statements, nor were there any material commitments outside the normal course of business.

21. Retirement Plans

Most of the Company's U.S. and non-U.S. employees participate in defined contribution plans, including 401(k), profit sharing, and other savings plans that provide retirement benefits. In the United States, the Company maintains a defined contribution retirement plan under Section 401(k) of the Internal Revenue Code (IRC) covering all eligible employees, as defined. Under the plan, a participant may elect to defer receipt of a stated percentage of his or her compensation, subject to limitation under the IRC, which would otherwise be payable to the participant for any plan year. The Company may make discretionary contributions to this plan, including making matching contributions of 50%, up to a maximum of 6% of an employee's pretax contribution. The Company made matching contributions of approximately \$4.7 million, \$1.9 million and \$2.0 million in fiscal 2023, 2022 and 2021, respectively. Additionally, the Company participates in certain government mandated defined contribution plans throughout the world for which the Company complies with all funding requirements. The total expenses related to employees participating in these plans were \$2.7 million, \$2.0 million, and \$5.1 million for fiscal 2023, 2022 and 2021, respectively.

Certain non-U.S. employees participate in Company-specific or statutorily required defined benefit plans. In general, the Company's policy is to fund these plans based on legal requirements, required benefit payments, and other factors. Defined benefit plan expense, benefits paid, and benefit plan contributions made by the Company were not material for all periods presented.

The non-U.S. defined benefit liability was \$8.7 million and \$7.0 million as of June 30, 2023 and 2022, respectively, as the projected benefit obligation and fair value of plan assets were \$13.6 million and \$4.8 million as of June 30, 2023 and \$11.6 million and \$4.6 million as of June 30, 2022, while the deferred actuarial gain in accumulated other comprehensive income was \$0.1 million as of June 30, 2023 and a gain of \$0.8 million as of June 30, 2022.

22. Segment and Geographic Information

Operating segments are defined as components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and to assess performance.

Prior to the Transaction, the Industrial Software Business had two operating and reportable segments: OSI Inc. and the GSS business (subsequently renamed Subsurface Science & Engineering Solutions, or "SSE", after the Closing Date). The Transaction resulted in the creation of a third operating and reportable segment: Heritage AspenTech. During the three months ended September 30, 2022, the Company completed certain integration activities and changes to its organizational structure that triggered a change in the composition of its operating and reportable segments. As a result, beginning with the interim period ended September 30, 2022, the Company is now comprised of a single operating and reportable segment. Accordingly, the Company has restated its operating and reportable segment information for fiscal 2022 and 2021. The Company's chief operating decision maker is its President and Chief Executive Officer.

Geographic Information

Summarized below is information about the Company's geographic operations:

Revenue by Destination

		Year Ended June 30, 2023				Nine Months Ended June 30, 2022		Year Ended otember 30, 2021
			(Do	llars in Thousands)				
Americas	\$	486,506	\$	234,383	\$	182,314		
Asia, Middle East and Africa		281,974		85,955		60,300		
Europe		275,698		84,958		58,026		
Total	\$	1,044,178	\$	405,296	\$	300,640		

Americas included revenue in the U.S. of \$387.8 million, \$173.5 million, and \$123.2 million for fiscal 2023, 2022, and 2021, respectively.

		Property, Equipment, and Leasehold Improvements, Net		
		June 30,		
		20232022(Dollars in Thousands)		2022
				nds)
Americas	\$	15,793	\$	14,591
Asia, Middle East and Africa		1,923		1,154
Europe		954		1,403
Total	\$	18,670	\$	17,148

Property, equipment, and leasehold improvements located in the U.S. were \$13.4 million and \$13.0 million, as of June 30, 2023 and 2022, respectively.

23. Transition Period Comparative Data

As discussed in Note 1, this Annual Report on Form 10-K includes financial information for the year ended June 30, 2023, nine-month period ended June 30, 2022, and the year ended September 30, 2021. The Consolidated and Combined Statements of Operations and Cash Flows for the twelve-months ended June 30, 2023 and 2022, are summarized below. All data for the twelve-month period ended June 30, 2022, are derived from the Company's unaudited consolidated and combined financial statements.

	1	Twelve-Month Period Ended June 30,			
Dollars in Thousands, Except per Share Data)		2023		2022	
				(unaudited)	
Revenue	\$	1,044,178	\$	482,311	
Cost of revenue		373,589		199,916	
Gross profit		670,589		282,395	
Operating expenses		853,654		260,123	
(Loss) income from operations		(183,065)		22,272	
Other (expense), net		(29,418)		(1,048)	
Interest income, net		31,917		3,222	
(Loss) income before provision for income taxes		(180,566)		24,446	
(Benefit) for income taxes		(72,806)		(17,498)	
Net (loss) income	\$	(107,760)	\$	41,944	
Net (loss) income per common share:					
Basic	\$	(1.67)	\$	1.05	
Diluted	\$	(1.67)	\$	1.05	
Weighted average shares outstanding:					
Basic		64,621		39,768	
Diluted		64,621		39,845	

		Twelve-Month Period Ended June 30,			
(Dollars in Thousands)		2023	2022		
			(unaudited)		
Cash flows from operating activities: Net (loss) income	¢	(107.7(0) \$	41.044		
	\$	(107,760) \$	41,944		
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		401 410	150.250		
Depreciation and amortization		491,419	150,350		
Reduction in the carrying amount of right-of-use assets		13,869	7,627		
Net foreign currency losses (gains)		4,079	1,232		
Net realized loss on settlement of foreign currency forward contracts		26,176	1(121		
Stock-based compensation		84,850	16,131		
Deferred tax liability		(192,926)	(84,713		
Provision for bad debts		7,827	853		
Other non-cash operating activities		(228)	289		
Changes in assets and liabilities:					
Accounts receivable		(25,538)	(4,486		
Contract assets		(21,658)	(82,898		
Contract costs		(10,165)	(4,992		
Lease liabilities		(13,655)	(5,979		
Prepaid expenses, prepaid income taxes, and other assets		7,625	(6,965		
Accounts payable, accrued expenses, income taxes payable and other liabilities		18,315	(25,908		
Contract liabilities		16,979	17,291		
Net cash provided by operating activities		299,209	19,776		
Cash flows from investing activities:					
Purchase of property, equipment and leasehold improvements		(6,577)	(4,870		
Proceeds from sale of property and equipment		—	91		
Payments for business acquisitions, net of cash acquired		(72,498)	(5,572,996		
Net payments for settlement of foreign currency forward contracts		(26,176)			
Payments for equity method investments		(700)	(24		
Payments for capitalized computer software costs		(366)	(508		
Purchase of other assets		(1,000)	(838		
Net cash (used in) investing activities		(107,317)	(5,579,145		
Cash flows from financing activities:					
Issuance of shares of common stock		36,736	5,702		
Repurchases of common stock		(100,000)			
Payment of tax withholding obligations related to restricted stock		(20,836)	(1,676		
Deferred business acquisition payments		(1,363)	(1,200		
Repayments of amounts borrowed under term loan		(276,000)	(6,000		
Net transfers (to) from Parent Company		(19,933)	5,987,190		
Payments of debt issuance costs		(2,375)			
Net cash (used in) provided by financing activities		(383,771)	5,984,016		
Effect of exchange rate changes on cash and cash equivalents		(16,637)	1,419		
(Decrease) increase in cash and cash equivalents		(208,516)	426,066		
Cash and cash equivalents, beginning of year		449,725	23,659		
Cash and cash equivalents, eeginning of year	\$	241,209 \$			
······································		, - 0>	,,725		

24. Subsequent Events

On July 28, 2023, the Company entered into the Plantweb Optics Analytics Assignment and License Agreement with Emerson for the purchase of Emerson's Plantweb Optics Analytics software and the perpetual and royalty-free licensing of other Emerson intellectual property for \$12.5 million, paid on July 28, 2023.

On August 1, 2023, the Company announced that its Board of Directors approved a share repurchase authorization (the "Share Repurchase Authorization"), pursuant to which the Company may repurchase up to \$300.0 million in the aggregate of the Company's outstanding shares of common stock, by means of open market transactions, block transactions, privately negotiated purchase transactions or any other purchase techniques, including 10b5-1 trading plans. The Share Repurchase Authorization will commence after the conclusion of the Company's ASR Program.

On August 1, 2023, the Company announced the termination of the agreement to purchase Micromine. See Note 1, "Organization and Basis of Presentation" for further information.

On August 7, 2023, the Company settled the ASR Program. See Note 15, "Stock Repurchase" for further information.

On August 18, 2023, the Emerson Credit Agreement was terminated. See Note 19, "Related-Party Transactions" for further information.

EXHIBIT INDEX

Exhibit Number	Description	Filed with this Annual Report on Form 10-K
2.1+	Transaction Agreement and Plan of Merger, dated as of October 10, 2021 (the "Transaction Agreement and Plan of Merger"), among AspenTech Corporation (f/k/a Aspen Technology, Inc.), Emerson Electric Co., EMR Worldwide Inc., Aspen Technology, Inc. (f/k/a Emersub CX, Inc.) and Emersub CXI, Inc. (incorporated by reference to our Form 8-K filed on October 12, 2021).	
2.2	Amendment No. 1 to the Transaction Agreement and Plan of Merger (incorporated by reference to our Form 10-Q filed on April 27, 2022).	
2.3	Amendment No. 2 to the Transaction Agreement and Plan of Merger.	Х
3.1	Amended and Restated Certificate of Incorporation of Aspen Technology, Inc. (f/k/a Emersub CX, Inc.) (incorporated by reference to our Form 8-K filed on May 17, 2022).	
3.2	Amended and Restated Bylaws of Aspen Technology, Inc. (incorporated by reference to our Form 8-K filed on May 17, 2022).	
4.1	Aspen Technology, Inc. Description of Capital Stock	Х
10.1	Stockholders Agreement, dated as of May 16, 2022, among Aspen Technology, Inc., Emerson Electric Co. and EMR Worldwide Inc. (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.2	Registration Rights Agreement, dated as of May 16, 2022, between EMR Worldwide Inc. and Aspen Technology, Inc. (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.3	Tax Matters Agreement, dated as of May 16, 2022, between Emerson Electric Co. and Aspen Technology, Inc. (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.4+	Commercial Agreement, dated as of May 16, 2022, among AspenTech Corporation, Aspen Technology, Inc. and Fisher-Rosemount Systems, Inc. (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.5	Aspen Technology, Inc. 2022 Employee Stock Purchase Plan (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.6^	Aspen Technology, Inc. 2022 Omnibus Incentive Plan (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.7^	Form of Aspen Technology, Inc. Stock Option Grant Agreement (Employee) under the Aspen Technology, Inc. 2022 Omnibus Incentive Plan (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.8^	Form of Aspen Technology, Inc. Restricted Stock Unit Grant Agreement (Employee) under the Aspen Technology, Inc. 2022 Omnibus Incentive Plan.	Х
10.9^	Form of Aspen Technology, Inc. Performance Stock Unit Grant Agreement (Employee) under the Aspen Technology, Inc. 2022 Omnibus Incentive Plan.	Х
10.10^	Form of Aspen Technology, Inc. Restricted Stock Unit Grant Agreement (Director Initial Grant) under Aspen Technology, Inc. 2022 Omnibus Incentive Plan (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.11^	Form of Aspen Technology, Inc. Restricted Stock Unit Grant Agreement (Director Annual Grant) under the Aspen Technology, Inc. 2022 Omnibus Incentive Plan (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.12^	Aspen Technology, Inc. FY23 Executive Bonus Plan (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.13^	Form of Aspen Technology, Inc. Executive Retention Agreement (incorporated by reference to our Form 10-Q filed on May 2, 2023).	

Exhibit Number	Description	Annual Report on Form 10-K
10.14^	Restated Executive Retention Agreement, dated as of May 16, 2022, between Aspen Technology, Inc. and Antonio J. Pietri (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.15^	Form of Aspen Technology, Inc. Indemnification Agreement (incorporated by reference to our Form 10-KT filed on August 25, 2022).	
10.16	Amended and Restated Credit Agreement, dated as of December 23, 2019 (the "Amended and Restated Credit Agreement"), among AspenTech Corporation (f/k/a Aspen Technology, Inc.), as borrower, the lenders party thereto, JPMorgan Chase Bank, N.A., as administrative agent, joint lead arranger and joint bookrunner, Silicon Valley Bank, as joint lead arranger, joint bookrunner and syndication agent, and Citibank N.A., Citizens Bank, N.A., TD Bank, N.A. and Wells Fargo Bank, N.A., as co-documentation agents.	Х
10.17	First Amendment to the Amended and Restated Credit Agreement (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.18	Waiver and Second Amendment to the Amended and Restated Credit Agreement.	Х
10.19	Borrower Assignment and Accession Agreement to the Amended and Restated Credit Agreement of Aspen Technology, Inc. dates as of May 16, 2022 (incorporated by reference to our Form 8-K filed on May 17, 2022).	
10.20	Third Amendment to the Amended and Restated Credit Agreement (incorporated by reference to our Form 10-Q filed on January 30, 2023)	
10.21^	Form of Proprietary and Confidential Information, Non-Competition and Non-Solicitation Agreement of Aspen Technology, Inc. (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.22^	Proprietary and Confidential Information and Non-Competition and Non-Solicitation Agreement, dated as of July 1, 2013, by and between AspenTech Corporation (f/k/a Aspen Technology, Inc.) and Antonio J. Pietri (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
10.23^	Letter agreement, dated as of August 29, 2022, between Aspen Technology, Inc and Frederic G. Hammond (incorporated by reference to our Form 8-K filed on August 31, 2022).	
10.24	System License Agreement, dated as of March 30, 1982, as amended, by and between the Massachusetts Institute of Technology and AspenTech Corporation (f/k/a Aspen Technology, Inc.) (incorporated by reference to our Form 10-Q filed on May 2, 2023).	
21.1	Subsidiaries of Aspen Technology, Inc.	Х
23.1	Consent of KPMG LLP	Х
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes- Oxley Act of 2002	Х
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes- Oxley Act of 2002	Х
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Х
101.INS	Inline Instance Document	Х
101.SCH	Inline XBRL Taxonomy Extension Schema Document	Х
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	Х
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	Х
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	Х
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	Х
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	Х

Filed with this

+ Certain information redacted and replaced with "[***]"

- ^ Management contract or compensatory plan or arrangement
- * The certification attached as Exhibit 32.1 that accompanies this Form 10-K is not deemed filed with the SEC and is not to be incorporated by reference into any filing of Aspen Technology, Inc. under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date of this Form 10-K, irrespective of any general incorporation language contained in such filing.

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.

Date: August 21, 2023

ASPEN TECHNOLOGY, INC.

By: /s/ ANTONIO J. PIETRI

Antonio J. Pietri

President and Chief Executive Officer (Principal Executive Officer)

By: /s/ CHANTELLE BREITHAUPT

Chantelle Breithaupt

Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)

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 dates indicated.

Date: August 21, 2023

Signature	Title	<u>Date</u>
/s/ ANTONIO J. PIETRI Antonio J. Pietri	President and Chief Executive Officer and Director (Principal Executive Officer)	August 21, 2023
/s/ CHANTELLE BREITHAUPT Chantelle Breithaupt	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)	August 21, 2023
/s/ CHRISTOPHER J. STAGNO Christopher J. Stagno	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	August 21, 2023
/s/ JILL D. SMITH Jill D. Smith	Chair of the Board of Directors	August 21, 2023
/s/ PATRICK M. ANTKOWIAK Patrick M. Antkowiak	Director	August 21, 2023
/s/ ROBERT BEAUCHAMP Robert Beauchamp	Director	August 21, 2023
/s/ THOMAS F. BOGAN Thomas F. Bogan	Director	August 21, 2023
/s/ KAREN GOLZ Karen Golz	Director	August 21, 2023
/s/ RAM R. KRISHNAN Ram R. Krishnan	Director	August 21, 2023
/s/ ARLEN R SHENKMAN Arlen R. Shenkman	Director	August 21, 2023
/s/ ROBERT M. WHELAN, JR. Robert M. Whelan, Jr.	Director	August 21, 2023

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