ASPEN TECHNOLOGY INC /DE/
Form 10-K
August 24, 2011

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended June 30, 2011

or

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

For the transition period from to
Commission file number: 0-24786

Aspen Technology, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**04-2739697**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
200 Wheeler Road **Burlington, Massachusetts**	**01803**
(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:

None

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

Common stock, $0.10 par value per share

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

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

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 ý No o

Indicate by checkmark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ý

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

Large accelerated filer ý	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

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

As of December 31, 2010, the aggregate market value of common stock (the only outstanding class of common equity of the registrant) held by non-affiliates of the registrant was $981,809,000 based on a total of 77,307,796 shares of common stock held by non-affiliates and on a closing price of $12.70 on December 31, 2010 for the common stock as reported on The NASDAQ Global Select Market.

There were 94,012,219 shares of common stock outstanding as of August 15, 2011.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement related to its 2011 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 Form 10-K are incorporated by reference in Part III, Items 10-14 of this Form 10-K.

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Our registered trademarks include aspenONE, Aspen Plus, AspenTech, the AspenTech logo, DMCplus, HTFS, HYSYS and INFOPLUS.21. Aspen Basic Engineering, Aspen Collaborative Demand Manager, Aspen Economic Evaluation, Aspen Exchanger Design and Rating, Aspen Fleet Optimizer, Aspen Inventory Management & Operations Scheduling, Aspen Petroleum Scheduler, Aspen Petroleum Supply Chain Planner, Aspen PIMS, Aspen Plus and Aspen Supply Chain Planner are our trademarks. All other trademarks, trade names and service marks appearing in this Form 10-K are the property of their respective owners.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements relate to future events or our future financial performance. We generally identify forward- looking statements by terminology such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "potential," "should," "target," or the negative of these terms or other similar words. These statements are only predictions. 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 customers' 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 Form 10-K, discuss some of the factors that could contribute to these differences. The forward-looking statements made in this 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.

This Form 10-K also contains estimates and other information concerning our industry, including market size and growth rates that are based on industry publications, surveys and forecasts, including those generated by ARC Advisory Group. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to these estimates. Although we believe the information in these industry publications, surveys and forecasts is reliable, we have not independently verified the accuracy or completeness of the information. 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."

PART I

Item 1. Business.

Overview

We are a leading global provider of mission-critical process optimization software solutions, which are designed to manage and optimize plant and process design, operational performance, and supply chain planning. Our aspenONE software and related services have been developed specifically for companies in the process industries, including the energy, chemicals, engineering and construction, and pharmaceutical industries. Customers use our solutions to improve their competitiveness and profitability by increasing throughput and productivity, reducing operating costs, enhancing capital efficiency, and decreasing working capital requirements.

Our software incorporates our proprietary empirical models of manufacturing and planning processes and reflects the deep domain expertise we have amassed from focusing on solutions for the process industries for 30 years. We have developed our applications to design and optimize processes across three principal business areas: engineering, manufacturing and supply chain. We are a recognized market and technology leader in providing process optimization software for each of these business areas.

We have more than 1,500 customers globally. Our customers include manufacturers in process industries such as energy, chemicals, pharmaceuticals, consumer packaged goods, power, metals and mining, pulp and paper, and biofuels, as well as engineering and construction firms that help design and build process manufacturing plants. As of June 30, 2011, our installed base included 19 of the 20 largest petroleum companies, all of the 20 largest chemical companies, and 15 of the 20 largest

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pharmaceutical companies. Customers outside the United States accounted for a majority of our total revenue in each of fiscal 2011, 2010 and 2009, and no single customer represented 10% or more of our total revenue in fiscal 2011, 2010 or 2009.

We have established sustainable competitive advantages based on the breadth, flexibility and return on investment associated with our software offerings, as well as our market leadership position, our extensive process industry expertise and our established, diversified customer base. We consult and collaborate with our customers to identify new applications which leads to innovative, targeted solutions and fosters long-term customer relationships. This approach has helped us develop software solutions that are embedded in our customers' operations and integrated with their core business processes.

In July 2009 we introduced our aspenONE subscription offering under which license revenue is recognized over the term of a license contract. Our aspenONE subscription offering provides customers with increased access to our applications and we believe this flexibility will lead to increased usage and revenue over time. Because we previously recognized a substantial majority of our license revenue upon shipment of software, our revenue for fiscal 2011and 2010 was significantly less than in the years preceding our licensing model change. We expect to recognize levels of revenue comparable to the years preceding our license model change when a significant majority of our existing arrangements has been renewed under our subscription-based licensing model. Customer collections are primarily driven by license and services billings on our portfolio of term arrangements, rather than recognized revenue. As a result, the transition to our subscription-based licensing model has not had an adverse impact on cash receipts, cash flows from operating activities or free cash flow.

Industry Background

The process industries consist of companies that typically manufacture finished products by applying a controlled chemical process either to a raw material that is fed continuously through the plant or to a specific batch of raw material. The process industries include energy, chemicals, pharmaceuticals, consumer packaged goods, power, metals and mining, pulp and paper, and biofuels as well as engineering and construction firms that design and build process manufacturing plants.

Process manufacturing is often complex because small changes in the feedstocks used, or to the chemical process applied, can have a significant impact on the efficiency and cost-effectiveness of manufacturing operations. As a result, process manufacturers, as well as the engineering and construction firms that partner with these manufacturers, have extensive technical requirements and need a combination of software, services and domain expertise to help design, operate and manage manufacturing environments. The unique characteristics associated with process manufacturing create special demands for business applications that frequently exceed the capabilities of generic software applications or non-process manufacturing software packages. The process industries require sophisticated, integrated software applications capable of designing and optimizing their complex, interconnected manufacturing and business processes.

Industry-Specific Challenges Facing the Process Industries

Companies in different process industries face specific challenges that are driving the need for solutions that design, operate and manage manufacturing environments more effectively:

Energy. Our energy markets are comprised of two primary sectors: Exploration and Production, also called upstream, and Refining and Marketing, also called downstream:

Exploration and Production companies explore for and produce hydrocarbons. They are targeting reserves in increasingly diverse geographies with greater geological, logistical and political environments. They face challenges in designing and developing ever larger and

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more complex and remote production, gathering and processing facilities as quickly as possible with the objective of optimizing production and ensuring regulatory compliance.

Refining and Marketing companies are characterized by high volumes and low operating margins. In order to deliver better margins, they focus on optimizing feedstock selection and product mix, maximizing throughput, and minimizing inventory, all while operating safely and in accordance with regulations.

Chemicals. The chemicals industry includes both bulk and specialty chemical companies:

Bulk chemical producers, which compete primarily on price, are seeking to achieve economies of scale and manage operating margin pressure by building larger, more complex plants located near feedstock sources.

Specialty chemical manufacturers, which primarily manufacture highly differentiated customer-specific products, face challenges in managing diverse product lines, multiple plants and complex supply chains.

Engineering and construction. Engineering and construction firms must compete on a global basis in bidding on and executing complex, large-scale projects. They need a digital environment in which optimal plant designs can be produced quickly and efficiently, incorporating highly accurate cost estimation technology. In addition, these projects require software that enables significant collaboration internally, with the manufacturer, and in many cases, with other engineering and construction firms.

Pharmaceuticals. The increasing prevalence of generic drugs and expansion of regulatory requirements are driving pharmaceutical companies to improve their operational performance. They are seeking to optimize their manufacturing and distribution operations to help them meet demanding regulatory requirements, bring new products to market faster during their initial patent protection period and decrease production costs.

Similarly, companies in the consumer packaged goods, power, metals and mining, pulp and paper, and biofuels industries are seeking process optimization solutions that help them deliver improved financial and operating results in the face of varied process manufacturing challenges.

Increasing Complexity of the Process Industries

In addition to the technical requirements associated with the process industries, several industry trends are driving the growing complexity of these industries:

Globalization of markets. Process manufacturers are expanding their operations beyond mature geographic markets in order to take advantage of growing demand and available feedstocks in emerging markets such as China, India, Russia, Latin America and the Middle East. Process manufacturers must be able to design, build and operate plants in emerging markets efficiently and economically. They also need to improve efficiency and reduce costs at their existing plants in mature markets in order to compete with new plants in emerging markets.

Volatile markets. Process manufacturers must react quickly to frequent changes in feedstock prices, temporary or longer-term feedstock shortages, and rapid changes in finished product prices. Unpredictable commodity markets strain the manufacturing and supply chain operations of process manufacturers, which must consider, and when appropriate implement, changes in inventory levels, feedstock inputs, equipment usage and operational processes in order to remain competitive.

Increased margin pressure. As the result of the increasingly competitive global environment, process manufacturers are seeking to design more efficient new plants and, at the same time,

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increase throughput and reduce costs at existing plants. These companies must optimize manufacturing operations and supply chain management, because even a relatively small change in feedstock, labor or energy costs, or in throughput, can have a significant impact on profitability.

Shrinking engineering workforce. In mature markets, the number of chemical engineers is decreasing, as more engineers are retiring than are entering the process industries. Process companies are seeking information technology solutions by which they can capture and manage the knowledge acquired by their engineers through years of experience and can automate tasks traditionally performed by engineers.

Environmental and safety regulations. Process companies must comply with an expanding array of data maintenance and reporting requirements under governmental and regulatory mandates, and the global nature of their operations can subject them to numerous regulatory regimes. These companies often face heightened scrutiny and oversight because of the environmental, safety and other implications of their products and manufacturing processes. These companies increasingly are relying upon software applications to model potential outcomes, store operating data and develop reporting capabilities.

Market Opportunity

Technology solutions historically have played a major role in helping companies in the process industries improve their manufacturing productivity. In the 1980's, process manufacturers implemented distributed control systems, or DCS, to automate the management of plant hardware. DCS use computer hardware, communication networks and industrial instruments to measure, record and automatically control process variables. In the 1990's, these manufacturers adopted enterprise resource planning, or ERP, systems to streamline back office functions and interact with DCS. This allowed process manufacturers to track, monitor and report the performance of each plant, rather than relying on traditional paper and generic word processing spreadsheets.

Many process manufacturers have implemented both DCS and ERP systems but have realized that their investments in hardware and back-office systems are inadequate. A DCS is only able to control and monitor processes based on fixed sets of parameters and cannot dynamically react to changes in the manufacturing process unless instructed by end users. ERP systems can only record what is produced in operations. Although DCS and ERP systems help manage manufacturing performance, neither of these systems can optimize what is produced, how it is produced or where it is produced. Moreover, neither can help a process manufacturer understand how to improve its processes or how to identify opportunities to decrease operating expenses.

Process optimization software addresses the gap between DCS and ERP systems. This software focuses on optimizing the manufacturing process itself: how the process is run and the economics of that process. By connecting DCS and ERP systems with intelligent, dynamic applications, process optimization software allows a manufacturer to make better, faster economic decisions. This software can optimize a manufacturing environment by, for example, incorporating process manufacturing domain knowledge, supporting real-time decision making, and providing the ability to forecast and simulate potential actions. Furthermore, these solutions can optimize the supply chain by helping a manufacturer to understand the operating conditions in each plant, which enables a manufacturer to decide where best to manufacture products.

Based on information and reports from ARC Advisory Group, the market for engineering, manufacturing and supply chain process optimization software and services for the energy, chemicals

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and pharmaceuticals industries was approximately $2.5 billion. More specifically, based on this information, it is estimated that:

- the engineering market was $585 million in 2010 and will grow 10% annually through 2015
- the manufacturing market was $1.7 billion in 2008 and will grow 12% annually through 2013; and
- the supply chain market was $279 million in 2008 and will grow 5% annually through 2013.

aspenONE Solutions

We provide integrated process optimization software solutions designed and developed specifically for the process industries. Customers use our solutions to improve their competitiveness and profitability by increasing throughput and productivity, reducing operating costs, enhancing capital efficiency, and decreasing working capital requirements. Our aspenONE software applications are organized into two suites, which are centered on our principal business areas of engineering, manufacturing and supply chain:

aspenONE Engineering. Our engineering software is used on an engineer's desktop to design new plants, re-design existing plants, and simulate and optimize plant processes.

aspenONE Manufacturing and Supply Chain. Our manufacturing software is designed to optimize day-to-day processing activities, enabling process manufacturers to make better, more profitable decisions and to improve plant performance. Our supply chain management software is designed to enable process manufacturers to reduce inventory levels, increase asset efficiency and optimize supply chain decisions.

While a significant number of our customers have already migrated to our aspenONE subscription offering, we continue to offer customers the ability to purchase our applications as point products. By offering point products, we can acquire, retain and potentially up-sell any customer that does not want to migrate to our aspenONE subscription offering.

We offer customer support, professional services and training services to our customers. Under our aspenONE subscription offering, and for point product arrangements entered into since July 2009, maintenance is included for the term of the arrangement. Professional services are offered to customers as a means to further customize and integrate our technology based on specific customer requirements.

The key benefits of our aspenONE solutions include:

Broad and comprehensive software suites. We believe we are the only software provider that has developed comprehensive suites of software applications addressing the engineering, manufacturing and supply chain requirements of process manufacturers. While some competitors offer solutions in one or two principal business areas, no other vendor can match the breadth of our aspenONE offerings. In addition, we have developed an extensive array of software applications that address extremely specific and complex industry and end user challenges, such as production scheduling for petroleum companies and solubility modeling for solvent screening.

Mission-critical, integrated software solutions. aspenONE provides a standards-based framework that integrates applications, data and models within each of our software suites. Process manufacturers seeking to improve their mission-critical business operations can use the integrated software applications in the aspenONE Manufacturing and Supply Chain suite to support real-time decision making both for individual production facilities and across multiple sites. In addition, the common data models underlying an aspenONE suite improve collaboration and productivity by enabling data to be entered once and then maintained in a centralized repository accessible across a customer's enterprise.

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Flexible commercial model. Our aspenONE subscription offering provides a customer with access to all of the applications within the aspenONE suite(s) the customer licenses. The customer can change or alternate the use of multiple applications in a licensed suite through the use of exchangeable units of measurement, or tokens, licensed in quantities determined by the customer. This enables the customer to use those applications whenever required and to experiment with different applications to best solve whatever critical business challenges the customer faces. The customer can easily increase its usage of our software as its business requirements evolve, without disrupting its business processes.

Hardware-independent technology. Our software can be easily integrated and used with equipment manufactured by any major process manufacturing hardware vendor. Because of our hardware-independent approach, customers can use our software solutions to create a unified view of their operations, even if their plants use hardware from different vendors.

Our Competitive Strengths

We believe our key competitive advantages include, in addition to the comprehensive breadth of our integrated software solutions and the flexibility of our aspenONE subscription offering, the following:

Market leadership. We are a leader in each of the markets addressed by our software. Based on information presented in reports issued by ARC Advisory Group relating to performance in our core industries, we ranked:

#1 in the market addressed by our engineering software;

#2 in the market addressed by our manufacturing software; and

#1 in the market addressed by our supply chain software.

Industry-leading innovation based on substantial process expertise. Over the past 30 years, we have designed a number of major process engineering advances considered to be industry-standard applications. Since our founding, we have built a highly specialized development organization comprised of not only traditional software engineers but also chemical engineers. As of June 30, 2011, approximately 50% of our software development personnel had degrees in chemical engineering or a similar discipline. This approach provides us with substantial process industry expertise, as our developers have critical know-how that allows us to address the specific challenges of our customers.

Rapid, high return on investment. Many customers purchase our software because they believe it will provide rapid, demonstrable and significant returns on their investment. For some customers, cost reductions in the first year following installation have exceeded the total cost of our software. For many customers, even a relatively small improvement in productivity can generate substantial recurring benefits due to the large production volumes and limited profit margins typical in process industries. In addition, our solutions can generate organizational efficiencies and operational improvements that can further increase a process company's return on investment.

Established, diversified customer base. We view our installed customer base of more than 1,500 customers as an important strategic asset and as evidence of our leadership position. As of June 30, 2011, our installed base included 19 of the 20 largest petroleum companies, all of the 20 largest chemical companies, and 15 of the 20 largest pharmaceutical companies. We consult and collaborate with customers to identify new applications, which leads to innovative, targeted solutions, long-term customer relationships and high renewal rates.

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Growth Strategy

Our objective is to further establish and extend our position as a leading global provider of process optimization software and related services to the process industries. We intend to build upon our market and technology leadership position by pursuing the following:

Continue to provide innovative, market-leading solutions. We have pioneered a number of industry standard and award-winning software applications. For example, AspenPlus, our process modeling tool for the chemicals industry, has won the *Chemical Processing* magazine Readers' Choice Award for "Process Simulation Software" for the last seven years. We have been recognized by *R&D Magazine* for innovation in out of the box modeling capabilities that we developed with the National Institute of Standards and Technology. Our recent innovations include applications for electrolyte and biofuel characterizations and methodologies for carbon management. We intend to continue to invest in research and development in order to develop and offer new and enhanced solutions for our aspenONE suites.

Further penetrate existing customer base. We have an installed base of over 1,500 customers, but many customers do not use all of our products and services. We intend to target customers that use only one of our aspenONE suites or that do not extensively utilize our professional services and training capabilities. In addition, we believe that many of our customers do not take full advantage of the applications in the aspenONE suite they currently license. As we transition these customers to our aspenONE subscription offering, we will seek to identify ways in which they can improve their business processes by using the entire licensed suite of aspenONE applications, both at an individual user level and across all of their plant locations.

Expand presence in emerging markets. Companies in the process industries are expanding their operations to take advantage of growing demand and available feedstocks in less mature markets such as China, India, Russia, Latin America and the Middle East. Additionally, process manufacturers with existing plants in these markets are beginning to recognize the value of upgrading their operations to take advantage of process optimization solutions. We historically have derived a significant portion of our total revenue from outside of North America, and we believe we can further extend our international presence by penetrating emerging markets. We have, for example, established a direct sales force and customer support capabilities for Russia and the Middle East.

Extend vertical reach and indirect sales channel. We historically focused on the energy, chemicals, and engineering and construction industries and in recent years have increasingly targeted the pharmaceutical industry. We intend to expand beyond our core vertical industries, in part by further developing our indirect channel. We are expanding our relationships with third-party resellers that have a presence in certain non-core verticals such as power, consumer packaged goods, pulp and paper, minerals and mining, and biofuels. We believe these relationships will enable us to reach companies in additional process industries cost effectively and to leverage our indirect channel partners' market experience and domain expertise in those industries.

Products

Our integrated process optimization software solutions are designed and developed specifically for the process industries. Customers use our solutions to improve their competitiveness and profitability by increasing throughput and productivity, reducing operating costs, enhancing capital efficiency, and decreasing working capital requirements.

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We have designed and developed our software applications across three principal business areas:

Engineering. Process manufacturers must address a variety of challenges related to strategic planning, collaborative engineering, economic evaluation, debottlenecking and operational improvement. They must, for example, determine where they should locate facilities, how they can lower manufacturing costs, what they should produce and how they can maximize plant efficiency. Our engineering software applications are used during both the design and the ongoing operation of plant facilities to model and improve the way engineers develop and deploy manufacturing assets. In the design phase, for example, our software supports proposal generation, develops highly accurate cost estimates, generates detailed implementation schedules and manages change orders. Our engineering solutions include desktop and server applications that typically do not require substantial professional services, although services may be provided for customized model designs and process synthesis.

Manufacturing. Process manufacturers must address a wide range of manufacturing challenges such as optimizing execution efficiency, reducing costs, selecting the right raw materials, scheduling and coordinating production processes, and identifying an appropriate balance between turnaround times, delivery schedules, cost and inventory. Our manufacturing software products focus on optimizing day-to-day processing activities, enabling customers to make better, faster decisions that lead to improved plant performance and operating results. These solutions include desktop and server applications that help customers make real-time decisions, which can reduce fixed and variable costs and improve product yields.

Supply chain management. Process manufacturers must address numerous challenges as they strive to effectively and efficiently manage raw materials inventory, production schedules and feedstock purchasing decisions. Supply chain managers face these challenges in an environment of ever-changing market prices, supply constraints and customer demands. Our supply chain management solutions include desktop and server applications that help customers optimize critical supply chain decisions in order to reduce inventory, increase asset efficiency, and respond more quickly to changing market conditions.

Our software products can be linked with a customer's DCS and ERP systems to further improve the customer's ability to gather, analyze and use the resulting information across the customer's business processes. By integrating our solutions with their DCS and ERP systems, customers can utilize historical data and develop new models to project and simulate future operational behavior, throughput performance, economic value and profitability.

Our software applications are organized into two suites: aspenONE Engineering and aspenONE Manufacturing and Supply Chain. These suites are integrated applications that allow end users to utilize common data models to design process manufacturing environments, forecast and simulate potential actions, monitor operational performance, and manage planning and scheduling activities. The

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two suites are designed around core modules and applications that allow customers to design, manage and operate their process manufacturing environments, as shown below:

aspenONE Engineering

Business Area	aspenONE Module	Major Products	Product Descriptions
Engineering	Engineering	Aspen Plus	Process modeling software for conceptual design, optimization and performance monitoring for the chemicals industry
		Aspen HYSYS	Process modeling software for conceptual design, optimization and performance monitoring for the energy industry
		Aspen Basic Engineering	Workflow tool that allows engineers to build, re-use and share process models and data
		Aspen Economic Evaluation	Economic evaluation software for estimating costs of conceptual process designs
		Aspen Exchanger Design and Rating	Software used to design, simulate and optimize the performance of heat exchangers

aspenONE Manufacturing and Supply Chain

Business Area	aspenONE Module	Major Products	Product Descriptions
Manufacturing	Production Management & Execution	Aspen InfoPlus.21	Data historian software that collects and stores large volumes of data for analysis and reporting
	Advanced Process Control	Aspen DMCplus	Multi-variable controller software capable of processing multiple constraints simultaneously
Supply Chain	Planning & Scheduling	Aspen Collaborative Demand Manager	Enterprise solution for forecasting market demand
		Aspen Petroleum Scheduler	Integrated system that supports comprehensive scheduling and optimization of refinery activities
		Aspen PIMS	Enterprise planning software that optimizes feedstock evaluation, product slate and operational execution
		Aspen Plant Scheduler	Plant scheduling software that optimizes production scheduling
		Aspen Supply Chain Planner	Software for determining what to produce given product demands, inventory, and manufacturing and distribution constraints
	Supply & Distribution	Aspen Inventory Management & Operations Scheduling	Enterprise solution that allows users to manage their supply and demand balancing, inventory and scheduling
		Aspen Petroleum Supply Chain Planner	Economic planning tool that solves multi-commodity, multi-period transportation optimization problems
		Aspen Fleet Optimizer	Enterprise solution for inventory management and truck transportation optimization

Our product development activities are currently focused on strengthening the integration of our applications and adding new capabilities that address specific mission-critical operational business

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processes in each industry. As of June 30, 2011, we had a total of 411 employees in our research and development group, which is comprised of software development, product development and quality assurance personnel. We incurred research and development expense of $50.8 million in fiscal 2011, $48.2 million in fiscal 2010 and $46.4 million in fiscal 2009.

Maintenance and Training

Maintenance consists primarily of providing customer technical support and access to software fixes and upgrades. For term arrangements entered into subsequent to our transition to a subscription-based licensing model, the license and software maintenance and support, or SMS, components cannot be separated, and SMS is included for the term of the arrangement. Customer technical support services are provided throughout the world by our three global call centers as well as via email and through our support website.

We offer a variety of training solutions ranging from standardized training, which can be delivered in a public forum, on-site at a customer's location or over the Internet, to customized training sessions, which can be tailored to fit customer needs. As of June 30, 2011, we had a total of 147 employees in our customer support and training group.

Professional Services

We offer professional services focused on implementation of our solution. Our professional services team primarily consists of project engineers with degrees in chemical engineering or a similar discipline, or who have significant relevant industry experience. Our employees include experts in fields such as thermophysical properties, distillation, adsorption processes, polymer processes, industrial reactor modeling, the identification of empirical models for process control or analysis, large-scale optimization, supply distribution systems modeling and scheduling methods. The services provided by our professional services team include implementing and integrating our software applications for customers that are seeking to integrate our technology with their existing systems in order to further improve their plant performance and gain better operational data. We offer our services on either a time-and-material or fixed-price basis. As of June 30, 2011, we had a total of 165 employees in our professional services group.

Business Segments

We have three operating segments: license, professional services, and maintenance and training. Our chief operating decision maker, the President and Chief Executive Officer, assesses financial performance and allocates resources based upon the three lines of business. For further information of our operating segments, see Note 15, "Segment and Geographic Information," to our Consolidated Financial Statements, included in "Item 15. Exhibits and Financial Statement Schedules" of this Form 10-K.

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Customers

Our software solutions are installed at the facilities of more than 1,500 customers worldwide. These customers include process manufacturers and the engineering and construction firms that provide services to them. Our customers include:

Energy	Chemicals	Pharmaceutical
BP International Ltd	Air Liquide	Bayer Technology Services GmbH
Exxon Mobil Corporation	BASF	Eli Lilly & Company
Flint Hills Resources, LLC	China Petrochemical International Co. Ltd	Pfizer, Inc.
Instituto Mexicano del Petroleo (PEMEX)	The Dow Chemical Company	
Marathon Oil Corporation	INEOS	**Other**
Occidential Petroleum Corporation	Lyondell Basell Industries	Cargill, Incorporated
OMV Group	Mitsubishi Chemical USA, Inc.	Lafarge North America Inc.
Petróleos de Venezuela S.A. (PDVSA)	Saudi Basic Industries Corp (SABIC)	
Repsol YPF, S.A.	Suid Afrikaanse Steenkool en Olie (Sasol)	
Saudi Arabian Oil Co. (SaudiAramco)		
Shell Oil Company	**Engineering and Construction**	
Statoil ASA	The Bechtel Group, Inc.	
Suncor Energy Inc.	Jacobs Engineering Group Inc.	
Total S.A	KBR, Inc.	
Valero Energy Corp.	Technip SA	
	Técnicas Reunidas, S.A.	
	WorleyParsons Limited	

No customer accounted for 10% or more of our total revenue in fiscal 2011, 2010 or 2009.

Sales and Marketing

We employ a value-based sales approach, offering our customers a comprehensive suite of software and services that enhance the efficiency and productivity of their engineering, manufacturing and supply chain operations. We have increasingly focused on selling our products as a strategic investment for our customers and therefore devote an increasing portion of our sales efforts at senior management levels, including senior decision makers in manufacturing, operations and technology. Our aspenONE solution strategy supports this value-based approach by broadening the scope of optimization across the entire enterprise and expanding the use of process models in the operations environment. In particular, we offer a variety of training programs focused on illustrating the capabilities of our applications and intend to implement incentive compensation programs for our sales force that will reward efforts that increase customer usage of our products.

Historically, most of our license sales have been generated through our direct sales force. Because the complexity and cost of our products often result in extended sales cycles, we believe that the development of long-term, consultative relationships with our customers is essential to a successful sales strategy. To develop these relationships, we focus our worldwide sales force on a defined set of strategic accounts. In North America we have organized our sales force around specific vertical markets. In the rest of the world the sales force is organized around specific countries or regions.

In July 2009 we introduced our aspenONE subscription offering under which customers receive access to all of the applications within the aspenONE suite(s) they license. This affords customers the ability to use our software whenever required and to experiment with different applications to best solve whatever critical business challenges they face. Customers can easily increase their usage of our software as their business requirements evolve, without disrupting their business processes. We believe our aspenONE subscription offering will further enable our sales force to develop consultative sales relationships with our customers.

In order to market the specific functionality and other complex technical features of our software, our account managers work with specialized teams of technical sales engineers and product specialists organized for each sales and marketing effort. Our technical sales engineers typically have advanced

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degrees in chemical engineering or related disciplines and actively consult with a customer's plant engineers. Product specialists share their detailed knowledge of the specific features of our software solutions as they apply to the unique business processes of different vertical industries. In addition, we have a limited number of global account managers, each of whom is focused on a specific global account. Our overall sales force, which consists of quota-carrying sales account managers, sales services personnel, business support engineers, internal channel support personnel, industry business unit professionals, marketing personnel and support staff, consisted of 328 employees as of June 30, 2011.

We supplement our direct sales efforts with a variety of marketing initiatives, including industry analyst and public relations activities, campaigns to promote awareness, user group meetings and customer relationship programs. We have established reseller relationships with select companies that we believe can help us increase sales in specific regions and non-core target markets.

We also license our software products to universities that agree to use our products in teaching and research. We believe that students' familiarity with our products will stimulate future demand once the students enter the workplace.

Competition

Our markets in general are highly competitive, and we expect the intensity of competition in our markets to increase as existing competitors enhance and expand their product and service offerings and as new participants enter the market. Increased competition may result in price reductions, reduced profitability and loss of market share. We cannot ensure that we will be able to compete successfully against existing or future competitors. Some of our customers and companies with which we have strategic relationships also are, or may become, competitors.

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 process 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.

Our primary competitors differ among our principal product areas:

Our engineering software competes with products of businesses such as ABB Ltd., Honeywell International, Inc., Invensys plc and KBC Advanced Technologies plc.

Our manufacturing software competes with products of companies such as ABB Ltd., Honeywell International, Inc., Invensys plc, OSIsoft, Inc., Rockwell Automation, Inc., Siemens AG and Yokogawa Electric Corporation.

Our supply chain management software competes with products of companies such as JDA Software Group, Inc., Oracle Corporation and SAP AG.

In addition, we face challenges in selling our solutions to large companies in the process industries that have internally developed their own proprietary software solutions.

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We believe the key competitive differentiator in our industry is the value, or return on investment, that our software and services provide. We seek to develop and offer integrated suites of targeted, high-value vertical industry solutions that can be implemented with relatively limited service requirements. We believe this approach provides us with an advantage over many of our competitors that offer software products that are point solutions or are more service-based. The principal competitive factors in our industry also include:

- breadth, depth and integration of software offerings;
- domain expertise of sales and service personnel;
- consistent global support;
- performance and reliability;
- price; and
- time to market.

Key License Agreements

Massachusetts Institute of Technology

In March 1982, we entered into a System License Agreement with the Massachusetts Institute of Technology, or MIT, under which we received a worldwide, perpetual non-exclusive license (with the right to sublicense) to use, reproduce, distribute and create derivative works of the computer programs known as "ASPEN" and the related documentation. The ASPEN program licensed from MIT provides a framework for simulating the steady-state behavior of chemical processes that we utilize in the simulation engine for our Aspen Plus product. MIT has agreed that we would own any derivative works and enhancements of ASPEN that we may create during the term of the agreement. A one-time license fee of $30,000 has been paid in full. MIT has the right to terminate the agreement upon the occurrence of any of the following events: if we breach the agreement and do not cure the breach within 90 days after receiving a written notice from MIT; if we cease to carry on our business; if proceedings under any bankruptcy or insolvency law are commenced by or against us and not dismissed within 90 days; if we make an assignment for the benefit of our creditors and such assignment is not discontinued within 90 days; or if a receiver is appointed for us and is not discharged within 90 days. In the event of such termination, our license to ASPEN will terminate but the sublicenses granted to our customers prior to termination will remain in effect.

Honeywell

We acquired Hyprotech Ltd. and related subsidiaries of AEA Technology plc in May 2002. The Federal Trade Commission alleged in an administrative complaint filed in August 2003 that this acquisition was improperly anticompetitive. In December 2004, we entered into a consent decree with the FTC to resolve the matter. In connection with the consent decree, we and certain of our subsidiaries entered into a purchase and sale agreement with Honeywell International Inc. and certain of its subsidiaries, pursuant to which we sold intellectual property and other assets to Honeywell relating to our operator training business and our Hyprotech engineering software products.

Under the terms of the transactions:

- we retained a perpetual, irrevocable, worldwide, royalty-free non-exclusive license (with the limited rights to sublicense) to the Hyprotech engineering software and have the right to continue to develop and sell the Hyprotech engineering products; and
- we retained certain agreements with third parties other than customers or distributors for HYSYS and related products.

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We are subject to ongoing compliance obligations under the FTC consent decree. Under a modification order that became final in August 2009, we are required to continue to provide the ability for users to save input variable case data for Aspen HYSYS and Aspen HYSYS Dynamics software in a standard "portable" format, which will make it easier for users to transfer case data from later versions of the products to earlier versions. We also must provide documentation to Honeywell of the Aspen HYSYS and Aspen HYSYS Dynamics input variables, as well as documentation of the covered heat exchange products. These requirements will apply to all existing and future versions of the covered products released prior to December 31, 2014 or December 31, 2016, at the option of Honeywell. In addition, we provided to Honeywell a license to modify and distribute (in object code form) certain versions of our flare system analyzer software.

There is no assurance that the actions required by the FTC's modified order and related settlement with Honeywell will not provide Honeywell with additional competitive advantages that could materially adversely affect our results of operations.

Intellectual Property

We regard our software as 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. 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.

We have obtained or applied for patent protection with respect to some of our intellectual property, but generally do not rely on patents as a principal means of protecting intellectual property. As of June 30, 2011 we owned 30 patents issued in the United States and had 16 patent applications pending in the United States and foreign counterparts.

We conduct business under our trademarks and use trademarks on some of our products. We believe that having distinctive marks may be an important factor in marketing our products. We have registered or applied to register some of our significant trademarks in the United States and in selected other countries. Although we have a foreign trademark registration program for selected marks, the laws of many countries protect trademarks solely on the basis of registration and we may not be able to register or use such marks in each foreign country in which we seek registration. We actively monitor use of our trademarks and have enforced, and will continue to enforce, our rights to our trademarks.

We rely on trade secrets to protect certain of our technology. We generally seek to protect these trade secrets by entering into non-disclosure agreements with our employees and customers, and historically have restricted access to our software and source code, which we regard as proprietary information. In certain cases, we have provided copies of code to customers for the purpose of special product customization or have deposited 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. Trade secrets may be difficult to protect, and it is possible that parties may breach their confidentiality agreements with us.

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. Any misappropriation of our technology or development of competitive technologies could harm our business. We could incur substantial costs in protecting and enforcing our intellectual property rights.

Third parties have asserted, and may assert in the future, claims that our products infringe patents or patent applications under which we do not hold licenses or other rights. Third parties may own or control these patents and patent applications in the United States and abroad. These third parties have

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brought, and could in the future bring, claims against us that would cause us to incur substantial expenses and, if successfully asserted against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay manufacturing or sales of the product that is the subject of the suit before or after the suit is decided on the merits. In addition, we could be forced to redesign a product that uses an allegedly infringing technology. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial and may require significant commitments of time by our management.

We believe that the success of our business depends more on the quality of our proprietary software products, technology, processes and know-how than on trademarks, copyrights or patents. While we consider our intellectual property rights to be valuable, we do not believe that our competitive position in the industry is dependent simply on obtaining legal protection for our software products and technology. Instead, we believe that the success of our business depends primarily on our ability to maintain a leadership position by developing proprietary software products, technology, information, processes and know-how. Nevertheless, we attempt to protect our intellectual property rights with respect to our products and development processes through trademark, copyright and patent registrations, both foreign and domestic, whenever appropriate as part of our ongoing research and development activities.

Employees

As of June 30, 2011, we had a total of 1,269 full-time employees, of whom 683 were located in the United States. None of our employees is represented by a labor union, except for 9 employees of our subsidiary Hyprotech UK Limited who belong to the Prospect union for professionals. We have experienced no work stoppages and believe that our employee relations are satisfactory.

Corporate Information

Aspen Technology, Inc. was formed in Massachusetts in 1981 and reincorporated in Delaware in 1998. Our principal executive offices are at 200 Wheeler Road, Burlington, MA 01803, 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 Form 10-K, unless expressly noted.

Available Information

Our website address is *http://www.aspentech.com*. Information contained on our website is not incorporated by reference into this Form 10-K unless expressly noted. 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 and amendm