VITAL IMAGES INC
Form 10-K
March 14, 2011
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

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

For the fiscal year ended December 31, 2010

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: 0-22229

Vital Images, Inc.

State of Incorporation:	Minnesota	I.R.S. Employer Identification No.:	42-1321776

Address of principal executive offices: 5850 Opus Parkway, Suite 300, Minnetonka, MN 55343-4414
Registrant's telephone number: (952) 487-9500

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.01 par value	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 o No x
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No x
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of 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. o
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 o Accelerated filer x Non-accelerated filer o Smaller reporting company o

(Do not check if a smaller reporting company)

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

As of June 30, 2010, the last day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $184,255,720. The common stock is the registrant's only class of voting stock.

The number of shares outstanding of the issuer's class of common stock as of March 7, 2011 was 14,064,645 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of registrant's definitive Proxy Statement in connection with the Annual Meeting of Stockholders to be held May 12, 2011 ("2011 Proxy Statement") are incorporated by reference into Part III of this Form 10-K, as indicated in Items 10 through 14 of Part III.

Table of Contents

Vital Images, Inc.
Form 10-K

Table of Contents

Table of Contents

Part I

Cautionary Statement Regarding Forward-Looking Information

Vital Images desires to take advantage of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 (the "Reform Act") and is filing this cautionary statement in connection with the Reform Act. This Annual Report on Form 10-K and any other written or oral statements made by us or on our behalf may include forward-looking statements that reflect our current views with respect to future events and future financial performance. Certain statements in this Annual Report on Form 10-K are "forward-looking statements" within the meaning of Section 27(a) of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You can identify these forward-looking statements by our use of the words "believes," "anticipates," "forecasts," "projects," "could," "plans," "expects," "may," "will," "would," "intends," "estimates" and similar expressions, whether in the negative or affirmative. We w to caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could cause such statements to be wrong. We cannot guarantee that we actually will achieve these plans, intentions or expectations. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These statements are only predictions and speak only of our views as of the date the statements were made. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, and/or performance of achievements. We do not assume any obligation to update or revise any forward-looking statements that we make, whether as a result of new information, future events or otherwise.

Factors that may impact forward-looking statements include, among others, our abilities to maintain the technological competitiveness of our current products, develop new products, successfully market our products, respond to competitive developments, develop and maintain partnerships with providers of complementary technologies, manage our costs and the challenges that may come with growth of our business, and attract and retain qualified sales, technical and management employees. We are also affected by the growth and regulation of the medical technology industry, including the acceptance of advanced visualization by hospitals, clinics, and universities, product clearances and approvals by the United States Food and Drug Administration and similar regulatory bodies outside the United States, and reimbursement and regulatory practices by Medicare, Medicaid, and private third-party payer organizations. We are also affected by other factors identified in our filings with the Securities and Exchange Commission, some of which are set forth in the section entitled "Item 1A. Risk Factors" in this Annual Report on Form 10-K (and many of which we have discussed in prior filings). Although we have attempted to list comprehensively these important factors, we also wish to caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or combination of factors may have on our business.

Item 1. Business

Our Business

Vital Images, Inc. ("Vital Images," "we," "us," or "our") is a leading provider of advanced visualization and image analysis solutions for use by medical professionals in clinical analysis and therapy planning for medical conditions. We provide software, customer education, software maintenance and support, professional services and third-party hardware to our customers. Our technology rapidly transforms complex data generated by diagnostic imaging equipment into functional digital images that can be manipulated and analyzed using our specialized applications to better understand internal anatomy and pathology. Our solutions are designed to improve physician workflow and productivity, enhance the ability to make clinical decisions, facilitate less invasive patient care, and complement often significant capital investments in diagnostic imaging equipment made by our customers. Our software is compatible with equipment from all major manufacturers of diagnostic imaging equipment, such as computed tomography ("CT") and magnetic resonance ("MR") scanners, and can be integrated into picture archive and communication systems ("PACS") and electronic medical record ("EMR") systems, which many hospitals use to acquire, distribute and archive

medical images and diagnostic reports.

We were founded and incorporated in Iowa in September 1988, and we re-incorporated in Minnesota in March 1997. Our principal executive offices are located at 5850 Opus Parkway, Suite 300, Minnetonka, MN 55343 (telephone (952) 487-9500, facsimile (952) 487-9510, e-mail — info@vitalimages.com).

Our corporate website address is www.vitalimages.com. To access our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, other reports and documents filed with or furnished to the United States Securities and Exchange Commission (the "SEC") and amendments to these reports free of charge, go to the "Investors" section of our website, then to the "Financial Information" category, and then to the "SEC Filings" subcategory, where we make such filings available as soon as reasonably practicable after they are filed with or furnished to the SEC. The "Corporate Governance"

Table of Contents

category of the Investors section of our website also contains free copies of the Charters for the Audit Committee, Compensation Committee, and Governance Committee of our Board of Directors, as well as our Code of Business Conduct and Ethics, which is our written code of ethics under Section 406 of the Sarbanes-Oxley Act of 2002. Each of the above referenced documents can also be obtained free of charge (other than a reasonable charge for copying exhibits to our reports on Forms 10-K, 10-Q or 8-K) in print by any shareowner who requests them from our investor relations department. The investor relations department's email address is investorrelations@vitalimages.com and its mail address is: Investor Relations, Vital Images, Inc., 5850 Opus Parkway, Suite 300, Minnetonka, MN 55343. Information available on our website is not incorporated by reference into this Annual Report on Form 10-K.

You may also obtain copies of our SEC filings on the SEC's website at www.sec.gov or at the SEC's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Products and Services

Our software solutions are used with medical diagnostic equipment, primarily in clinical analysis and therapy planning. Our software applies proprietary technologies to a variety of data supplied by diagnostic imaging equipment, such as CT and MR scanners, to allow medical clinicians to create 2D, 3D and 4D views of human anatomy and to non-invasively navigate within these images to better visualize and understand internal structures and pathologies. Our main customers are hospitals and clinics, university medical schools and diagnostic imaging centers. We market our products and services to these customers both directly through our own sales force and indirectly through digital imaging equipment manufacturers and PACS and EMR companies, who sell our products with other products they either manufacture or acquire from third parties.

Our enterprise offerings provide access to advanced visualization software throughout a hospital enterprise to physicians and surgical specialists, particularly in the areas of cardiology, radiology, cardiovascular, oncology, neurology and gastroenterology. Our current enterprise offering is called Vitrea Enterprise Suite, which delivers comprehensive advanced visualization solutions, and may include our proprietary back-end data management software, Vital Image Management System. Vitrea Enterprise Suite can be used by every medical professional that practices within our customer's enterprise. Our products also serve as an integration platform for applications offered by our visualization technology partners, including MeVis Medical Solutions Inc.'s ImageChecker® CT software applications for the detection of lung nodules; Mirada Solutions Ltd.'s Fusion 7D™ software application for the anatomical alignment of two different image data sets from two different types of diagnostic equipment, such as combining images from CT and PET scanners; Merge Healthcare Incorporated's CADstream™ breast MRI software; and Medis Inc.'s QMass® MR software.

Our products work with equipment from all major manufacturers of diagnostic imaging systems, including Toshiba Medical Systems Corporation ("Toshiba"), GE Healthcare ("GE"), Siemens Medical Systems, Inc. ("Siemens") and Philips Medical Systems ("Philips"). Our products may also be integrated into PACS, such as those marketed by McKesson Corporation ("McKesson") and Sectra AB ("Sectra"), and into EMRs, such as those marketed by Cerner Corporation ("Cerner"), and run on off-the-shelf third-party computer hardware.

In addition to software products and installation services, we provide maintenance and support services, as well as certain other services, such as professional consulting services and customer education. We offer maintenance and support services for our software solutions pursuant to which we provide error correction, software enhancements, updates and upgrades, telephone support and other general support services. We provide customer education services for our customers, both in connection with their acquisition of our software and as independent purchases. We conduct customer education programs for our software at our headquarters in Minnetonka, Minnesota, at customers' locations and at various designated locations through the United States.

Marketing and Distribution

We market our products directly to end-user customers and through business partners, including diagnostic imaging equipment manufacturers, PACS companies, and software developers, all of whom sell our products with products they either manufacture or acquire from third parties.

Our marketing partners include Toshiba, which markets our software to its customers through its subsidiaries and distributors worldwide. Our agreement with Toshiba commenced in 2001, and it has been extended multiple times, most recently through December 31, 2013. The Marketing and Distribution Agreement, which was entered into by Toshiba and us on November 21, 2008, is a typical reseller or distributor agreement, under which Toshiba resells our imaging products in connection with its sales of its own scanner equipment. Under the Marketing and Distribution Agreement, Toshiba markets and resells our products

Table of Contents

to its customers. Our sales team may provide assistance to Toshiba in its sales efforts, in a similar manner to how our sales team provides assistance to our other resellers, and we provide back-up technical support for problems that Toshiba cannot resolve. The Marketing and Distribution Agreement requires an annual minimum amount of purchases from us by Toshiba. Historically, purchases by Toshiba exceeded its commitment under the Marketing and Distribution Agreement, so the minimum purchase obligations were not triggered. For 2010, with this historical success as background, Toshiba agreed to increase its purchase commitment to the highest it had ever been, and Toshiba's performance during 2010 exceeded its performance during 2009 by approximately $1 million. However, despite the improved performance, Toshiba missed achieving the increased 2010 commitment amount by less than 10%, we believe as a result of general weakness in the U.S. and European CT market. In the fourth quarter, we held discussions with Toshiba about its performance against the 2010 commitment amount, and agreed not to trigger the minimum purchase obligation in exchange for Toshiba's commitment to enhance its internal processes for generating and forecasting sales of our products by its local and regional subsidiaries and resellers, which we believe will help increase sales of our products through Toshiba during 2011 and in future years. Additionally, Toshiba agreed to continue funding the Technology Development Agreement during 2011, which positively impacts our financial results, because the funding amount is treated as a credit to our research and development expenses, as discussed below in the section entitled, "Research and Development." Sales through Toshiba are a material portion of our revenues, comprising approximately 51% of our 2010 revenues, 54% of our 2009 revenues and 52% of our 2008 revenues. License revenue generated through our relationship with Toshiba during the years ended December 31, 2010, 2009 and 2008 was $16.9 million, $18.3 million, and $23.3 million, respectively.

We also have marketing and reseller agreements with several other companies, such as McKesson, Sectra and Cerner Corp., under which these companies may resell our products to their customers as add-on components to their products.

Geographic Information

Our export sales and long-lived assets by significant geographic areas are presented in Note 11 of the Consolidated Financial Statements in this Annual Report on Form 10-K, listed in Item 15(a)(1) of the Form 10-K.

Research and Development

Our research and development activities are focused on the development of new products and on improvements to existing products. Research and development expense was $13.6 million, $16.3 million and $20.4 million for the years ended December 31, 2010, 2009 and 2008, respectively.

In addition to our Marketing and Distribution Agreement with Toshiba, noted above, we also have entered into a Technology Development Agreement, which became effective on January 8, 2009 and calls for development of software or clinical applications by us under Product Development Plans, as such term is defined in the Technology Development Agreement. Each Product Development Plan is separately entered into between Toshiba and us and discusses the key features of the project, including the product to be developed, development milestones, and the amount and timing of funding to be provided by Toshiba for the development effort. Upon completion of the project, we can sell the product that is developed both through Toshiba and, after a 180-day exclusivity period, through our direct sales force, although the exclusivity period may be waived for certain projects. We dedicate a specific number of our personnel exclusively to each project that is funded by Toshiba. The Technology Development Agreement currently will terminate six months following the end of all active Product Development Plans, although it may renew upon written agreement by Toshiba and us. If at any time no projects are ongoing during the term of the Technology Development Agreement, Toshiba will continue to provide funding to us at the rates set forth in the Agreement for up to six months for any of our personnel who are assigned to and actively engaged on projects related to errors reported in any project software that was previously released. In addition, Toshiba will also continue to provide funding for the dedicated project personnel for up to six months during the term, if no project is ongoing, or for up to six months after the term, to assist us to cover reallocation and/or termination costs. Funding received by us under the Technology

Development Agreement is accounted for as an offset to research and development expense. We recognized a credit to research and development expenses of $1.0 million and $1.1 million under the Technology Development Agreement in 2010 and 2009, respectively.

Competition

The advanced visualization market is highly competitive, subject to rapid change and is significantly affected by new product introductions and other market activities of industry participants. Our products compete based on a multitude of factors, including quality, performance, functionality, clinical features, quality of support and service, reputation, brand and price. Our primary competitors are diagnostic imaging system suppliers, which are typically large, multinational companies with far greater financial and technical resources. They also have well-established sales and distribution networks for their products.

Table of Contents

These companies, including GE, Siemens, and Philips, develop and market medical imaging systems, such as CT and MR equipment, which may be purchased with integrated medical imaging capabilities. Our software works on the products offered by each of these companies. To win business against equipment manufacturers, we must convince customers to buy our solution separately from their purchase of imaging equipment instead of buying integrated systems from our competitors or we must persuade them that introducing our enterprise product throughout their hospitals will provide them with unique benefits not provided by our competitors.

We also face competition from PACS vendors and other suppliers of medical imaging systems and software. PACS companies sometimes provide medical imaging capability in addition to their image archiving and networking products. Some of the diagnostic equipment manufacturers, including GE and Philips, also offer PACS that comprise a large share of the PACS market. Vendors of hospital, clinical and radiology information systems have also diversified into the PACS and medical imaging product lines, either through internal development or business development and partnership channels. These companies, which may be large or small, attempt to offer an integrated system covering a full range of administrative, clinical and radiology information management capabilities to healthcare providers. Other suppliers of medical imaging systems and software, such as TeraRecon, Inc., compete on the basis of volume rendering or other visualization technologies, specific applications or market niches. We are seeing additional competitors enter our market, but have yet to see these competitors attain a meaningful share of the market.

Intellectual Property

We rely primarily on a combination of trade secret and copyright law, employee and third-party nondisclosure agreements and other protective measures to protect intellectual property rights pertaining to our products and technologies. We do not own all of the software and other technologies used in our products, but we believe we have the necessary licenses from third parties to use that technology in our current products. It may be necessary to renegotiate with such third parties for any new versions of current products or any new products. Such third-party licenses may not be available on reasonable terms, or at all.

Governmental Regulation

As medical devices, our software solutions are subject to extensive and rigorous regulation by numerous governmental authorities, principally the U.S. Food and Drug Administration (“FDA”) and corresponding foreign agencies. In the United States, the FDA administers the Federal Food, Drug, and Cosmetic Act, its amendments (the “FD&C Act”) and its related regulations. The FD&C Act and these regulations classify medical devices as Class I, II or III devices, which are subject to general controls, special controls or pre-market approval requirements, respectively. Most Class I and II devices, as well as some Class III devices, can be cleared for marketing pursuant to a 510(k) pre-market notification. The process of obtaining a 510(k) clearance typically can take several months to a year or longer.

Class III devices generally require more stringent clinical investigation and pre-market clearance requirements. In such cases, the FDA will require that the manufacturer submit a pre-market approval (“PMA”) application that must be reviewed and approved by the FDA prior to the sale and marketing of the device in the United States. The process of obtaining a PMA can be expensive, uncertain and lengthy, frequently requiring anywhere from one to several years from the date of FDA submission, if approval is obtained at all. Moreover, a PMA, if granted, may include significant limitations on the indicated uses for which a product may be marketed.

Our software is classified as a Class II medical device and has received marketing clearances from the FDA as the result of 510(k) pre-market notifications. Specifically, our software in general release has been cleared to be marketed for use with CT, MR and PET scanners. Future products, add-on options to existing software, and expanded claims of efficacy will likely require additional 510(k) pre-market notifications.

There can be no assurance that future FDA review processes will not involve delays or that clearances will be granted on a timely basis. In recent years, the FDA has increased its level of scrutiny of medical devices involving software, which requires us to produce additional documentation about the safety and effectiveness of our devices in order to obtain regulatory clearance, and which can lengthen the time required to obtain such clearance. Further, if any of our current or future products become classified as Class III devices, they could be subject to an even more expensive, uncertain and lengthy approval process, and approval, if granted, could include significant limitations on the indicated uses for which a product may be marketed.

We are also subject to regulation in foreign countries in which we sell our products. Many of the regulations applicable to our products in such countries are similar to those of the FDA, but the regulations in several countries, particularly in Asia, may be more particular than those of the FDA, and significantly greater time and resources may be required to obtain approval in those

Table of Contents

countries. Our ability to successfully market and sell our products in foreign markets depends in large part on our ability to comply with such foreign regulatory requirements. Our products have been Conformité Europeene ("CE") marked, indicating conformance with applicable sections of the Medical Device Directive, which allows the products to be marketed in the member countries of the European Communities.

We are also subject to periodic inspections by the FDA and similar foreign regulatory agencies, whose primary purpose is to audit our compliance with quality system regulations established by the FDA and other applicable government standards. Regulatory action may be initiated in response to audit deficiencies or product performance problems. We believe that our manufacturing and quality control procedures comply with all applicable requirements of the FDA and foreign regulatory agencies in countries in which we sell our products. We have received and maintain ISO 13485 Certification.

Medicare and Medicaid laws and regulations may impact the financial arrangements through which we market, sell and distribute our products and services to patients who are Medicare or Medicaid beneficiaries. Violations of these laws and regulations may result in civil and criminal penalties, including substantial fines and imprisonment. In a number of states, the scope of these laws and regulations has been extended to include the provision of services or products to all patients, regardless of the source of payment, although there is variation from state to state as to the exact provisions of such laws or regulations. In other states, and on a national level, several health care reform initiatives have been proposed which would have a similar impact. We believe that our operations and our marketing, sales and distribution practices currently comply with all current applicable fraud and abuse and physician anti-referral laws and regulations.

Employees

As of December 31, 2010, we had 238 full-time employees, with 74 involved in research and development, 66 in sales and marketing, 61 in technical support functions and 37 in administrative functions. We believe our relationship with our employees is good.

Item 1A. Risk Factors

The discussion of our business and operations included in this annual report on Form 10-K should be read together with the risk factors set forth below. They describe various risks and uncertainties to which we are or may become subject. These risks and uncertainties, together with other factors described elsewhere in this report, have the potential to affect our business, financial condition, results of operations, cash flows, strategies or prospects in a material and adverse manner. New risks may emerge at any time, and we cannot predict those risks or estimate the extent to which they may affect financial performance. Each of the risks described below could adversely impact the value of our securities. These statements, like all statements in this report, speak only as of the date of this report (unless another date is indicated), and we undertake no obligation to update or revise the statements in light of future developments.

We offer only one line of products, which is advanced visualization software, related services and hardware, and if our products do not continue to gain market acceptance, our financial results would be adversely affected.

Our current market success depends on our ability to successfully market advanced visualization software for clinical use, and on the ability and willingness of physicians to use enterprise-wide advanced visualization medical imaging software in clinical analysis and therapy planning. Our enterprise-wide advanced visualization software products are alternatives to the conventional methods traditionally used for viewing medical images in the clinical setting. Often, a purchase by a customer of our products means that it has chosen not to utilize software that was provided in connection with the customer's purchase of a scanner, which means that the customer may pay additional amounts to obtain our products. The acceptance of our products by physicians and other clinicians will depend on our ability to educate those users as to the speed, ease-of-use and other benefits offered by our products and systems, as well as our timely introduction of new features and functions. There can be no assurance that users will prefer advanced visualization and analysis software solutions over less expensive 2D medical imaging software or that we will succeed

in our efforts to further develop, commercialize and achieve market acceptance for our products or for any other product in the clinical setting. If our single line of products does not continue to gain market acceptance, our financial results will be adversely affected.

A substantial portion of our revenue is derived from sales of our software in connection with customer purchases of computer tomography, or CT, scanners, and any decline in the purchase of CT scanners or any difficulty we have in growing sales separately from sales of CT scanners could have a material adverse effect on our results of operations and financial condition.

Our business historically was tied to sales of our advanced visualization products on a workstation basis, which were typically purchased concurrently with a customer's purchase of CT imaging equipment. The market for CT imaging equipment has trended downward since 2007 and is not expected to recover to its past levels within the foreseeable future. In order to improve

Table of Contents

the marketability of our products separately from sales of CT imaging equipment, during 2008, we evolved our products and business model into sales throughout a customer's enterprise. However, there can be no assurance that sales of our enterprise-wide advanced visualization product through our reseller channel will not remain dependent upon the CT sales cycle, or that such products will be sold by our resellers at the same level as they previously sold our advanced visualization products on a workstation.

We presently depend on Toshiba for a significant portion of our total revenues. A reduction in the business from Toshiba could adversely affect our revenues and could seriously harm our business.

One of our principal distribution channels is to sell our medical imaging software in connection with medical imaging equipment sold by Toshiba. Sales to Toshiba accounted for 51% of our total revenue for the year ended December 31, 2010, 54% of our total revenue for the year ended December 31, 2009 and 52% of our total revenue for the year ended December 31, 2008. Toshiba's accounts receivable represented 58% of our accounts receivable at December 31, 2010 and 36% at December 31, 2009. Except for our agreement with Toshiba, we have no significant purchase commitments from any of our customers or business partners, and we generally make sales pursuant to individual transactions. Our joint distribution agreement with Toshiba commenced in 2001 and has been extended multiple times, most recently through December 31, 2013. However, Toshiba does have the ability to conduct in-house development of advanced visualization capabilities for all Toshiba modalities which could lead to a reduction in Toshiba's need for our products in the future. A reduction, delay, or cancellation of orders from Toshiba, or our inability to collect accounts receivable from Toshiba, likely would have a material adverse effect on our financial condition and operating results.

We operate in a single industry and are therefore dependent upon payer reimbursement rates and market demand for advanced visualization products and services. If reimbursement rates decline or if our market does not grow as we expect, our business, results of operations and financial condition will be adversely affected.

State and federal governmental agencies and private payers are putting pressure on reimbursement rates for advanced visualization examinations, which can negatively affect demand for our products. Many of the major hospitals and medical research centers within the United States have already purchased scanners, PACS and advanced visualization technologies, causing future sales to be upgrades or replacements instead of new installations, potentially lengthening the sales cycles as customers feel less urgency to purchase and implement new systems.

Given the uncertainties associated with the developing stage of many of the geographic and medical specialty markets that we believe represent growth opportunities, there can be no assurance that they will develop in the manner we anticipate or that they will not require a level of investment greater than we expect. Additionally, some of our customers finance their acquisitions through third-party lenders. With the unpredictability of credit availability in the lending market, some customers who would otherwise purchase our products may not be able to obtain sufficient financing and therefore will not complete their purchases. Accordingly, there can be no assurance that the advanced visualization industry will provide growth opportunities for us and our software products or that our business strategies will be successful as the industry continues to evolve. Ultimately, if the advanced visualization industry fails to develop as we expect, our business, results of operations and financial condition will be materially and adversely affected.

Most of our products are used with CT scanning equipment, and are therefore dependent upon the amount of use of CT equipment. If usage of CT equipment is reduced, our business, results of operations and financial condition will be adversely affected.

Most of our products are used with CT scanning equipment, which uses ionizing radiation to generate images of the body. Recently, media and regulatory concern has been directed at the dosage of radiation that may be given to a patient undergoing a CT scan. The optimal radiation dose is "no more or less than what is necessary to produce a high-quality image," according to a recent FDA white paper. If the current concern results in a reduction in market demand for CT scans, it is likely that the demand for our products could also be reduced. Unless we are successful in

developing significant usage for our products other than in connection with CT image data, if the CT equipment manufacturers are unable to develop scanners that produce meaningful data at lower doses of radiation or we are unable to develop software that provides useful images based on the lower dosage levels, our financial results could be adversely affected. Further, recent healthcare regulatory reform seeks to increase the percentage of time of utilization for each scanner that is used in the United States. Utilization reform, while increasing usage of existing scanners, could reduce demand for future scanner purchases, and reduced demand for scanner purchases could materially and adversely affect our business, results of operations and financial condition.

We participate in a highly competitive industry. If we fail to compete effectively, our results of operations and financial condition would be adversely affected.

Table of Contents

We face intense competition in the advanced visualization industry. We expect technology to continue to develop rapidly, and our success will depend to a large extent on our ability to maintain a competitive position with our products. Our competitors in the advanced visualization industry include large, established manufacturers of CT and MR imaging equipment. Companies such as GE, Siemens and Philips typically offer their own advanced visualization software and workstations as part of their integrated imaging and scanner systems. Our software works on the products offered by each of these companies. To win business against equipment manufacturers, we must convince customers to buy our software solutions separately from their purchase of imaging equipment instead of buying integrated systems from our competitors.

In addition to having a competitive advantage in marketing advanced visualization tools as an integrated part of their imaging products, many of our competitors have significantly greater capital and staffing resources for research and development, more recognizable brand names, and more well-established marketing and distribution networks. Although price has been less significant than other factors, increasing competition may result in price reductions and reduced gross margins. Additionally, we face competition from other entities, such as PACS vendors and developers of competitive or ancillary software packages. The advanced visualization market is characterized by rapid innovation and technological change. For example, as scanners become faster and generate increasingly more slices, our software must maintain its capability to handle the increased data volumes generated by such scanners. We may devote time and resources to develop products that do not obtain market acceptance or for which the market is much smaller than we expected when we planned the products. Products developed by our competitors may render our products obsolete or non-competitive. Similarly, our competitors may succeed in developing or marketing products that are viewed as providing superior clinical performance, enterprise access and performance, or are less expensive than our current or future products.

As a result, we may not be able to compete effectively with such manufacturers or competing entities on each or any particular factor, including price, features and service.

As our products are accessed by additional medical professionals throughout an enterprise, the satisfaction of our customers may decrease.

Historically, our products were used by radiologists who received education on the use of imaging products in medical school and continuing education programs and to whom we provided training in connection with their purchases. For radiologists, use of medical imaging products is a relatively routine activity. As our products are used by additional medical professionals throughout an enterprise, they will be used by persons with less training and familiarity with imaging technologies. Occasional and less-trained users of imaging technology may find use of our products to be more difficult than do radiologists, which could increase our time and expenses supporting these users, thus negatively affecting our gross margins for support services. Further, these users may realize less satisfaction than do our historical customers, negatively affecting the adoption of our products elsewhere in the enterprise. Finally, occasional and less-trained users are more likely to use our products incorrectly. Although our products are intended to be secondary analytical devices, their incorrect use could result in errors by medical professionals in their treatment of patients, lowering their satisfaction with our products and potentially exposing us to legal and regulatory liability, which could affect our results of operations and ability to market our products.

We may make future acquisitions, which may be difficult to integrate, divert management resources, result in unanticipated costs or dilute our shareholders.

Part of our continuing business strategy is to evaluate possible acquisitions of, or investments in, companies, products or technologies that complement our current products, enhance our market coverage or technical capabilities, or offer growth opportunities. Future acquisitions could pose numerous risks to our operations, including:

- we may have difficulty integrating the purchased operations, technologies or products;
- we may incur substantial unanticipated integration costs;

- assimilating the acquired businesses may divert significant management attention and financial resources from our other operations and could disrupt our ongoing business;
- acquisitions could result in the loss of key employees, particularly those of the acquired operations;
- we may have difficulty retaining or developing the acquired businesses' customers;
- acquisitions could adversely affect our existing business relationships with suppliers and customers;
- we may fail to realize the potential cost savings or other financial benefits and/or the strategic benefits of the acquisitions; and
- we may incur liabilities from the acquired businesses for infringement of intellectual property rights or other claims, and we may not be successful in seeking indemnification for such liabilities or claims.

Further, we may not receive the returns from an acquisition that were expected at the time of acquisition. In connection with

Table of Contents

any acquisition or investment, we could incur debt, be required to amortize expenses related to intangible assets, incur large and immediate write-offs, experience volatility in future earnings resulting from contingent consideration, assume liabilities, or issue stock that would dilute our current shareholders' percentage of ownership. We may not be able to complete acquisitions or integrate the operations, products or personnel gained through any such acquisition without a material adverse effect on our business, financial condition and results of operations.

We sell our products internationally and are subject to various risks relating to such international activities, which could harm our international sales and profitability.

During the years ended December 31, 2010, 2009 and 2008, 34%, 34% and 29% of our total revenues, respectively, were attributable to international sales. Toshiba has been the primary source of our international sales, and we have also entered into agreements with several other companies to resell our products internationally. We are also developing direct international sales and marketing efforts. By doing business in international markets, we are exposed to risks separate and distinct from those we face in our domestic operations. Our international business may be adversely affected by changing economic conditions in foreign countries. Because most of our sales are currently denominated in U.S. dollars, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets, which could adversely affect our profitability. Furthermore, the percentage of sales denominated in non-U.S. currencies may increase in the future, in which case fluctuations in exchange rates could affect demand for our products.

Most of our business in markets outside the United States is provided through third parties with whom we have marketing agreements. There can be no assurance that these third parties will wish to continue our relationships on an indefinite basis or under the same terms as the business is currently conducted. Further, although we have developed direct relationships with customers in markets outside the United States, we may not be successful in doing so at a sufficient level. The loss of or adverse changes in our relationships with our third-party business partners, and our failure to establish sufficient direct relationships with customers outside the United States, would have a material adverse impact on our business, financial condition and results of operations.

Engaging in international business inherently involves a number of other difficulties and risks, including:

- export restrictions and controls relating to technology;
- the availability and level of reimbursement within prevailing foreign healthcare payment systems;
- pricing pressure that we may experience internationally;
- required compliance with existing and new foreign regulatory requirements and laws;
- business customs in other countries that violate U.S. laws, such as the Foreign Corrupt Practices Act;
- laws and business practices favoring local companies;
- longer payment cycles;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems;
- political and economic instability;
- potentially adverse tax consequences, tariffs and other trade barriers;
- international terrorism and anti-American sentiment;
- difficulties and costs of staffing and managing foreign operations;
- changes in currency exchange rates; and
- difficulties in enforcing intellectual property rights.

Our exposure to each of these risks may lower our revenues, increase our costs, lengthen our sales cycle and require significant management attention. We cannot assure you that one or more of these factors will not harm our business.

If our internal control over financial reporting is found to be inadequate, our financial results may not be accurate, raising concerns for investors and potentially adversely affecting our stock price.

Under Section 404 of the Sarbanes-Oxley Act of 2002, we are required to evaluate and determine the effectiveness of our internal controls over financial reporting. We have dedicated a significant amount of time and resources to ensure compliance with this legislation in recent years and will continue to do so for future periods. We may encounter problems or delays in completing the evaluation, the implementation of improvements, and the receipt of a positive attestation, or any attestation at all, from our independent registered public accounting firm. In addition, our assessment of our internal controls may identify deficiencies that need to be addressed in our internal controls over financial reporting or other matters that may raise concerns for investors as to the accuracy of our reported financial results and adversely affect our stock price.

Table of Contents

We may experience fluctuations in operating results, which may result in volatility in the price of our common stock. We have in the past experienced, and may in the future experience, significant fluctuations in annual and quarterly operating results. If these fluctuations occur, they may result in volatility in the price of our common stock. Quarterly revenue and operating results may fluctuate as a result of a variety of factors that are outside of our control including, but not limited to, the timing of significant orders, the timing of product enhancements and new product introductions by us or our competitors, the pricing of our products, changes in customers' budgets and competitive conditions. Our quarterly license and services revenue may fluctuate and may be difficult to forecast for a variety of reasons, including the following:

- a significant number of our existing and prospective clients' decisions regarding whether to enter into license agreements with us are made within the last few weeks or days of each quarter;
- the size and number of license transactions can vary significantly;
- our dependence on Toshiba or any other major customer for a significant portion of our revenues;
- a decrease in license fee revenue which may likely result in a decrease in services revenue in the same or subsequent quarters;
- clients unexpectedly postponing or canceling projects due to changes in their strategic priorities, project objectives, budget or personnel;
- the uncertainty caused by potential business combinations in the software industry, causing clients and prospective clients to cancel, postpone or reduce capital spending projects on software;
- client evaluations and purchasing processes that vary significantly from company to company, and a client's internal approval and expenditure authorization process that is difficult and time consuming to complete, even after selection of a vendor;
- the number, timing and significance of software product enhancements and new software product announcements by us or our competitors;
- existing clients declining to renew support for our products, and market pressures that limit our ability to increase support fees or require clients to upgrade from older versions of our products; or
- prospective clients declining or deferring the purchase of new products or releases if we do not have sufficient client references for those products.

We are subject to government regulation of our products, which can result in additional costs or restrict our ability to market our products.

Our products are subject to regulation by the FDA and by comparable agencies in foreign countries. In the United States, the FDA regulates the development, introduction, manufacturing, labeling and record keeping procedures for medical devices, including medical imaging software and systems. Our medical devices require clearance or approval by the FDA before they can be commercially distributed in the United States. Modifications and enhancements to a medical device also require a new FDA clearance or approval if they could significantly affect its safety or effectiveness or would constitute a major change in its intended use, design or manufacture. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer's decision and may require a new clearance or approval for the modification if it disagrees with the manufacturer's decision. If the FDA requires us to seek clearance or approval for the modification of a previously cleared product for which we have concluded that new clearances or approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties, which could have a material adverse effect on our financial results and competitive position. The process of obtaining marketing clearance from the FDA for new products and new applications for existing products can be time-consuming and expensive. All of our current products are marketed pursuant to 510(k) pre-market clearance from the FDA. Our products have been cleared to be marketed for use with CT, MR and PET scanners. The FDA may not grant clearance with respect to our future products or enhancements, or future FDA review may involve delays that could adversely affect our ability to market such future products or enhancements. In addition, the FDA, which is currently under political pressure regarding a handful of products that it cleared over the past few years, including

some products that are used for medical imaging, is reviewing the process by which it grants clearance to products. Several of the potential changes could make the process to obtain regulatory clearance more difficult, lengthy and expensive. A more difficult and expensive regulatory clearance process, in addition to potentially causing us to defer or choose not to conduct promising areas of research and development, would by itself slow the time by which products for patient care reach market and could materially and adversely affect our business and results of operations. Further, these changes could affect our products as well as the scanning equipment that produce the data from which our products produce images. If the process becomes more difficult and expensive, medical device manufacturers, including scanning and imaging companies, could increase prices to compensate for the additional risks and costs. Increased prices could further reduce demand for our products, which would materially and adversely affect our business, results of operations and financial condition.

Table of Contents

Even if we obtain regulatory clearances and approvals to market a product from the FDA, these approvals may entail limitations on the indicated uses of the product. Product clearances and approvals by the FDA can also be withdrawn due to failure to comply with regulatory standards or the occurrence of unforeseen problems following initial approval. The FDA could also limit or prevent the distribution of our products and has the power to require the recall of such products. FDA regulations depend heavily on administrative interpretation, and future interpretations made by the FDA or other regulatory bodies may adversely affect us. The FDA may inspect our facilities and operations to determine whether we are in compliance with various regulations relating to specification, development, documentation, validation, testing, quality control and product labeling. If the FDA determines that we are in violation of such regulations, it could impose civil penalties, including fines, recall or seize products and, in extreme cases, impose criminal sanctions. If we determine that our facilities, operations or products are not in compliance with FDA requirements, we may voluntarily suspend our operations or recall products.

We market our products both domestically and internationally. International regulatory bodies have established varying regulations governing product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. Our inability or failure to comply with the varying regulations, or the imposition of new regulations, could restrict our ability to sell our products internationally and could adversely affect our business.

The imposition of requirements under the Health Insurance Portability and Accountability Act of 1996, or HIPAA, could adversely affect our business.

The HIPAA regulations require our customers to observe several requirements for the privacy and security of the protected health information (PHI) of their patients. Although the products and services we provide may technically not be covered under the HIPAA regulations, we may have access to PHI while working with our customers and our customers therefore routinely request that we sign “business associate” agreements with them. A “business associate” is a person or entity that performs certain functions or activities that involve the use or disclosure of protected health information on behalf of, or that provides services to, a covered entity. By law, the HIPAA Privacy Rule applies only to covered entities—health plans, healthcare clearinghouses, and certain healthcare providers. However, most healthcare providers do not carry out all of their healthcare activities and functions by themselves. Instead, they often use the services of a variety of other persons or businesses. The HIPAA Privacy Rule allows covered providers and health plans to disclose protected health information to these “business associates” if the providers or plans obtain satisfactory assurances that the business associate will use the information only for the purposes for which it was engaged by the covered entity, will safeguard the information from misuse, and will help the covered entity comply with some of the covered entity’s duties under the HIPAA Privacy Rule. Further, the Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009, extended most of the obligations and liabilities of covered entities to business associates. Covered entities may disclose protected health information to an entity in its role as a business associate only to help the covered entity carry out its healthcare functions—not for the business associate’s independent use or purposes, except as needed for the proper management and administration of the business associate. These agreements are necessary for us in the normal course of servicing and supporting our products and may require us to incur liabilities if we disclose protected health information in a manner not allowed under any respective agreement. Our potential liabilities may include indemnifying our customer against any damages resulting from the disclosure. If we are not willing to or are unable to enter into a business associate agreement with current and potential customers, such customers may not purchase our products or services or discontinue previously-purchased services, which would have a material adverse effect on our business, financial condition, or results of operations.

We are subject to various federal and state “fraud and abuse” laws, and if we are unable to fully comply with such laws, we could face substantial penalties, which may adversely affect our business.

We are subject to various federal and state laws pertaining to health care fraud and abuse, including HIPAA and the following:

- the federal Anti-Kickback Statute, which prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce either the referral of an individual, or furnishing or arranging for a good or service, for which payment may be made under federal health care programs (such as Medicare and Medicaid);
- the federal False Claims Act, which prohibits anyone from knowingly presenting or causing to be presented a false or fraudulent claim for payment to the federal government;
- the federal False Statements Statute, which prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for health care benefits, items or services; and
- state law equivalents to these federal laws, which may not be limited to government reimbursed items, and may not contain identical exceptions.

Table of Contents

If our past or present operations are found to be in violation of any of the laws described above or the other similar governmental regulations to which we are subject, we may be subject to the applicable penalty associated with the violation, including civil and criminal penalties, damages, fines, exclusion from federal health care programs and/or the curtailment or restructuring of our operations. Similarly, if the physicians or other providers or entities with which we do business are found to be non-compliant with applicable laws, they may be subject to sanctions, which could also have a negative impact on us. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. The risk of our being found in violation of these laws is increased by the fact that their provisions are open to a variety of interpretations and are subject to further legal or regulatory change. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, fines and other penalties, divert our management's attention from the operation of our business and damage our reputation.

The protection of our intellectual property may be uncertain, and we may face possible claims of others.
Although we have received patents and have filed patent applications with respect to certain aspects of our technology, we generally do not rely principally on patent protection with respect to our products and technologies. Instead, we rely primarily on a combination of trade secret and copyright law, employee and third-party nondisclosure agreements and other protective measures to protect intellectual property rights pertaining to our products and technologies. Such measures may not provide meaningful protection of our trade secrets, know-how or other intellectual property in the event of any unauthorized use, misappropriation or disclosure. Others may independently develop similar technologies or duplicate our technologies. In addition, to the extent that we apply for any patents, such applications may not result in issued patents or, if issued, such patents may not be valid or of value. Third parties could, in the future, assert infringement or misappropriation claims against us with respect to our current or future products and technologies, or we may need to assert claims of infringement against third parties. Any infringement or misappropriation claim by us or against us could place significant strain on our financial resources, divert management's attention from our business and harm our reputation. The costs of prosecuting or defending an intellectual property claim could be substantial and could adversely affect our business, even if we are ultimately successful in prosecuting or defending any such claims. If our products or technologies are found to infringe the rights of a third party, we could be required to pay significant damages or license fees or cease production, any of which could have a material adverse effect on our business.

We face the risk of product liability claims, and our product liability and errors and omissions insurance coverage may not be adequate to pay products liability claims, which could have a material adverse effect on our financial condition.
Our business exposes us to the risk of product liability claims that is inherent in the manufacturing and marketing of medical devices, including those which may arise from the misuse or malfunction of, or design flaws in, our products. We may be subject to product liability claims if our products cause, or merely appear to have caused, an injury. Claims may be made by patients, healthcare providers or others selling our products. Our product liability and errors and omissions insurance is subject to deductibles and coverage limitations. Our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, the coverages may not be adequate to protect us against any future product liability claims. Further, if additional products are approved for marketing, we may seek additional insurance coverage. If we are unable to obtain insurance at an acceptable cost or on acceptable terms with adequate coverages or otherwise protect against potential product liability claims, we will be exposed to significant liabilities, which may harm our business. A product liability claim, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could result in significant costs and damage to our reputation and future results, any of which would cause significant harm to our business.

If we fail to attract and retain qualified personnel, our business would be harmed.
Recruiting and retaining talented personnel is critical to our success. There is intense competition from other companies, research and academic institutions, government entities and other organizations for qualified personnel in

the areas of our activities. We are located in Minnesota, but compete with companies nationally for employees, particularly those with unique skill sets, and not all potential employees view moving to Minnesota favorably. Further, the pace of change in our industry is rapid, and to keep pace we need to ensure that our existing employees continually upgrade their knowledge and skills. If we fail to identify, attract, retain and motivate these highly skilled personnel, we may be unable to continue our marketing and development activities and may experience interruptions or delays in the execution of our overall business strategy.

We depend on third-party reimbursement. A reduction or other change in reimbursement from third parties could negatively affect our business.

Our products are purchased by hospitals, clinics, imaging centers and other users, which bill various third-party payers, such as government health programs, private health insurance plans, managed care organizations and other similar programs, for the healthcare goods and services provided to their patients. There are currently Current Procedural Terminology, or CPT,

Table of Contents

reimbursement codes that describe most of the diagnostic procedures that use our products. However, the amount of reimbursement from third-party payers varies by site of service and geographic location and is subject to change. Payers may deny reimbursement if they determine that a product used in a procedure was not used in accordance with established payer protocol regarding cost-effective treatment methods or was used for an unapproved indication. Third-party payers are increasingly challenging the prices charged for medical services and, in some instances, have put pressure on service providers to lower their prices or reduce their services. We are unable to predict what changes will be made in the reimbursement methods used by third-party healthcare payers. Third-party payers may not consider as cost effective the procedures in which our products are used. Reimbursement for such procedures may not be available or, if available, payers' low reimbursement levels may adversely affect our ability to sell our products on a profitable basis. In addition, there have been and may continue to be changes and proposals by legislators, regulators and third-party payers to curb further these costs in the future. For example, the Deficit Reduction Act of 2005, or the DRA, which was signed into law on February 8, 2006, imposed caps on Medicare payment rates for certain imaging services, including MR and PET, furnished in physicians' offices and other non-hospital based settings. Under the caps, payments for specified imaging services cannot exceed the hospital outpatient payment rates for these services. Enactment of the DRA appeared to significantly affect one segment of our customer base, the standalone imaging center, and also appeared to reduce demand for imaging products among other segments of our customer base. A failure by hospitals and other users of our products to obtain reimbursement from third-party payers, changes in third-party payers' policies toward reimbursement for procedures using our products, or legislative action could have a material adverse effect on our business, financial condition and results of operations.

Healthcare reform may negatively impact our business.

The levels of revenue and profitability of medical technology companies may be affected by the efforts of government and third-party payers to contain or reduce the costs of healthcare through various means. In the United States, there has been, and we expect that there will continue to be, a number of federal, state and private proposals to control healthcare costs. These proposals include legislative, regulatory and other initiatives and may contain measures intended to control public and private spending on healthcare as well as to provide universal public access to the healthcare system. If enacted, these proposals may result in a substantial restructuring of the healthcare delivery system. For example, the Congressional Budget Office has issued a report suggesting that radiology benefit managers could require pre-authorization, which could decrease the demand for imaging services.

Further, on March 23, 2010, President Obama signed the Patient Protection and Affordable Care Act. The legislation imposes significant new taxes on makers of certain medical devices. Specifically, beginning in 2013, the legislation imposes a 2.3 percent excise tax on the sale by manufacturers of taxable medical devices intended for human use. These taxes, whether determined to be applicable directly to us and our products or applicable to other companies with which we partner, could have a substantial impact on the manner in which we conduct business and a material adverse effect on our business, financial condition, results of operations and cash flows.

Consolidation in the healthcare industry could lead to demands for price concessions or limit or eliminate our ability to sell to certain of our significant market segments.

The cost of healthcare has risen significantly over the past decade, and numerous initiatives and reforms initiated by legislators, regulators and third-party payers to curb these costs have resulted in a consolidation trend in the medical device industry, as well as among our customers, including healthcare providers. This consolidation has resulted in greater pricing pressures and limitations on our ability to sell to important market segments, as group purchasing organizations, independent delivery networks and large single accounts, such as the Veterans Administration in the United States, continue to consolidate purchasing decisions for some of our healthcare provider customers. We expect that market demand, government regulation, third-party reimbursement policies and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances which may exert further downward pressure on the prices of our products and adversely impact our business, financial condition and results of operations.

We may incur goodwill impairment charges that adversely affect our operating results.
We review goodwill for impairment annually and more frequently if events and circumstances indicate that the asset may be impaired and that the carrying value may not be recoverable. We operate as one reporting unit and therefore compare our book value to our market value (consisting of market capitalization plus an appropriate control premium). If the market value exceeds the book value, goodwill is generally considered not to be impaired.

Failure of the global economy to recover from the recent downturn, or an extended delay in this recovery, may adversely impact our ability to improve our financial results and grow our business.

Table of Contents

We have been affected by the general decline in the global economy, which resulted in contracted capital spending by hospitals and lower interest rates on our cash and investments. Disruptions in the financial markets and the related economic downturn also negatively impacted customer purchasing and payment patterns. Failure of the global economy to recover from this prolonged downturn, or an extended delay in this recovery, may have a material adverse effect on our financial condition and results of operations.

We may issue shares of preferred stock without the consent of our holders of common stock, which could adversely affect the rights of the holders of our common stock.

Our Articles of Incorporation authorize our Board of Directors, without any action by the holders of our common stock, to establish the rights and preferences of up to 5,000,000 shares of currently undesignated preferred stock. These shares of preferred stock could possess voting and conversion rights that could adversely affect the voting power of the holders of the common stock or dilute their ownership rights, and it may have the effect of delaying, deferring or preventing a change in control of Vital Images. No shares of preferred stock or other senior equity securities are currently designated, and currently we have no plan to designate or issue any such securities.

We are subject to certain laws and plans which may discourage takeover attempts that could be beneficial for shareholders

We are subject to anti-takeover provisions of the Minnesota Business Corporation Act. These provisions may deter or discourage takeover attempts and other changes in control that are not approved by our Board of Directors, and they may have a depressive effect on any market for our stock. As a result, our shareholders may lose opportunities to dispose of their shares at the higher prices typically available in takeover attempts or that may be available under a merger proposal. In addition, these provisions may have the effect of permitting our current directors to retain their positions and place them in a better position to resist changes that our shareholders may wish to make if they are dissatisfied with the conduct of our business.

We have never paid any cash dividends and this practice is expected to continue which means appreciation in our stock price will be our shareholders' only opportunity to achieve a return on their investment in our common stock

We have not paid cash dividends on our common stock in the past, and we do not intend to do so in the foreseeable future. Consequently, appreciation in the market price of our common stock and the ability to sell shares at a profit represents our shareholders' only opportunity to achieve a return on their investment.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal office is located in an office building in Minnetonka, Minnesota, where we currently occupy approximately 72,000 square feet under a lease that expires January 31, 2012. We also lease small offices in Den Haag, the Netherlands, and Beijing, China, for our operations in those countries. We consider our current facilities adequate for our current needs.

Item 3. Legal Proceedings

We are involved in various claims and legal actions in the normal course of business. We are of the opinion that the outcome of such legal actions will not have a significant adverse effect on our financial position, results of operations or cash flows. Notwithstanding our belief, an unfavorable resolution of some or all of these matters could materially affect our future results of operations or cash flows.

Item 4. Reserved

15

Table of Contents

Part II

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

Vital Images, Inc.'s common stock is quoted on The NASDAQ Global Select Market under the symbol "VTAL." The table below reflects the high and low per share sale prices of our common stock as reported by The NASDAQ Global Select Market for each of the periods indicated. Such prices reflect inter-dealer prices, do not include adjustments for retail mark-ups, markdowns or commissions, and may not necessarily represent actual transactions.

	High	Low
2010		
Fourth Quarter	$14.74	$12.89
Third Quarter	$14.90	$12.20
Second Quarter	$16.70	$12.49
First Quarter	$16.92	$12.60
2009		
Fourth Quarter	$13.18	$11.35
Third Quarter	$13.75	$10.19
Second Quarter	$12.25	$9.64
First Quarter	$14.29	$8.54

We have never paid or declared any cash dividends on our common stock and do not intend to pay dividends on our common stock in the foreseeable future. We expect to retain our future anticipated earnings to finance development and expansion of our business. As of February 28, 2011, there were approximately 5,400 beneficial owners and approximately 500 registered holders of record of our common stock.

During 2008, our Board of Directors approved a share repurchase program, which authorized repurchases of shares on the open market of up to $40.0 million, including fees and expenses, of the Company's common stock, which program was completed in February 2009. Our current share repurchase program, under which we may repurchase up to 1.0 million shares of our common stock, was announced on March 3, 2009. As of December 31, 2010, we had purchased 922,548 shares of our common stock through only open market transactions under this program. On August 4, 2010, we announced an additional share repurchase program, authorizing repurchases of shares on the open market of up to $20.0 million. No shares had been repurchased under this additional program as of December 31, 2010.

The following table presents information with respect to purchases of our common stock made during the quarter ended December 31, 2010 by us or our "affiliated purchaser," as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number and Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1-31, 2010	21,535	$13.00	21,535	93,586 shares and $20.0 million
November 1-30, 2010	15,897	$13.18	15,897	77,689 shares and $20.0 million
December 1-31, 2010	237	$13.24	237	77,452 shares and $20.0 million
	37,669	$13.08	37,669	77,452 shares and $20.0 million

Performance Graph

Since April 24, 2007, our common stock has been quoted on The NASDAQ Global Select Market. From June 9, 2003 through April 23, 2007, our stock was quoted on The NASDAQ Global Market. From September 29, 2000 through June 6, 2003, our common stock was quoted on The NASDAQ SmallCap Market (now known as The NASDAQ Capital Market). The following graph shows changes during the period from December 31, 2005 to December 31, 2010 in the value of $100 invested in: (1) Vital Images, Inc.'s common stock; (2) the Total Return Index for The NASDAQ Composite; and (3) NASDAQ Non-Financial Stocks. The values of each investment as of the dates indicated are based on share prices plus any dividends paid in

Table of Contents

cash, with the dividends reinvested on the date they were paid. The calculations exclude trading commissions and taxes.

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934 that might incorporate future filings by reference, including this Annual Report on Form 10-K, in whole or in part, the following performance graph shall not be deemed to be incorporated by reference into any such filings and shall not otherwise be deemed filed under such acts.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Vital Images, Inc., The NASDAQ Composite Index
And The NASDAQ Non-Financial Index

*$100 invested on 12/31/05 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010
Vital Images, Inc.	$100.00	$133.08	$69.10	$53.19	$48.53	$53.46
NASDAQ Composite	$100.00	$111.74	$124.67	$73.77	$107.12	$125.93
NASDAQ Non-Financial	$100.00	$109.34	$122.52	$71.80	$108.57	$127.96

Table of Contents

Item 6. Selected Financial Data (in thousands, except per share data)

	2010	2009	2008	2007	2006
Years Ended December 31:					
Revenue	$59,709	$58,230	$68,141	$70,176	$70,512
Gross profit	$43,431	$44,025	$52,268	$54,587	$56,302
Operating expenses	$44,775 (1)	$52,036 (2)	$62,093 (4)	$61,755 (5)	$49,371
Operating (loss) income	$(1,344)	$(8,011)	$(9,825)	$(7,168)	$6,931
Net (loss) income	$(966)	$(21,252) (3)	$(2,800)	$1,367	$6,583
Net (loss) income per share - basic	$(0.07)	$(1.48)	$(0.17)	$0.08	$0.49
Weighted average common shares - basic	14,250	14,315	16,155	16,972	13,463
Net (loss) income per share - diluted	$(0.07)	$(1.48)	$(0.17)	$0.08	$0.46
Weighted average common shares - diluted	14,250	14,315	16,155	17,457	14,259
At December 31:					
Working capital	$127,222	$121,034	$135,417	$173,905	$162,202
Total assets	$170,529	$172,062	$198,193	$230,996	$219,730
Long-term debt	$—	$—	$—	$—	$—
Total stockholders' equity	$144,746	$146,722	$168,691	$202,216	$190,902

(1) Includes an offset to research and development expense of $1,459 for the receipt of a Qualifying Therapeutic Discovery Project (QTDP) grant from the United States government.

(2) Includes a $3,147 asset impairment charge related to the implementation of the Company's enterprise resource planning system in the second quarter of 2009.

(3) Includes a $14,964 non-cash charge to the provision for income taxes to establish a full valuation allowance against the Company's deferred tax assets in the second quarter of 2009.

(4) Includes a $660 restructuring charge related to a reduction in workforce of approximately 11% in November 2008.

(5) Includes an $885 charge related to the separation of our former Chief Executive Officer in the fourth quarter of 2007.

Table of Contents

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

Executive summary

The financial results for Vital Images, Inc. (also referred to as "we", "us" and "our") improved during 2010, reflecting a slightly improved economic environment. However, contracted capital spending by U.S. hospitals, continued weakness in the high-end computed tomography ("CT") and picture archiving and communication systems ("PACS") markets, and increased competitive pressure in the advanced visualization market have pressured our results in 2010 as they did in past years. We mitigated the impact of these negative factors by making strategic investments to expand the range of our market opportunities and through cost-control measures. Vital Images, Inc. summary 2010 results were as follows:

- Total revenue of $59.7 million, compared to $58.2 million for 2009 and $68.1 million for 2008.
- Gross margin of 72.7%, compared to 75.6% for 2009 and 76.7% for 2008.
- Operating expenses of $44.8 million, compared to $52.0 million for 2009 and $62.1 million for 2008.
- Operating loss of $1.3 million, compared to operating losses of $8.0 million for 2009 and $9.8 million for 2008.
- Interest income of $529,000, compared to interest income of $1.1 million for 2009 and $4.6 million for 2008, representing 0.4% 0.8% and 2.9% returns on investment in 2010, 2009 and 2008, respectively.
- Net loss of $966,000, or $(0.07) loss per diluted share, compared to net losses of $21.3 million, or $(1.48) loss per diluted share, for 2009 and $2.8 million, or $(0.17) per diluted share, for 2008. The net loss for 2009 included $18.1 million of non-cash charges representing $(1.27) per diluted share.

Total cash, cash equivalents and marketable securities were $139.9 million as of December 31, 2010, compared to $142.2 million as of December 31, 2009. Working capital (defined as current assets less current liabilities) was $127.2 million as of December 31, 2010, compared to $121.0 million as of December 31, 2009. The decrease in cash, cash equivalents and marketable securities during 2010 was primarily the result of repurchases of our common stock in 2010 totaling $6.5 million under share repurchase programs authorized by our Board of Directors. The increase in working capital during 2010 was primarily due to noncurrent marketable securities becoming current during the period, offset in part by cash used for repurchases of common stock.

Critical accounting policies and estimates

Our discussion and analysis of financial condition and results of operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The notes to the Consolidated Financial Statements contained in this Annual Report describe our significant accounting policies used in the preparation of the Consolidated Financial Statements. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. We continually evaluate our critical accounting policies and estimates.

We believe the critical accounting policies listed below reflect significant judgments, estimates and assumptions used in the preparation of our Consolidated Financial Statements.

Allowance for doubtful accounts

We maintain an allowance for doubtful accounts in an amount estimated to be sufficient to provide adequate protection against losses resulting from extending credit to our customers. In judging the adequacy of the allowance for doubtful accounts, we consider multiple factors, including historical bad debt experience, the general economic environment, the need for specific client reserves and the aging of our outstanding receivables. A portion of this provision is included in operating expenses as a general and administrative expense and a portion of this provision is included as a reduction of license revenue. A considerable amount of judgment is required in assessing these factors. If the factors utilized in determining the allowance do not reflect future performance, then a change in the allowance

for doubtful accounts would be necessary in the period such determination has been made, which would impact future results of operations. As of December 31, 2010, the allowance for doubtful accounts was $667,000 for gross accounts receivable of $14.8 million.

Deferred taxes

Significant judgment is required in determining the realizability of our deferred tax assets. We must assess the likelihood that our net deferred tax assets will be recovered from future taxable income, and to the extent we believe that recovery is not likely, we must establish a valuation allowance. Considerations for determining the realizability of our deferred tax assets primarily

Table of Contents

involve cumulative pre-tax income for financial reporting purposes, cumulative taxable income for the past three years, estimated future pre-tax income for financial reporting purposes and estimated future taxable income from our core business. We also consider the expiration dates and amounts of net operating loss carryforwards and other tax credits, and estimate the impact of future tax deductions from the exercise of stock options. These estimates are projected through the life of the related deferred tax assets based on assumptions which we believe to be reasonable and consistent with current operating results. After giving consideration to the above factors, during the three months ended June 30, 2009, we recorded a non-cash charge of $15.0 million to the provision for income taxes to establish a full valuation allowance against our deferred tax assets. If pretax results improve in future periods, we may be able to reverse the valuation allowance, which will positively impact earnings. As of December 31, 2010, we had a full valuation allowance against our deferred taxes of $15.7 million.

Goodwill

Goodwill and intangible assets with indefinite lives are reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. We operate as one reporting unit and therefore compare the book value to the market value (consisting of market capitalization plus an appropriate control premium). As of December 31, 2010, our book value relative to our market value indicated that our goodwill of $9.1 million was not impaired. If the market value exceeds the book value, goodwill is considered not impaired, and thus the second step of the impairment test is not necessary. If our book value exceeds the market value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of the goodwill with the book value of the goodwill. If the carrying value of the goodwill exceeds the implied fair value of the goodwill, an impairment loss would be recognized in an amount equal to the excess. If market conditions continue to fluctuate, we may incur goodwill impairment charges that adversely affect our financial position and operating results.

Revenue Recognition

We follow specific and detailed guidelines in determining the proper amount of revenue to be recorded; however, certain judgments affect the application of our revenue recognition policy.

We recognize revenue when it is realized or realizable and earned. We consider revenue realized or realizable and earned when we have persuasive evidence of an arrangement, the product has been shipped or the services have been provided to the customer, the sales price is fixed or determinable, and collectability is probable.

Revenue results are difficult to predict, and any shortfall in revenue or delay in recognizing revenue could cause our operating results to vary significantly from period to period. The significant judgments for revenue recognition typically involve whether collectability can be considered probable and whether fees are fixed or determinable. Significant judgment is also required when evaluating and assessing revenue recognition relating to our distribution agreements with original equipment manufacturers, value-added resellers and independent distributors (collectively, “Resellers”). In addition, our transactions often consist of multiple element arrangements, which must be analyzed to determine the fair value of each element, the amount of revenue to be recognized upon shipment, if any, and the period and conditions under which deferred revenue should be recognized. As a result, if facts and circumstances change that affect our current judgments, our revenue could be materially different in the future.

Equity-based compensation

We recognize equity-based compensation expense under the fair value recognition provisions of applicable accounting guidance. We recognize equity-based compensation net of an estimated forfeiture rate and recognize compensation cost only for those shares expected to vest over the requisite service period of the award.

The fair value of each option award is estimated as of the date of grant using the Black-Scholes option valuation model. The Black-Scholes option valuation model requires the development of assumptions that are input into the model. These assumptions are the expected stock volatility, the risk-free interest rate, the option's expected life and the dividend yield on the underlying stock. Expected volatility is calculated based on the historical volatility of our common stock over the expected option life. Risk-free interest rates are calculated based on continuously compounded U.S. Treasury risk-free rates for the appropriate term. Prior to March 9, 2006, the expected life of stock options was calculated by performing a detailed analysis of all historical stock option information available. On March 9, 2006, we began to grant options with a five-year legal life instead of the eight-year legal life that had historically been used. As a result, we elected to use the "simplified" method, to estimate the expected life of options granted on and after March 9, 2006. As options granted in 2006 will reach the end of their five-year

Table of Contents

contractual term during 2011, we believe that we will have sufficient historical information in the near future to compute the expected term assumption based on the weighted average of historical grants for options to be granted in future periods. The dividend yield is assumed to be zero, as we have never paid or declared any cash dividends on our common stock and do not intend to pay dividends on our common stock in the foreseeable future. The expected forfeiture rate is estimated based on historical experience.

Determining the appropriate fair value model and calculating the fair value of equity-based payment awards require the input of the subjective assumptions described above. The assumptions used in calculating the fair value of equity-based payment awards represent management's best estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our equity-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected forfeiture rate and recognize expense only for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the equity-based compensation expense could be significantly different from what we have recorded in the current period. See Note 2 to the Consolidated Financial Statements for a further discussion of equity-based compensation.

Table of Contents

Results of Operations

The following table sets forth information from our Statements of Operations, expressed as a percentage of total revenue.

	For the Year Ended December 31,		
	2010	2009	2008
Revenue:			
License fees	38.2 %	39.1 %	50.3 %
Maintenance and services	57.1	57.9	47.6
Hardware	4.7	3.0	2.1
Total revenue	100.0	100.0	100.0
Cost of revenue:			
License fees	6.1	5.7	7.2
Maintenance and services	16.9	15.9	14.8
Hardware	4.3	2.8	1.3
Total cost of revenue	27.3	24.4	23.3
Gross profit	72.7	75.6	76.7
Operating expenses:			
Sales and marketing	36.1	38.8	40.8
Research and development	22.8	28.1	29.9
General and administrative	16.1	17.1	19.4
Asset impairment	—	5.4	—
Restructuring charge	—	—	1.0
Total operating expenses	75.0	89.4	91.1
Operating loss	(2.3)	(13.8)	(14.4)
Interest income	0.9	1.9	6.8
Loss before income taxes	(1.4)	(11.9)	(7.6)
Provision (benefit) for income taxes	0.2	24.6	(3.5)
Net loss	(1.6)%	(36.5)%	(4.1)%

Revenue (dollars in thousands)

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Revenues:							
License fees	$22,823	$22,766	$34,290	$57	$(11,524)	— %	(34)%
Maintenance and services	34,102	33,717	32,436	385	1,281	1 %	4 %
Hardware	2,784	1,747	1,415	1,037	332	59 %	23 %
Total revenue	$59,709	$58,230	$68,141	$1,479	$(9,911)	3 %	(15)%

Table of Contents

License fee revenue (dollars in thousands)
The following table sets forth information on license fee revenue by source:

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
License fee revenue:							
Direct and other distributors	$5,903	$4,493	$11,014	$1,410	$(6,521)	31%	(59)%
Toshiba	16,920	18,273	23,276	(1,353)	(5,003)	(7)%	(21)%
Total license fees	$22,823	$22,766	$34,290	57	(11,524)	—%	(34)%
Percent of license fee revenue:							
Direct and other distributors	26%	20%	32%				
Toshiba	74	80	68				
Total license fee revenue	100%	100%	100%				

License fee revenue remained flat during 2010, compared to 2009, after declining from 2008 to 2009. During 2010, license fee revenue through Toshiba decreased $1.4 million, reflecting weakness in the market for high-end CT equipment. This was offset by increased license fee revenue in the U.S. through our direct channel and other distributors due to increased sales of Vitrea Enterprise Suite. The decrease in license fee revenue for 2009, compared to 2008, was driven by the general decline in the U.S. economy starting in 2007 and continuing through 2009, which resulted in increased pricing pressures and contracted capital spending by U.S. hospitals and imaging centers.

Maintenance and services revenue (dollars in thousands)

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Maintenance and services revenue:							
Maintenance and support	$29,082	$28,792	$26,656	$290	$2,136	1%	8%
Customer education	3,098	3,511	4,478	(413)	(967)	(12)%	(22)%
Professional services	1,922	1,414	1,302	508	112	36%	9%
Total maintenance and services revenue	$34,102	$33,717	$32,436	$385	$1,281	1%	4%

Maintenance and support revenue remained relatively flat for 2010, compared to 2009. Revenue growth continued to be impacted by pressure on new software sales and a greater percentage of installed base customer conversions to Vitrea Enterprise Suite, which conversions result in lower incremental maintenance and support revenue than new license sales. The increase in maintenance and support revenue in 2009, compared to 2008, was due to an increase in the number of customers on maintenance contracts resulting from additional license sales.

Recognition of education revenue is impacted by the amount of license sales in preceding quarters and the timing of education sessions provided to customers. The decrease in education revenue for 2010, compared to 2009, was primarily due to the decrease in license revenue from 2008 to 2009. Similarly, education revenue decreased in 2009, compared to 2008, as license sales declined during the second half of 2007 and into 2008.

Professional services revenue, which includes installation and other implementation-related services, increased for 2010 and 2009, compared to 2009 and 2008, respectively, due to a higher percentage of enterprise sales, which

generally include more professional services than non-enterprise sales, as well as the timing of professional services provided.

Hardware revenue

Hardware revenue increased 59% to $2.8 million in 2010, compared to $1.7 million in 2009, which was an increase of 23% from $1.4 million in 2008. Although the hardware we sell is commercially available, the increase in our hardware revenue is

Table of Contents

also driven by the fact that more hardware is purchased from us in connection with sales of Vitrea Enterprise Suite than in conjunction with sales of Vitrea, which were primarily on a workstation basis. We offer to sell hardware to our customers in conjunction with license sales, and fluctuations are driven by individual customer purchasing preferences. Sales of hardware systems are not core to our strategy, although many customers purchasing our software on an enterprise basis are choosing to also purchase the hardware for their enterprise from us. We expect hardware sales to fluctuate from period to period depending upon the needs and preferences of our customers.

Cost of revenue and gross profit

Gross profit decreased 1% to $43.4 million in 2010, compared to $44.0 million in 2009, which was a 16% decrease from $52.3 million in 2008. Gross margin percentage decreased to 72.7% in 2010 from 75.6% in 2009 and 76.7% in 2008, due to the mix between revenue categories, as well as the mix of software sales and increased maintenance and services costs.

A comparison of gross profit and gross margin by revenue category is as follows (dollars in thousands):

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Gross profit:							
License fees	$19,182	$19,465	$29,368	$(283)	$(9,903)	(1)%	(34)%
Maintenance and services	24,026	24,435	22,347	(409)	2,088	(2)%	9 %
Hardware	223	125	553	98	(428)	78 %	(77)%
Total gross profit	$43,431	$44,025	$52,268	$(594)	$(8,243)	(1)%	(16)%
Gross margin:							
License fees	84.0 %	85.5 %	85.6 %				
Maintenance and services	70.5 %	72.5 %	68.9 %				
Hardware	8.0 %	7.2 %	39.0 %				
Total gross margin	72.7 %	75.6 %	76.7 %				

Fluctuations in license fee gross margin are generally a result of changes in the product and customer mix. Additionally, the mix between domestic and international sales may impact license fee gross margins. License fee gross margin decreased for 2010, compared to 2009, due primarily to the overall product mix, including a higher number of installed base customer conversions to Vitrea Enterprise Suite, which results in lower upfront revenue and therefore lower upfront gross margin than do new license sales, and a lower number of Vitrea sales, which more often carry a higher upfront gross margin than customer conversions to Vitrea Enterprise Suite. License fee gross margin remained relatively flat in 2009, compared to 2008, as a decrease in amortization expense was offset by pricing pressures and changes in product and customer mix.

Maintenance and services gross margins decreased for 2010, compared to 2009, due to increased costs related to customer upgrades and an increased number of contractors and temporary services personnel. Additionally, we are investing in our maintenance and services capability, which we believe increases customer satisfaction and drives additional sales of our products, but can temporarily lower maintenance and service gross margins, with the expectation that we will recover previous maintenance and service gross margins when maintenance and service revenue increases as a result of an increase in license sales. Maintenance and services gross margin increased during 2009, compared to 2008, as a larger percentage of each enterprise sale was allocated to maintenance and services revenue than has historically been allocated for sales of our products on a workstation basis, as enterprise sales carry higher maintenance and services pricing without a corresponding increase in costs. We will continue to invest in our customer education, installation, professional services and customer support areas in the future to adequately support

our growing installed base of customers. We had 61, 51 and 53 maintenance and services personnel as of December 31, 2010, 2009 and 2008, respectively.

Hardware gross margins increased for 2010, compared to 2009, and decreased for 2009, compared to 2008, due to variability in pricing during the periods. Variances in gross margin for hardware are expected, as hardware sales are not a substantial part of the sales strategy.

Table of Contents

Operating expenses

The following is a comparison of operating expenses as a percent of revenue as well as the percent increase or decrease in the total expense:

	Percent of Revenue for the Year Ended December 31,			Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009
Operating expenses:					
Sales and marketing	36.1 %	38.8 %	40.8 %	(5)%	(19)%
Research and development	22.8	28.1	29.9	(17)%	(20)%
General and administrative	16.1	17.1	19.4	(4)%	(25)%
Asset impairment	—	5.4	—	(100)%	100 %
Restructuring charge	—	—	1.0	— %	(100)%
Total operating expenses	75.0 %	89.4 %	91.1 %	(14)%	(16)%

Sales and marketing

Sales and marketing expenses were as follows (dollars in thousands):

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Salaries, benefits and bonus	$8,323	$8,841	$10,590	$(518)	$(1,749)	(6)%	(17)%
Trade shows and advertising	2,796	2,839	3,422	(43)	(583)	(2)%	(17)%
Overhead and other expenses	2,723	2,715	3,059	8	(344)	0 %	(11)%
Travel, meals and entertainment	2,414	2,424	3,319	(10)	(895)	(0)%	(27)%
Commissions	2,385	2,050	3,588	335	(1,538)	16 %	(43)%
Outside services and consulting	1,133	843	991	290	(148)	34 %	(15)%
Depreciation	975	1,624	1,601	(649)	23	(40)%	1 %
Equity-based compensation	802	1,243	1,265	(441)	(22)	(35)%	(2)%
Total	$21,551	$22,579	$27,835	$(1,028)	$(5,256)	(5)%	(19)%

Sales and marketing expense decreased for 2010, compared to 2009, as salaries, benefits and bonuses decreased due to lower average annual headcount and reduced bonus expense. Equity-based compensation decreased due to certain restricted stock awards becoming fully vested in the first quarter of 2010 and the reduction in unvested options outstanding subsequent to the tender offer in March 2010, described in the “Tender offer” section below. Depreciation expense decreased during 2010 as assets became fully depreciated. These decreases were partially offset as increased direct and other distributor sales resulted in higher commission expense and increased utilization of consultants resulted in higher consulting expense.

Sales and marketing expense decreased in 2009, compared to 2008, as salaries and benefits expense decreased due to lower average annual headcount. Commission expense was also lower due to decreased direct sales. The decreases in other expense categories in 2009, compared to 2008, were primarily due to decreased headcount and other broad-based cost control measures.

We had 66, 70 and 69 sales and marketing personnel as of December 31, 2010, 2009 and 2008, respectively.

Table of Contents

Research and development

Research and development expenses were as follows (dollars in thousands):

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Salaries, benefits and bonus	$10,435	$11,814	$13,024	$(1,379)	$(1,210)	(12)%	(9)%
Overhead and other expenses	2,797	3,345	3,588	(548)	(243)	(16)%	(7)%
Outside services and consulting	1,505	497	1,520	1,008	(1,023)	203 %	(67)%
Equity-based compensation	979	945	1,179	34	(234)	4 %	(20)%
Depreciation	529	869	1,044	(340)	(175)	(39)%	(17)%
Development reimbursement	(2,638)	(1,138)	—	(1,500)	(1,138)	132 %	100 %
Total	$13,607	$16,332	$20,355	$(2,725)	$(4,023)	(17)%	(20)%

The decrease in research and development expenses for 2010, compared to 2009, was due significantly to an increase in development reimbursement, which included a one-time grant of $1.5 million from the U.S. government under the Qualified Therapeutic Discovery Program in 2010 and monetization of $217,000 of Minnesota tax credits as a result of legislation enacted in 2010. The remaining balance of the development reimbursement amount reflects reimbursement from Toshiba for development costs we incurred under a development agreement with Toshiba, under which Toshiba provides funding in support of our research and development efforts, and the parties work collaboratively to develop and deliver innovative technology advancements for Toshiba's medical equipment and our advanced visualization software solutions. The decrease in research and development expense was also driven by decreased headcount, which included the termination of 20 employees in our Beijing office in August 2009 in conjunction with our decision to discontinue test and product development activities there. The termination of the employees in Beijing also resulted in lower lease expense and depreciation expense at that location. These headcount-related decreases were partially offset by increased outside services and consulting expenses for test and product development services. Depreciation expense also decreased as assets became fully depreciated.

The decrease in research and development expenses for 2009, compared to 2008, was due to reduced headcount resulting from our November 2008 reduction in force, lower utilization of consultants and other cost control measures. In 2009, we also recognized a credit of $1.1 million to our research and development expenses for reimbursement from Toshiba for development costs we incurred under the co-development agreement. The decreases in other expense categories for 2009, compared to 2008, were primarily due to decreased headcount and other broad-based cost control measures.

We had 74, 87 and 114 research and development personnel as of December 31, 2010, 2009 and 2008, respectively. The decrease in headcount as of December 31, 2009, was due primarily to the termination of 20 employees in our Beijing office in August 2009 in conjunction with our decision to discontinue test and product development activities in Beijing.

General and administrative

General and administrative expenses were as follows (dollars in thousands):

	For the Year Ended December 31,			Increase (Decrease)		Percent Increase (Decrease)	
	2010	2009	2008	2009 to 2010	2008 to 2009	2009 to 2010	2008 to 2009
Salaries, benefits and bonus	$4,532	$4,582	$4,583	$(50)	$(1)	(1)%	(0)%
Overhead and other expenses	2,366	2,355	3,335	11	(980)	0 %	(29)%
Equity-based compensation	1,293	1,356	2,230	(63)	(874)	(5)%	(39)%

Accounting, auditing and legal fees	1,059	1,340	1,524	(281)	(184)	(21)%	(12)%
Consulting	367	345	1,571	22	(1,226)	6 %	(78)%
Total	$9,617	$9,978	$13,243	$(361)	$(3,265)	(4)%	(25)%

General and administrative expenses decreased for 2010, compared to 2009. Accounting, auditing and legal fees decreased as a result of the timing and nature of services provided. Equity-based compensation decreased as fewer unvested options remained outstanding subsequent to the tender offer in March 2010, described in the “Tender offer” section below.

Table of Contents

The decrease in general and administrative expenses in 2009, compared to 2008, was due in part to a lower utilization of consultants and reduced headcount resulting from the November 2008 reduction in force. Equity-based compensation decreased in 2009, compared to 2008, as previously issued equity awards became fully vested and as headcount decreased. The decreases in other expense categories in 2009, compared to 2008, were primarily due to decreased headcount and other broad-based cost control measures.

We had 37, 38 and 44 general and administrative personnel as of December 31, 2010, 2009 and 2008, respectively. Decreases in headcount were the result of our cost-control measures.

Tender offer

During the three months ended March 31, 2010, we initiated a cash tender offer for certain employee stock options in an effort to reduce the number of our stock options outstanding. The tender offer expired on March 19, 2010. Pursuant to the tender offer, employees tendered for purchase 360,000 options, and we accepted for purchase all such options. As a result, we paid an aggregate of $194,000 to the participating employees and incurred equity-based compensation expense of $692,000 related to the remaining unamortized equity-based compensation expense associated with the options tendered in the offer. The tender offer applied to outstanding stock options held by employees with an exercise price equal to or greater than $25.00 per share. The price offered for each eligible stock option was at a discount to its fair value as determined using the Black-Scholes option pricing model.

Asset impairment

In 2007, we began the implementation of an enterprise resource planning (“ERP”) system. The ERP system was intended to replace numerous disconnected business management software applications and link the data contained within these disconnected systems to enable better management of our business and derive more useful data for various business functions, such as sales, marketing, finance and customer support.

Phase 1 of the implementation, which related to the replacement of our general ledger, was completed in 2007 and is being depreciated through December 31, 2011. Phase 2 of the implementation, which consisted of replacing our various customer relationship management and order processing systems, was put on hold in 2008 in conjunction with our cost-control efforts, and we did not capitalize any costs relating to Phase 2 subsequent to October 2008. During the three months ended June 30, 2009, we determined, in conjunction with continued cost-control measures, that we would not implement Phase 2. As a result, in 2009 we recognized an asset impairment charge of $3.1 million related to the Phase 2 implementation.

Restructuring charge

During 2008, we continued to experience the effects of the industry-wide slowdown in the high-end CT market and the Deficit Reduction Act that significantly impacted our 2007 results. Additionally, in 2008, we were impacted by the general decline in the U.S. economy, which resulted in contracted capital spending by U.S. hospitals and lower interest rates on our cash and investments. We reduced our workforce by approximately 11% under a plan announced in November 2008 in order to align our operations with the current market conditions and improve profitability in 2009 and beyond.

In connection with the reduction in workforce, we incurred certain charges in 2008 totaling $660,000, which were primarily comprised of employee severance and other termination costs. The following table summarizes 2009 and 2008 restructuring transactions and related liability balances (in thousands):

	Severance and Other Termination

	Costs
Balance at January 1, 2008	$—
Restructuring charges	660
Payments	(519)
Balance at December 31, 2008	141
Payments	(141)
Balance at December 31, 2009	$—

Actions with respect to the above activities were completed in the fourth quarter of 2008, and we did not incur any significant additional charges in 2009 related to the restructuring plan announced in November 2008.

Table of Contents

Interest income

We generated $529,000 of interest income in 2010, compared to $1.1 million in 2009 and $4.6 million in 2008. A decline in interest rates and decreased investment in higher yielding U.S. government obligations, which matured in 2009, resulted in a 0.4% return on investments in 2010, compared to a 0.8% and 2.9% return on investments in 2009 and 2008, respectively.

Interest income is significantly impacted by changes in interest rates. We do not anticipate a significant improvement in interest rates in 2011 compared to 2010 due to general market conditions; interest rate changes may have a significant impact on results.

Income taxes

During 2010, we recognized a $151,000 tax provision primarily related to international taxes and the recognition of income tax expense for the reversal of previously recognized alternative minimum tax refunds.

During the three months ended June 30, 2009, we recorded a non-cash charge of $15.0 million to the provision for income taxes to establish a full valuation allowance against our deferred tax assets based on our assessment of cumulative pretax results in recent years and projections of cumulative pretax results in future periods.

During 2009, we recognized $194,000 in one-time tax benefits resulting from tax legislation, which enabled us to receive cash payment for the monetization of certain historic research and development tax credits. Also as a result of the legislation, we recognized a $248,000 one-time tax benefit related to the refund of certain alternative minimum tax payments in prior years.

For 2011, we anticipate a consolidated tax provision of approximately $25,000 per quarter relating entirely to foreign operations.

Liquidity and capital resources

The following table sets forth certain relevant measures of our liquidity and capital resources (in thousands):

	As of December 31,	
	2010	2009
Cash and cash equivalents	$87,697	$120,317
Marketable securities	52,204	21,907
Cash, cash equivalents and marketable securities	$139,901	$142,224
Working capital	$127,222	$121,034
Debt	$—	$—

The decrease in our cash, cash equivalents and marketable securities as of December 31, 2010, compared to December 31, 2009, was primarily the result of repurchases of our common stock totaling $6.5 million under share repurchase programs authorized by our Board of Directors. The increase in working capital during 2010 was primarily due to noncurrent marketable securities becoming current during the period, offset in part by cash used for repurchases of our common stock during the period.

We believe our existing cash and investments will satisfy our foreseeable working capital requirements for at least the next 12 months. Additionally, we believe our liquidity and strong balance sheet enable us to execute our repurchases of common stock while still investing in our enterprise solution and marketing strategy and remaining well positioned to pursue strategic acquisitions if and when they emerge.

We have investments in marketable securities that are classified and accounted for as available-for-sale. As of December 31, 2010, $46.5 million of our marketable securities mature within one year and the remaining $5.7 million of our marketable securities mature in 2012.

Table of Contents

Summary of Cash Flows
A summary of cash flows is as follows (in thousands):

	For the Year Ended December 31,		
	2010	2009	2008
Cash provided by (used in)			
Operating activities	$3,690	$2,374	$8,581
Investing activities	(31,987)	12,668	(10,246)
Financing activities	(4,323)	(4,431)	(35,314)
Net change in cash and cash equivalents	$(32,620)	$10,611	$(36,979)

Operating activities
Net cash provided by operating activities increased $1.3 million in 2010 to $3.7 million, compared to $2.4 million in 2009, due to a $20.3 million decrease in net loss and a $1.5 million decrease in changes in operating assets and liabilities, offset by a $20.5 million decrease in non-cash operating items.

Net cash provided by operating activities decreased $6.2 million in 2009 to $2.4 million, compared to $8.6 million in 2008, due to an $18.5 million increase in net loss and a $7.3 million decrease in changes in operating assets and liabilities, offset by a $19.5 million increase in non-cash operating items.

The increase of changes in operating assets and liabilities of $1.5 million in 2010, compared to 2009, and decrease of $7.3 million in 2009, compared to 2008, were primarily due to the timing of receipts and payments in the ordinary course of business. A $1.9 million use of cash resulted from the change in accounts receivable for 2010, compared to a $572,000 source of cash in 2009 and a $2.4 million source of cash in 2008. Changes in the accounts receivable balances each period resulted primarily from the amount and timing of sales within the quarter and the timing of receipts from large enterprise transactions and channel partners. Our days' sales outstanding (calculated by dividing ending net accounts receivable by revenue per day) increased to 86 days as of December 31, 2010, compared to 76 days as of December 31, 2009, which reflected an increase from 70 as of December 31, 2008. A $215,000 use of cash resulted from changes in accounts payable, accrued expenses and other liabilities for 2010, compared to a $1.3 million use of cash in 2009 and a $117,000 use of cash in 2008. Changes in the accounts payable, accrued expenses and other liabilities balances each period are primarily affected by purchases in the fourth quarter of the respective year and the timing of payments to vendors. A $1.0 million source of cash resulted from the change in deferred revenue in 2010, compared to a $2.4 million use of cash in 2009 and a $1.2 million source of cash in 2008. Changes in the deferred revenue balances each period are primarily affected by sales for the preceding four quarters and the timing of services provided.

Cash provided by non-cash operating items decreased by $20.5 million to $6.7 million in 2010, compared to 2009, and increased $19.5 million to $27.2 million in 2009, compared to $7.6 million in 2008. The changes primarily resulted from a $14.7 million decrease in deferred tax assets in 2009, due to a $15.0 million valuation allowance recorded in the second quarter of 2009, and a $3.1 million asset impairment in the second quarter of 2009.

Investing activities
Net cash used by investing activities was $32.0 million in 2010, compared to cash provided by investing activities of $12.7 million in 2009 and cash used by investing activities of $10.2 million in 2008.

We used $40.1 million, $21.7 million and $76.4 million to purchase investments in marketable securities during 2010, 2009 and 2008, respectively. We realized $9.7 million, $36.8 million and $71.6 million of proceeds from maturities and sales of marketable securities during 2010, 2009 and 2008, respectively. As of December 31, 2010, the marketable securities consist of U.S. government obligations and corporate commercial obligations.

We used $1.6 million, $2.3 million and $5.4 million for purchases of property and equipment in 2010, 2009 and 2008, respectively. The purchases for all periods were principally to upgrade computer equipment and to purchase computer equipment for new personnel. Purchases for 2008 also included costs related to expanding our facilities. Additionally, in 2007, we began the implementation of an enterprise resource planning ("ERP") system. We continued implementation of the ERP during 2008 and 2009, though we recognized an impairment charge related to Phase 2 in the second quarter of 2009, as noted in the "Asset impairment" section above. We anticipate that we will continue to purchase property and equipment in the normal course of business. The amount and timing of these purchases and the related cash outflows in future periods are difficult to

Table of Contents

predict and depend on a number of factors, including the hiring of employees and the rate of change of computer hardware.

Financing activities
Cash used by financing activities totaled $4.3 million, $4.4 million and $35.3 million in 2010, 2009 and 2008, respectively. The primary use of cash in 2010, 2009 and 2008 was for the repurchase of $6.5 million, $6.1 million and $38.2 million, respectively, of our common stock under our share repurchase programs.

We have never paid or declared any dividends and do not intend to pay dividends in the near future.

The following summarizes our contractual obligations at December 31, 2010 and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	Total	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
Operating leases	$1,209	$1,027	$182	$—	$—

Off-balance-sheet arrangements
We did not have any off-balance sheet arrangements as of December 31, 2010 or 2009.

Purchase commitments
We had no significant outstanding purchase commitments as of December 31, 2010. We have entered into a number of technology licensing agreements that provide for the payment of royalties when we sell our software products; we are not obligated for any minimum payments under such agreements.

Inflation
We believe inflation has not had a material effect on our operations or financial condition.

Recent accounting pronouncements
Information regarding new accounting pronouncements is included in Note 2 to the Consolidated Financial Statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, interest rates, indices, volatilities, correlations or other market factors such as liquidity will result in losses for a certain financial instrument or group of financial instruments. We do not hold or issue financial instruments for trading purposes, and we do not enter into forward financial instruments to manage and reduce the impact of changes in foreign currency rates as our export sales are primarily negotiated, invoiced and paid in U.S. dollars, with a small percentage of sales transactions denominated in foreign currencies. Based on the controls in place and the relative size of the foreign currency transactions entered into, we believe the risks associated with not using these instruments would not have a material adverse effect on our consolidated financial position or results of operations.

In addition, we do not engage in speculative transactions and do not use derivative instruments or engage in hedging activities. See the Notes to the Consolidated Financial Statements for a description of our accounting policies and other information related to these financial instruments.

In the normal course of business, we are exposed to market risks, including changes in interest rates and price changes, which could affect our operating results.

Interest rate risk

We place our cash, cash equivalents and marketable securities with a high-quality financial institution and have investment guidelines relative to diversification and maturities designed to maintain safety and liquidity. As of December 31, 2010, we had cash, cash equivalents and marketable securities totaling $139.9 million. Interest income for 2010 was $529,000, which represented at 0.4% return on investment. If interest rates decline in future periods, interest income from cash, cash equivalents and marketable securities may be negatively impacted.

Table of Contents

Foreign currency risk

Our export sales are primarily negotiated, invoiced and paid in U.S. dollars, with a portion of sales transactions denominated in foreign currencies. Therefore, fluctuations in the value of the dollar as compared to other foreign currencies have not had a significant effect on our results of operations or financial condition. As we expand our direct business internationally, we expect to enter into a higher percentage of sales transactions in foreign currencies and could be subject to greater gains or losses based on exchange rate fluctuations.

Item 8. Financial Statements and Supplementary Data

Our financial statements and Report of Independent Registered Public Accounting Firm thereon, all of which are included in this Annual Report on Form 10-K, are listed in Item 15(a)(1) of this Form 10-K.

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

Not applicable.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended ("Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required financial disclosure.

Our management, under the supervision of and with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this report. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Management's report on internal control over financial reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. 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 established policies or procedures may deteriorate.

Our management, under the supervision of and with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our internal control over financial reporting as of the end of the period covered by this report based on the criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of this evaluation, we concluded that our internal control over financial reporting was effective as of the end of the period covered by this report.

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in Item 15(a)(1) of this Annual Report on Form 10-K.

Changes in internal control over financial reporting

There were no changes in internal control over financial reporting during the quarter ended December 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Table of Contents

Part III

Certain information required by Part III is omitted from this Annual Report on Form 10-K because we will file a definitive Proxy Statement relating to our 2011 Annual Meeting of Stockholders pursuant to Schedule 14A (the "Proxy Statement") not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and certain information included therein is incorporated herein by reference as indicated below.

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 will be included under the captions "Election of Directors" and "Information Concerning Directors, Nominees and Executive Officers" in our Proxy Statement for our 2011 annual meeting of shareholders. Information concerning the compliance of our officers, directors and 10% shareholders with Section 16(a) of the Securities Exchange Act of 1934 is incorporated by reference to the information to be contained in the 2011 proxy statement under the caption "Information Concerning Directors Nominees and Executive Officers — Section 16(a) Beneficial Ownership Reporting Compliance." The information regarding Audit Committee members and "Audit Committee Financial Experts" is incorporated by reference to the information to be contained in the 2011 proxy statement under the caption "Information Concerning Directors Nominees and Executive Officers — Board Committees." The information regarding our Code of Business Ethics is incorporated by reference to the information to be contained in the 2011 proxy statement under the heading "Information Concerning Directors Nominees and Executive Officers — Code of Business Conduct and Ethics."

Item 11. Executive Compensation

The information under the captions "Information Concerning Directors, Nominees and Executive Officers — Director Compensation," "Information Concerning Directors, Nominees and Executive Officers — Compensation Discussion and Analysis," "Information Concerning Directors, Nominees and Executive Officers — Compensation Committee Report," "Information Concerning Directors, Nominees and Executive Officers — Executive Compensation" and "Information Concerning Directors, Nominees and Executive Officers — Compensation Committee Interlocks and Insider Participation" to be contained in the 2011 proxy statement is incorporated herein by reference.

The following information is being provided instead of reporting the information under Item 5.02(e) of a Current Report on Form 8-K:

On February 23, 2011, our Board of Directors approved the recommendation of the Compensation Committee regarding base salaries for 2011 and grants of stock options under the 2006 Long-Term Incentive Plan for each of our executive officers, including our principal executive officer, principal financial officer and each of our other "named executive officers" (as defined in Regulation S-K Item 402(a)(3)) to be identified in our proxy statement for our 2011 annual meeting of shareholders. Specifically, the Compensation Committee approved the following salaries, effective March 1, 2011: Michael H. Carrel, the Company's President and Chief Executive Officer ($345,000), Peter J. Goepfrich, its Chief Financial Officer and Treasurer ($225,000), Aaron (Erkan) Akyuz, its Executive Vice President - Product Strategy and Development ($275,000), Steven P. Canakes, its Executive Vice President - Global Sales ($213,200), and Vikram Simha, its Chief Technology Officer ($247,200). The Committee also approved grants of options for the following numbers of shares: Mr. Carrel (50,000), Mr. Goepfrich (16,000), Mr. Akyuz (30,000), Mr. Canakes (12,500) and Mr. Simha (12,500). All options were granted on March 1, 2011 at an exercise price of $14.79 (the closing price of our common stock on the NASDAQ Global Select Market on the grant date). All options vest with respect to 28% of the shares on March 1, 2012 and, as to the remaining shares, with respect to 2% of the shares on each monthly anniversary thereafter so long as the executive officer is an employee of our Company. All options have a term of five years from the date of grant.

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

The information under the captions “Beneficial Ownership of Common Stock” and “Information Concerning Directors, Nominees and Executive Officers — Securities Authorized for Issuers Under Equity Compensation Plans” to be contained in the 2011 proxy statement is incorporated herein by reference.

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

The information under the caption “Information Concerning Directors, Nominees and Executive Officers — Independent Directors” and “Information Concerning Directors, Nominees and Executive Officers — Policy and Procedures with Respect to Related Person Transactions” to be contained in the 2011 proxy statement is incorporated herein by reference.

Table of Contents

Item 14. Principal Accountant Fees and Services

The information under the caption "Ratification of Appointment of PricewaterhouseCoopers LLP as Independent Registered Public Accounting Firm" to be contained in the 2011 proxy statement is incorporated herein by reference.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following Consolidated Financial Statements of Vital Images, Inc. and Report of Independent Registered Public Accounting Firm thereon are included herein:

(1) Financial Statements

(2) All other schedules to the Consolidated Financial Statements required by Article 12 of Regulation S-X are not required under the related instructions or are inapplicable and therefore have been omitted or the information required to be set forth in those schedules is included in the financial statements or related notes.

(3) Listing of Exhibits

(b) Exhibits

Included in Item 15(a)(3) above.

Table of Contents

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, in Minneapolis, Minnesota, on the 14th day of March, 2011.

Vital Images, Inc.

By: /s/Peter J. Goepfrich
Peter J. Goepfrich
Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

Pursuant to the requirement of the Securities Exchange Act of 1934, this Report has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael H. Carrel Michael H. Carrel	President, Chief Executive Officer and Director (Principal Executive Officer)	March 14, 2011
/s/Peter J. Goepfrich Peter J. Goepfrich	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	March 14, 2011
/s/James B. Hickey, Jr. James B. Hickey, Jr.	Chairman of the Board and Director	March 14, 2011
/s/ Oran E. Muduroglu Oran E. Muduroglu	Director	March 14, 2011
/s/ Gregory J. Peet Gregory J. Peet	Director	March 14, 2011
/s/Richard W. Perkins Richard W. Perkins	Director	March 14, 2011
/s/Douglas M. Pihl Douglas M. Pihl	Director	March 14, 2011
/s/Michael W. Vannier Michael W. Vannier	Director	March 14, 2011
/s/Sven A. Wehrwein Sven A. Wehrwein	Director	March 14, 2011

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Vital Images, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of stockholders' equity and comprehensive income (loss) and of cash flows present fairly, in all material respects, the financial position of Vital Images, Inc. and its subsidiaries at December 31, 2010 and December 31, 2009, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these 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 Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal 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.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

/s/ PricewaterhouseCoopers LLP
Minneapolis, Minnesota
March 14, 2011

35

Table of Contents

Vital Images, Inc.
Consolidated Balance Sheets
(In thousands, except per share amounts)

	December 31, 2010	2009
Assets		
Current assets:		
Cash and cash equivalents	$87,697	$120,317
Marketable securities	46,519	9,673
Accounts receivable, net	14,089	12,196
Prepaid expenses and other current assets	3,579	2,686
Total current assets	151,884	144,872
Marketable securities	5,685	12,234
Property and equipment, net	3,849	5,485
Other intangible assets, net	22	382
Goodwill	9,089	9,089
Total assets	$170,529	$172,062
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$2,311	$2,588
Accrued compensation	2,827	3,574
Accrued royalties	892	812
Other current liabilities	2,223	1,364
Deferred revenue	16,409	15,500
Total current liabilities	24,662	23,838
Deferred revenue	1,085	1,033
Deferred rent	36	469
Total liabilities	25,783	25,340
Commitments and contingencies (Note 4)		
Stockholders' equity:		
Preferred stock: $0.01 par value; 5,000 shares authorized; none issued or outstanding	—	—
Common stock: $0.01 par value; 40,000 shares authorized; 14,034 issued and outstanding as of December 31, 2010; and 14,330 shares issued and outstanding as of December 31, 2009	140	143
Additional paid-in capital	167,071	168,058
Accumulated deficit	(22,598)	(21,632)
Accumulated other comprehensive income	133	153
Total stockholders' equity	144,746	146,722
Total liabilities and stockholders' equity	$170,529	$172,062

The accompanying notes are an integral part of the Consolidated Financial Statements.

Table of Contents

Vital Images, Inc.
Consolidated Statements of Operations
(In thousands, except for per share amounts)

	For the Year Ended December 31,		
	2010	2009	2008
Revenue:			
License fees	$22,823	$22,766	$34,290
Maintenance and services	34,102	33,717	32,436
Hardware	2,784	1,747	1,415
Total revenue	59,709	58,230	68,141
Cost of revenue:			
License fees	3,641	3,301	4,922
Maintenance and services	10,076	9,282	10,089
Hardware	2,561	1,622	862
Total cost of revenue	16,278	14,205	15,873
Gross profit	43,431	44,025	52,268
Operating expenses:			
Sales and marketing	21,551	22,579	27,835
Research and development	13,607	16,332	20,355
General and administrative	9,617	9,978	13,243
Asset impairment (Note 3)	—	3,147	—
Restructuring charge (Note 10)	—	—	660
Total operating expenses	44,775	52,036	62,093
Operating loss	(1,344)	(8,011)	(9,825)
Interest income	529	1,091	4,643
Loss before income taxes	(815)	(6,920)	(5,182)
Provision (benefit) for income taxes	151	14,332	(2,382)
Net loss	$(966)	$(21,252)	$(2,800)
Net loss per share – basic and diluted	$(0.07)	$(1.48)	$(0.17)
Weighted average common shares outstanding - basic and diluted	14,250	14,315	16,155

The accompanying notes are an integral part of the Consolidated Financial Statements.

Table of Contents

Vital Images, Inc.
Consolidated Statements of Stockholders' Equity and Comprehensive Income (Loss)
(In thousands)

	Common Stock		Additional Paid-In Capital	Retained Earnings / (Accumulated Deficit)	Accumulated Other Comprehensive Income / (Loss)	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares	Amount					
Balances as of December 31, 2007	17,153	$172	$199,625	$ 2,420	$ (1)	$ 202,216	
Issuance of common stock upon exercise of stock options	243	2	1,927			1,929	
Tax benefit related to exercise of stock options and release of restricted stock			50			50	
Issuance of common stock under employee stock purchase plan	43	—	490			490	
Grant of restricted stock to employees	30	—	—			—	
Forfeiture or cancellation of restricted stock	(27)	—	—			—	
Common stock surrendered for payment of payroll tax liability resulting from the vesting of restricted stock	(12)	—	(174)			(174)	
Equity-based compensation			5,007			5,007	
Repurchases of common stock	(2,757)	(27)	(38,187)			(38,214)	
Change in unrealized gain or loss on investments, net of tax					187	187	$ 187
Net loss				(2,800)		(2,800)	(2,800)
Balances as of December 31, 2008	14,673	147	168,738	(380)	186	168,691	$ (2,613)
Issuance of common stock upon exercise of stock options	163	2	1,151			1,153	
Issuance of common stock under employee stock purchase plan	51	—	496			496	
Grant of restricted stock to employees	15	—	—			—	
	(10)	—	(119)			(119)	

Common stock surrendered for payment of payroll tax liability resulting from the vesting of restricted stock							
Equity-based compensation			3,867			3,867	
Repurchases of common stock	(562)	(6)	(6,075)			(6,081)	
Change in unrealized gain or loss on investments, net of tax					(33)	(33)	$ (33)
Net loss				(21,252)		(21,252)	(21,252)
Balances as of December 31, 2009	14,330	143	168,058	(21,632)	153	146,722	$ (21,285)
Issuance of common stock upon exercise of stock options	195	2	1,934			1,936	
Issuance of common stock under employee stock purchase plan	42	—	456			456	
Forfeiture or cancellation of restricted stock	(18)	—	—			—	
Common stock surrendered for payment of payroll tax liability resulting from the vesting of restricted stock	(5)	—	(61)			(61)	
Equity-based compensation			3,394			3,394	
Option tender (Note 5)			(194)			(194)	
Repurchases of common stock	(510)	(5)	(6,516)			(6,521)	
Change in unrealized gain or loss on investments, net of tax					(20)	(20)	$ (20)
Net loss				(966)		(966)	(966)
Balances as of December 31, 2010	14,034	$140	$167,071	$ (22,598)	$ 133	$ 144,746	$ (986)

The accompanying notes are an integral part of the Consolidated Financial Statements.

Table of Contents

Vital Images, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	For the Year Ended December 31,		
	2010	2009	2008
Cash flows from operating activities:			
Net loss	$(966)	$(21,252)	$(2,800)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	3,259	4,843	4,919
Amortization of identified intangible assets	360	426	1,044
Loss on disposal of assets	—	111	—
Asset impairment	—	3,147	—
Provision for doubtful accounts	(26)	279	519
Deferred income taxes	—	14,664	(2,521)
Excess tax benefit from stock transactions	—	—	(481)
Amortization of discount and accretion of premium on marketable securities	96	238	(473)
Equity-based compensation	3,394	3,867	5,007
Amortization of deferred rent	(413)	(394)	(375)
Changes in operating assets and liabilities:			
Accounts receivable	(1,867)	572	2,396
Prepaid expenses and other assets	(893)	(507)	262
Accounts payable	(326)	(936)	623
Accrued expenses and other liabilities	111	(329)	(740)
Deferred revenue	961	(2,355)	1,201
Net cash provided by operating activities	3,690	2,374	8,581
Cash flows from investing activities:			
Purchases of property and equipment	(1,574)	(2,335)	(5,434)
Purchases of marketable securities	(40,063)	(21,749)	(76,395)
Proceeds from maturities of marketable securities	9,650	36,752	70,002
Proceeds from sales of marketable securities	—	—	1,581
Net cash (used in) provided by investing activities	(31,987)	12,668	(10,246)
Cash flows from financing activities:			
Repurchases of common stock	(6,521)	(6,081)	(38,214)
Proceeds from sale of common stock under stock plans	2,392	1,650	2,419
Payment for options tendered	(194)	—	—
Excess tax benefit from stock transactions	—	—	481
Net cash used in financing activities	(4,323)	(4,431)	(35,314)
Net (decrease) increase in cash and cash equivalents	(32,620)	10,611	(36,979)
Cash and cash equivalents, beginning of period	120,317	109,706	146,685
Cash and cash equivalents, end of period	$87,697	$120,317	$109,706
Supplemental cash flow information:			
Purchases of property and equipment included in accounts payable	$146	$97	$366

The accompanying notes are an integral part of the Consolidated Financial Statements.

Table of Contents

Vital Images, Inc.
Notes to Consolidated Financial Statements

1. Business description

Vital Images, Inc. (the “Company”) is a leading provider of advanced visualization and image analysis solutions for use by medical professionals in clinical analysis and therapy planning for medical conditions. The Company provides software, customer education, software maintenance and support, professional services and third-party hardware to its customers. The Company’s technology rapidly transforms complex data generated by diagnostic imaging equipment into functional digital images that can be manipulated and analyzed using its specialized applications to better understand internal anatomy and pathology. The Company’s solutions are designed to improve physician workflow and productivity, enhance the ability to make clinical decisions, facilitate less invasive patient care, and complement often significant capital investments in diagnostic imaging equipment made by its customers. The Company’s software is compatible with equipment from all major manufacturers of diagnostic imaging equipment, such as computed tomography ("CT") and magnetic resonance (“MR”) scanners, and can be integrated into picture archiving and communication systems ("PACS") and electronic medical record ("EMR") systems, which many hospitals use to acquire, distribute and archive medical images and diagnostic reports.

2. Summary of significant accounting policies

Basis of presentation

The Consolidated Financial Statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

The Company views its operations and manages its business as one reportable segment — the development and marketing of software and related services for advanced visualization and analysis solutions for use by medical professionals in clinical analysis and therapy planning. Factors used to identify the Company’s single operating segment include the financial information available for evaluation by the chief operating decision maker in making decisions about how to allocate resources and assess performance. The Company markets its products and services through a direct sales force and independent distributors in the United States and international markets.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair value of financial instruments

The Company’s financial instruments consist primarily of cash, cash equivalents, and marketable securities, for which the current carrying amounts approximate fair market values based on quoted market prices or net asset value.

Cash and cash equivalents

Cash and cash equivalents consist of cash and temporary investments with maturities of 90 days or less when purchased. The carrying amount of cash equivalents approximates fair value due to the short maturity of these instruments.

Marketable securities

Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. Currently, all marketable securities held by the Company are classified as available-for-sale. Available-for-sale securities are carried at fair value as determined by quoted market prices with unrealized gains and losses, net of tax, reported as a separate component of stockholders’ equity. If an unrealized loss

for any investment is considered to be other-than-temporary, the loss will be recognized in the consolidated income statement in the period the determination is made. The cost basis of securities sold is determined using the specific identification method. The cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in interest income. Interest and dividends on securities classified as available-for-sale are included in interest income.

The Company analyzes its investments for impairment on an ongoing basis. Factors considered in determining whether an

Table of Contents

unrealized loss is a temporary loss or an other-than-temporary loss include the length of time and extent to which the securities have been in an unrealized loss position and the Company's ability and intent to hold the investment for a period of time sufficient to allow for any anticipated market recovery.

Accounts receivable and allowance for doubtful accounts

Accounts receivable are initially recorded at a selling price, which approximates fair value upon the sale of goods or services to customers. The Company maintains an allowance for doubtful accounts to reflect accounts receivable at net realizable value. In judging the adequacy of the allowance for doubtful accounts, the Company considers multiple factors, including historical bad debt experience, the general economic environment, the need for specific client reserves and the aging of the Company's receivables. A portion of this provision is included in operating expenses as a general and administrative expense and a portion of this provision is included as a reduction of license revenue. A considerable amount of judgment is required in assessing these factors. If the factors utilized in determining the allowance do not reflect future performance, then a change in the allowance for doubtful accounts would be necessary in the period such determination has been made, which would impact future results of operations.

Concentration of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, marketable securities and trade accounts receivable. Deposits with the Company's bank may exceed the amount of insurance provided on such deposits. The Company's investment policy, approved by its Audit Committee, limits the amount the Company may invest in any one type of investment, thereby reducing credit risk concentrations. A significant portion of the Company's accounts receivable relates to Toshiba Medical Systems Corporation, totaling 58% of accounts receivable as of December 31, 2010. The Company reviews the creditworthiness of its customers prior to product shipment and generally does not require collateral.

Property and equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the related asset's estimated useful life, generally three to seven years. Equipment is generally depreciated over three to seven years, furniture and fixtures are generally depreciated over seven years, computer software is generally depreciated over three to seven years, and leasehold improvements are amortized over the shorter of their estimated useful lives or the remaining terms of the related leases. The asset cost and related accumulated depreciation or amortization are adjusted for asset retirement or disposal, with the resulting gain or loss, if any, credited or charged to results of operations.

Long-lived assets

The Company reviews long-lived assets (or asset groups) for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Events or changes in circumstances that indicate the carrying amount may not be recoverable include, but are not limited to, a significant decrease in the market value of the business or asset acquired, a significant adverse change in the extent or manner in which the business or asset acquired is used, or a significant adverse change in the business climate. If such events or changes in circumstances are present, the undiscounted cash flows method is used to determine whether the asset is impaired. Cash flows would include the estimated terminal value of the asset and exclude any interest charges. To the extent the carrying value of the asset exceeds the undiscounted cash flows over the estimated remaining life of the asset, the impairment is measured using the discounted cash flows. The discount rate utilized would be based on management's best estimate of the related risks and return at the time the impairment assessment is made.

Goodwill

Goodwill and intangible assets with indefinite lives are reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including

goodwill. The Company operates as one reporting unit and therefore compares the book value to the market value (market capitalization plus a control premium). If the market value exceeds the book value, goodwill is considered not impaired, and thus the second step of the impairment test is not necessary. If the Company's book value exceeds the market value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of the goodwill with the book value of the goodwill. If the carrying value of the goodwill exceeds the implied fair value of the goodwill, an impairment loss would be recognized in an amount equal to the excess. Any loss recognized cannot exceed the carrying amount of goodwill. The Company completed the annual goodwill impairment assessment as of December 31, 2010, from which no impairment was

Table of Contents

recorded. If market conditions continue to fluctuate, the Company may incur goodwill impairment charges that adversely affect its financial position and operating results.

Revenue recognition

The Company recognizes revenue when it is realized or realizable and earned. The Company considers revenue realized or realizable and earned when it has persuasive evidence of an arrangement, the product has been shipped or the services have been provided to the customer, the sales price is fixed or determinable, and collectability is probable.

License fee revenue is derived from the licensing of software. Hardware revenue is derived from the sale of system hardware, including peripheral equipment. Maintenance and service revenue is derived from software maintenance and from telephone support, installation, customer education and consulting services. The Company's software licenses are generally sold as part of an arrangement that includes maintenance and support and often hardware, installation and customer education services.

The Company licenses software and sells products and services to end users and also indirectly through original equipment manufacturers, value-added resellers and independent distributors (collectively, "Resellers"). Terms offered by the Company do not generally differ between end users and Resellers. The Company generally offers terms that require payment within 30 to 90 days after product delivery. In rare situations where the Company offers terms that require payment beyond 90 days after product delivery, revenue is deferred until the payment becomes due. The Company does not generally offer rights of return or acceptance clauses to its customers. In rare situations where the Company provides rights of return or acceptance clauses, revenue is deferred until the clause expires. The Company evaluates the credit worthiness of all customers. In circumstances where the Company does not have experience selling to a customer and lacks adequate credit information to conclude that collection is probable, revenue is deferred until collection is reasonably assured and all other revenue recognition criteria in the arrangement have been met. If all other revenue recognition criteria are met, license revenue from Resellers is recognized on a sell-in or sell-through basis depending on the arrangement with the Reseller. The Company recognizes revenue from Resellers on a sell-in basis if the Reseller i) assumes all risk of the purchase, ii) has the ability and obligation to pay regardless of receiving payment from the end user, and iii) all other revenue recognition criteria are met. The majority of revenue generated through Resellers has been on a sell-in basis. The following are other revenue recognition criteria applied by the Company:

- Software and Hardware — Revenue from license fees and hardware is recognized when shipment of the product has occurred, no significant Company obligations with regard to implementation remain and the Company's services are not considered essential to the functionality of other elements of the arrangement.
- Services — Revenue from maintenance and support arrangements is deferred and recognized ratably over the term of the maintenance and support arrangements. Revenue from customer education, installation and consulting services is recognized as the services are provided to customers or upon contractual expiration of such services.
- Multiple-Element Arrangements — The Company enters into arrangements with customers that include a combination of software products, system hardware, maintenance and support (which includes when-and-if-available unspecified upgrades), or installation and customer education services. For such arrangements, the Company recognizes revenue using the residual method. The Company allocates the total arrangement fee among the various elements of the arrangement based on the fair value of each of the undelivered elements determined by vendor-specific objective evidence. The fair value of installation and customer education services and maintenance and support services is established based upon sold separately pricing for the services or stated renewal rate. In software arrangements for which the Company does not have vendor-specific objective evidence of fair value for all elements, revenue is deferred until the earlier of when vendor-specific objective evidence is determined for the undelivered elements (residual method) or when all elements for which the Company does not have vendor-specific objective evidence of fair value have been delivered.
- Subscription Arrangements — Revenue from subscription arrangements is recognized ratably over the subscription period. Revenue from subscription arrangements is allocated to license revenue, maintenance and service revenue,

and hardware revenue in a manner consistent with the allocation of revenue under the residual method for the same elements in non-subscription transactions.

Equity-based compensation

The Company accounts for equity-based compensation in accordance with applicable guidance, which requires the measurement and recognition of compensation expense for all equity-based payment awards made to employees and directors, including employee stock options, restricted stock and employee stock purchases related to the Employee Stock Purchase Plan, based on estimated fair values.

Table of Contents

Equity-based compensation expense for the years ended December 31, 2010, 2009 and 2008 was $3.4 million, $3.9 million and $5.0 million, respectively.

The following table illustrates how equity-based compensation was allocated to the income statement as well as the effect on net loss of all equity-based compensation recognized (in thousands):

	For the Year Ended December 31,		
	2010	2009	2008
Cost of revenue	$320	$323	$333
Sales and marketing	802	1,243	1,265
Research and development	979	945	1,179
General and administrative	1,293	1,356	2,230
Equity-based compensation before income taxes	3,394	3,867	5,007
Income tax benefit	—	—	(1,771)
Total equity-based compensation after income taxes	$3,394	$3,867	$3,236

Stock Options

Accounting guidance for share-based compensation requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The Company uses the Black-Scholes option-pricing model, which requires the input of assumptions, including an estimate of the average period of time employees will retain vested stock options before exercising them, the estimated volatility of the Company's common stock price over the expected term, and the number of options that will ultimately be forfeited before completing vesting requirements. Changes in the assumptions can materially affect the estimate of fair value of equity-based compensation and, consequently, the related expense recognized. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite vesting period.

For purposes of calculating the fair value of options, the weighted average fair value of options granted during 2010, 2009 and 2008 were $5.69, $3.74 and $5.50, respectively. The weighted-average fair values for the options were based on the fair values on the dates of grant. The fair values for the options were calculated using the Black-Scholes option-pricing model, with the following weighted-average assumptions and expense adjusted using the following expected forfeiture rate assumptions:

	For the Year Ended December 31,		
	2010	2009	2008
Expected option life	3.64 years	3.69 years	3.75 years
Expected volatility factor	46%	49%	46%
Expected dividend yield	—%	—%	—%
Risk-free interest rate	1.89%	1.67%	2.33%
Expected forfeiture rate	2%	2%	1%

Because equity-based compensation expense recognized for the years ended December 31, 2010, 2009 and 2008 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and, if necessary, adjusted in subsequent periods if actual forfeitures differ from those estimates.

Prior to March 9, 2006, the expected life of stock options was calculated by performing a detailed analysis of all historical stock option information available. On March 9, 2006, the Company began to grant options with a five-year legal life instead of the eight-year legal life that it had previously used. As a result, the Company has elected to use the "simplified" method to estimate the expected life of options granted on and after March 9, 2006. As options granted in 2006 will reach the end of their five-year contractual term during 2011, the Company believes that it will have sufficient historical information in the near future to compute the expected term assumption based on the weighted average of historical grants for options to be granted in future periods. The expected volatility is calculated based on

the historical volatility of the Company's common stock over the expected option life. The expected dividend yield is based on the Company's intent not to issue dividends for the foreseeable future. Risk-free interest rates are calculated based on continuously compounded U.S. Treasury risk-free rates for the appropriate term. The expected forfeiture rate is estimated based on historical experience.

As of December 31, 2010, there was $3.6 million of unrecognized compensation expense related to stock options that is expected to be recognized over a weighted-average period of 2.2 years.

Table of Contents

Restricted Stock

The Company has granted nonvested shares of common stock ("restricted stock") to certain employees under its 1997 Stock Option and Incentive Plan and 2006 Long-Term Incentive Plan, which generally vest 25% annually beginning one year after the grant date. The Company records equity-based compensation expense equal to the fair market value of the common stock on the date of grant ratably over the vesting period. Equity-based compensation expense related to restricted stock was $123,000, $328,000 and $491,000 for the years ended December 31, 2010, 2009 and 2008, respectively.

As of December 31, 2010, there was $200,000 of unrecognized compensation expense related to restricted stock awards that is expected to be recognized over a weighted-average period of 2.2 years. The aggregate fair value of restricted stock that vested was $162,000, $325,000 and $488,000 for the years ended December 31, 2010, 2009 and 2008, respectively.

Employee Stock Purchase Plan

Employee Stock Purchase Plan ("ESPP") compensation expense was $126,000, $156,000 and $154,000 for the years ended December 31, 2010, 2009 and 2008, respectively.

The fair value of stock compensation expense associated with the Company's ESPP was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	For the Year Ended December 31,		
	2010	2009	2008
Expected life of ESPP options	3 months	3 months	3 months
Expected volatility factor	34 %	42 %	46 %
Expected dividend yield	— %	— %	— %
Risk-free interest rate	0.14 %	0.15 %	1.81 %

The benefits of tax deductions from the exercise of stock options and settlement of restricted stock awards in excess of the compensation cost are recognized for those options and stock awards to be classified as financing cash inflows rather than operating cash inflows on a prospective basis. This amount is shown as "Excess tax benefit from stock transactions" on the Consolidated Statement of Cash Flows. The Company did not incur any such excess tax benefits in 2010 and 2009 as the Company had a full valuation allowance against its deferred tax assets as of December 31, 2010 and 2009.

The Company has elected to calculate its historical pool of windfall tax benefits (that is, the amount that would have accumulated as of the adoption date of equity-based compensation guidance) using the alternative ("short-cut") method and the "tax law ordering approach" to determine when the historic tax benefits are realized (tax benefits realized based on provisions in the tax law that identify the sequence in which stock option deductions are utilized for tax purposes). The Company will continue to track the balance of the pool of windfall tax benefits based on windfalls or shortfalls incurred after the adoption date.

Research and development costs

Costs related to research, design and development of products are charged to research and development expense as incurred and are reported net of offsets resulting from reimbursements or grants received for research and development activities. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when a product is available for general release to customers. The Company uses the working model approach to determine technological feasibility. The Company's products are released soon after technological feasibility has been established. As a result, the Company has not capitalized any software development costs because such costs have not been significant.

Income taxes

The Company provides for income taxes using the liability method, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this statement, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some component or all of the deferred tax assets will not be realized. Tax rate changes are reflected in income during the period such changes are enacted.

Table of Contents

Computation of net loss per share

Basic earnings per share is computed using net loss and the weighted average number of common shares outstanding. Diluted earnings per share reflect the weighted average number of common shares outstanding plus any potentially dilutive shares outstanding during the period. Potentially dilutive shares consist of shares issuable upon the exercise of stock options and warrants, as well as unvested restricted stock. All common share equivalents are anti-dilutive in periods in which the Company generates a net loss.

The computations for basic and diluted net loss per share are as follows (in thousands, except per share amounts):

	For the Year Ended December 31,		
	2010	2009	2008
Numerator:			
Net loss	$(966)	$(21,252)	$(2,800)
Denominator:			
Denominator for weighted average common shares outstanding – basic	14,250	14,315	16,155
Dilution associated with the company's stock-based compensation plans	—	—	—
Denominator:			
Denominator for weighted average common shares outstanding – diluted	14,250	14,315	16,155
Net loss income per share – basic and diluted	$(0.07)	$(1.48)	$(0.17)
Antidilutive stock options and restricted stock awards excluded from above calculation	2,240	2,689	2,515

Comprehensive income (loss)

Comprehensive income (loss) includes net income and items defined as other comprehensive income. The applicable accounting guidance requires that items defined as other comprehensive income, such as unrealized gains and losses on certain marketable securities, be separately classified in the financial statements. Such items are reported in the consolidated statements of stockholders' equity as comprehensive income (loss).

Recent accounting pronouncements

In October 2009, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2009-13, Multiple-Deliverable Revenue Arrangements—a consensus of the FASB Emerging Issues Task Force, that provides amendments to the criteria for separating consideration in multiple-deliverable arrangements and eliminates the residual method for separating delivered and undelivered elements of an arrangement. The ASU does not apply to arrangements for which industry specific allocation and measurement guidance exists, such as long-term construction contracts and software transactions. ASU No. 2009-13 is effective for the Company beginning January 1, 2011. The Company may elect to adopt the provisions prospectively to new or materially modified arrangements beginning on the effective date or retrospectively for all periods presented. The Company does not expect that the adoption of this standard will have a material impact on the Company's consolidated financial statements.

In October 2009, the FASB issued ASU No. 2009-14, Certain Revenue Arrangements That Include Software Elements—a consensus of the FASB Emerging Issues Task Force, that reduces the types of transactions that fall within the current scope of software revenue recognition guidance. Existing software revenue recognition guidance requires that its provisions be applied to an entire arrangement when the sale of any products or services containing or utilizing software when the software is considered more than incidental to the product or service. The ASU also provides guidance on how to allocate transaction consideration when an arrangement contains both deliverables within the scope of software revenue guidance (software deliverables) and deliverables not within the scope of that guidance (non-software deliverables). ASU No. 2009-14 is effective for the Company beginning January 1, 2011. The Company may elect to adopt the provisions prospectively to new or materially modified arrangements beginning on the effective date or retrospectively for all periods presented. However, the Company must elect the same transition

method for this guidance as that chosen for ASU No. 2009-13. The Company does not expect that the adoption of this standard will have a material impact on the Company's consolidated financial statements.

In January 2010, the FASB issued ASU No. 2010-6, Improving Disclosures About Fair Value Measurements, that amends existing disclosure requirements under fair value measurement guidance, by adding required disclosures about items

Table of Contents

transferring into and out of levels 1 and 2 in the fair value hierarchy; adding separate disclosures about purchase, sales, issuances, and settlements relative to level 3 measurements; and clarifying, among other things, the existing fair value disclosures about the level of disaggregation. For the Company, this ASU is effective for the first quarter of 2010, except for the requirement to provide level 3 activity of purchases, sales, issuances, and settlements on a gross basis, which is effective beginning the first quarter of 2011. Since this standard impacts disclosure requirements only, its adoption will not have a material impact on the Company's consolidated results of operations or financial condition.

3. Financial statement components

Allowance for doubtful accounts

The allowance for doubtful accounts activity was as follows (in thousands):

	For the Year Ended December 31,		
	2010	2009	2008
Beginning balance	$736	$638	$505
Provision	(26)	279	519
Write-offs	(43)	(181)	(386)
Ending balance	$667	$736	$638

Marketable securities

As of December 31, 2010 and 2009, the Company's marketable securities were as follows (in thousands):

	December 31, 2010			December 31, 2009		
	Adjusted Cost Basis	Aggregate Fair Value	Net Unrealized Gains	Adjusted Cost Basis	Aggregate Fair Value	Net Unrealized Gains
Corporate debt	$26,761	$26,836	$75	$16,766	$16,911	$145
Government debt	25,310	25,368	58	4,988	4,996	8
	$52,071	$52,204	$133	$21,754	$21,907	$153

As of December 31, 2010 and 2009, the Company's gross unrealized gains and losses were as follows (in thousands):

	December 31, 2010			December 31, 2009
	Gross Unrealized Gains	Gross Unrealized (Losses)	Net Unrealized Gains	Gross Unrealized Gains