ELLIE MAE INC Form 10-K February 22, 2017

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

#### FORM 10-K

(Mark One) x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2016 OR ..TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to Commission File Number: 001-35140

ELLIE MAE, INC. (Exact name of registrant as specified in its charter)

Delaware	94-3288780
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)
<ul> <li>4420 Rosewood Drive, Suite 500</li> <li>Pleasanton, California</li> <li>(Address of principal executive offices)</li> <li>(925) 227-7000</li> <li>(Registrant's telephone number, including</li> </ul>	

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

Title of Each ClassName of Each Exchange on Which<br/>RegisteredCommon Stock, par value \$0.0001 per shareNew York Stock ExchangeSecurities Registered pursuant to Section 12(g) of the<br/>Act: NoneAct: None

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 of Section 15(d) of the 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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  $x = N_0 \circ o$ 

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 the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer o 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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$2,332,871,000 (based on the last reported sale price of \$91.65 on June 30, 2016). 33,770,632 shares of the registrant's common stock, par value \$0.0001 per share, were outstanding as of February 16, 2017.

Documents Incorporated by Reference

Portions of the registrant's Proxy Statement for the registrant's 2017 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K to the extent stated herein. The registrant intends to file the Proxy Statement within 120 days of the registrant's fiscal year ended December 31, 2016.

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#### NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created by those sections. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial performance, future revenues, future profitability, future products and services, projected costs, expectations regarding demand and acceptance of our products and services, growth opportunities, our reputation, future economic conditions, trends in the market in which we operate, the plans and objectives of management and the statements set forth in the section captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report.

Forward-looking statements may include words such as "may," "will," "should," "expect," "plan," "intend," "anticipate," "beli "estimate," "predict," "potential," "continue" or other wording indicating future results or expectations. Forward-looking statements are subject to risks and uncertainties, and actual events or results may differ materially. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation:

outages and other system interruptions in our Encompass software, the Ellie Mae Network service or our other services and any related impact on our reputation;

fluctuations in mortgage lending volume;

the volume of mortgages originated by our Encompass users;

the impact of changes in mortgage interest rates;

changes in mortgage originator, lender, investor or service provider behavior and any related impact on the residential mortgage industry;

our ability to accurately forecast revenues and appropriately plan our expenses;

the number of Encompass users, including contracted Encompass users;

the effectiveness of our marketing and sales efforts to attract new and retain existing Encompass users and Ellie Mae Network participants;

transaction volume on the Ellie Mae Network;

the level of demand for our Encompass Docs Solution, our Encompass Product & Pricing Service, our Encompass Compliance Service, our Encompass CRM service and the other services we offer;

our ability to secure the confidential information of the customers of the users of our software and services;

our ability to enhance the features and functionality of our software and services, including the development and successful deployment of our next generation Encompass platform;

the timing of the introduction and acceptance of new software and services;

changes in government regulation affecting mortgage lenders and Ellie Mae Network participants or our business, and potential structural changes in the U.S. residential mortgage industry;

customer retention, renewal and upgrade

• rates;

the increased time, cost and complexity that may be required to successfully target larger customers;

our ability to scale our operations and increase productivity to support our existing and growing customer base; our ability to successfully manage our growth and any future acquisitions of businesses, solutions or technologies; the risk that the anticipated benefits and growth prospects expected from our recent acquisitions may not be fully realized or may take longer to realize than expected;

the timing of future acquisitions of businesses, solutions or technologies and new product launches;

the impact of uncertain domestic and worldwide economic conditions, including the resulting effect on residential mortgage volumes;

the attraction and retention of qualified employees and key personnel;

our ability to compete effectively in a highly competitive market and adapt to technological changes;

our ability to protect our intellectual property, including our proprietary Encompass software;

costs associated with defending intellectual property infringement and other claims; our ability to maintain effective

internal controls;

the risk of natural and man-made catastrophic interruptions to our business; and

the risks set forth in the section captioned "Risk Factors" in this report.

We do not assume any obligation to update any forward-looking statements, except as required by law.

In this report, references to "Ellie Mae," "the Company," "we," "our" or "us" refer to Ellie Mae, Inc. together with its subsidiaries, unless the context requires otherwise.

#### PART I

**ITEM 1. BUSINESS** 

Our Company

We are a leading provider of innovative on-demand software solutions and services for the residential mortgage industry in the United States. Banks, credit unions, mortgage lenders and mortgage brokers use our Encompass® all-in-one mortgage management solution to originate and fund mortgages and improve compliance, loan quality, and efficiency. At December 31, 2016, approximately 165,000 mortgage professionals used Encompass for their mortgage management solution.

Our Encompass software is a comprehensive, end-to-end enterprise solution that handles most of the functions involved in running the business of originating mortgages including: customer relationship management; loan processing; underwriting; preparation of mortgage applications, disclosure agreements, and closing documents; funding and closing the loan for the borrower; compliance with regulatory and investor requirements and overall enterprise management that provides one system of record for loans. Delivery of our Encompass software in an on-demand Software-as-a-Service, or SaaS, environment provides customers with the added benefits of lower up front implementation costs and reduced need for an infrastructure of servers, storage and network devices as well as the staff needed to support the infrastructure. SaaS delivery of Encompass enables access to the most current version of our software, including periodic upgrades and regulatory updates. We also host the Ellie Mae Network, a proprietary electronic platform that allows Encompass users to conduct electronic business transactions with mortgage investors (also referred to as "investors") and service providers they work with in order to process and fund loans. For mortgage originators, Encompass is a comprehensive mortgage management system that handles key business and management functions involved in running a residential mortgage origination business. Mortgage originators use Encompass as a single tool for loan processing, marketing, and customer communication and to interact electronically with lenders, investors, and service providers over the Ellie Mae Network. For the lenders, investors and service providers on the Ellie Mae Network, we provide electronic connectivity that allows them to do business with mortgage origination professionals using Encompass. We also offer Encompass users a variety of other on-demand software services delivered within Encompass which are discussed below in our Product and Services overview. Mortgage originators pay for Encompass in one of two models: recurring monthly subscription fees or monthly subscription fees based on the number of licensed users combined with transaction fees based mortgages funded, which we refer to as Success Based Pricing. Our additional services are paid on either a subscription or transaction basis. Lenders, investors and service providers participating in the Ellie Mae Network also pay us fees, generally on a per transaction basis, for transactions processed through the Ellie Mae Network from Encompass users. Under the AllRegs brand, our research and reference products include single and multifamily underwriting & insuring guidelines as well as libraries of federal and state laws and regulations, and we are the exclusive electronic publisher of certain mortgage lending guidelines for Fannie Mae and Freddie Mac and The Federal Home Loan Bank. Our educational division, AllRegs Academy, offers courses related to the mortgage industry, including self-paced training, instructor-led online courses, webinars or live classroom training and certified continuing education classes for state licensed mortgage originators. In addition, through the AllRegs brand, we offer documentation and learning management solutions to facilitate our customers' mortgage lending compliance, as well as data and analytics services relating to investor loan products.

## Corporate Information

Founded in 1997 as a California corporation, we were reincorporated as a Delaware corporation in November 2009. We completed our initial public offering of our common stock in April 2011, and our common stock is listed on the New York Stock Exchange under the symbol "ELLI". Our mailing address and executive offices are located at 4420 Rosewood Drive, Suite 500, Pleasanton, California 94588 and our telephone number at that address is

(925) 227-7000. Our website address is www. elliemae.com. Information found on or accessible through our website is not part of and is not incorporated into this report.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, or Exchange Act, and, in accordance therewith, file periodic reports, proxy statements, and other information with the Securities and Exchange Commission, or SEC. Such periodic reports, proxy statements, and other information are available for inspection and copying at the SEC's Public Reference Room at 100 F Street, NE., Washington, DC 20549 or may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website at http://www.sec.gov that contains reports, proxy statements, and other information regarding issuers that file electronically with the SEC. We also post on the Investor Relations page of our website, www.elliemae.com, a link to our filings with the SEC, our Corporate Governance Guidelines, and Code of Business Conduct and Ethics, which applies to all directors and all our employees, and the charters of our Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee of our board of directors. Our filings with the SEC are posted on our website and are available free of charge as soon as reasonably practical after they are filed electronically with the SEC. You can also obtain copies of these documents free of charge by writing to us at: Corporate Secretary, Ellie Mae, Inc., 4420 Rosewood Drive, Suite 500, Pleasanton, CA 94588, or emailing us at: ir@elliemae.com. The "Ellie Mae," "Encompass," "AllRegs", and other trademarks or service marks of Ellie Mae appearing in this report are the property of Ellie Mae.

#### Mortgage Industry Overview

#### Overview of Mortgage Origination Market

Mortgage originators typically advise borrowers, process loan files, collect, and verify the property and borrower data upon which lending decisions are based and, in the majority of cases, fund and close mortgage loans. According to data available pursuant to the Home Mortgage Disclosure Act (HMDA), there were more than 6,000<sup>1</sup> mortgage lenders in 2016 in the United States, including national banks, regional banks, non-bank lenders and credit unions. Based on estimates provided by the Mortgage Bankers Association, there were \$1.9 trillion, \$1.7 trillion, \$1.3 trillion, \$1.8 trillion, and \$2.0 trillion<sup>2</sup> in loans originated for 1- to 4-family homes during the years ended December 31, 2016, 2015, 2014, 2013, and 2012, respectively.

#### The Mortgage Origination Process

Originating a residential mortgage involves multiple parties and requires a complex series of data-laden transactions that must be handled accurately under tight time constraints. By the time a mortgage has been funded, the typical loan package contains over one thousand pages of documents that come from over a dozen different entities, usually operating on disparate technology systems and databases. Traditionally, much of the data used to prepare these documents has been gathered manually, rather than electronically, with documents exchanged among the many participants by facsimile, courier or mail. The entire process results in significant duplicative efforts, time delays, errors, costs, and redundant paper documentation, and often exposes borrower data to potential privacy and security breaches.

<sup>&</sup>lt;sup>1</sup>Federal Financial Institutions Examination Council, Federal Financial Institutions Examination Council Announces <sup>1</sup>Availability of 2015 Data on Mortgage Lending, September 29, 2016.

<sup>2</sup>Mortgage Bankers Association, MBA Quarterly Origination Estimates as of November 17, 2016. Copyright 2016.

The following diagram of the mortgage origination process provides a framework for understanding the complexity and inefficiency of the process and the need for automated solutions.

In addition to the challenges involved in processing loans, mortgage originators must satisfy a multitude of federal, state and local regulations, and address basic business needs, including marketing, sales, product fulfillment, customer support, reporting, and general management functions. Historically, most mortgage originators have operated their businesses using separate task-specific software applications that were interconnected, if at all, through customized integrations. This often resulted in constraints on effective collaboration among operating departments, limited ability to monitor the business comprehensively, increased risk of error due to inconsistent data, failure to incorporate current regulations into work flows, inadequate security and control over the process, and expensive technical integration and maintenance costs.

Recent Mortgage Industry Trends and Developments

The residential mortgage industry continues to evolve and undergo significant changes. There are five major trends that are currently impacting the residential mortgage industry.

Greater Focus on Operational Efficiencies

The average total production cost per loan was \$6,969 in the third quarter of 2016.<sup>3</sup> We expect operational costs to continue to be a significant consideration for mortgage originators due to the continuously changing regulatory environment and heightened quality standards. As a result, mortgage originators have sought to increase their efficiency and reduce fixed expenses, leading them to explore technology solutions to automate their business processes as well as methods to avoid or reduce expenses that are not tied to revenue generating activities. Customers Adopting Multi-Channel Strategies

Customers are developing multi-channel strategies beyond a single retail, correspondent or wholesale mortgage lending channel in order to grow their businesses. The requirements of these different channels vary and in order to maintain a single operating system, customers must use a robust system with customizable functionality.

<sup>&</sup>lt;sup>3</sup>Mortgage Bankers Association, Independent Mortgage Bank Volumes Up, Production Profits Stable in 3rd Quarter 2016, December 7, 2016.

#### Changes in Regulation Affecting Lenders and Investors

Mortgage lending regulations continue to change and many regulatory reforms have been introduced or proposed in recent years to promote increased underwriting standards and accountability by lenders and mortgage originators, ensure meaningful disclosures by lenders to borrowers, increase the transparency and objectivity of settlement services, and protect consumers in the mortgage market from unfair or abuse lending practices. Many of the significant changes in regulations were issued in 2014 and 2015 including legal changes resulting from the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and associated regulations issued by the Consumer Financial Protection Bureau, or CFPB. These regulatory changes have complicated the mortgage origination process and increased the amount of documentation required to originate and fund residential mortgages. We have made and expect to continue to make significant investments in our products and services to address changing regulations

Increased Quality Standards Imposed by Regulators, Lenders and Investors

Lenders have eliminated many high-risk loan product offerings and significantly tightened underwriting and processing requirements. Similarly, investors seek higher-quality, lower-risk loans in which to invest. Consistent with these tightened standards and expectations, lenders and investors are demanding increased levels of documentation of the data upon which a lending decision will be based, increased use of third-party services to obtain unbiased and independent verification of borrowers' creditworthiness, greater proof of the adequacy of the collateral securing mortgages and strict compliance with regulatory requirements. This trend further increases the amount of documentation and number of services required to originate and fund residential mortgages. Increased enforcement by federal and state regulators continues to encourage mortgage originators to explore technology solutions that provide adequate controls and policy enforcement to facilitate originating compliant loans.

Greater focus by customers and regulators on data security and consumer privacy

Recent high-profile data security incidents affecting banking institutions and their third party service providers have resulted in an increased focus on data security by our customers and our customers' regulators. We expect the industry focus on data security to continue to increase as companies generate greater amounts of data and as future data security incidents occur.

#### Our Strategy

Our mission is to be the industry standard platform for residential mortgage origination in the United States. Key elements of our strategy include:

Increase the number of Encompass users. We continue to focus our marketing, sales and product development efforts to increase the number of mortgage lenders, commercial banks, thrifts, and credit unions using Encompass and our additional services. Mortgage lenders typically require software with comprehensive functionality to meet their various needs and generally order most of the settlement and other services available on the Ellie Mae Network in the process of funding loans. We continue to grow our sales department as we expect many non-Encompass mortgage lenders to assess new platform options and replace their legacy systems in response to the increased quality standards and compliance mandates affecting the industry. We intend to continue to focus our efforts on all segments, including the largest, or enterprise segment, of the lending industry.

Expand our product and service offerings to Encompass users. By utilizing our comprehensive suite of bundled products and services, customers avoid the risk and effort of cobbling together two or more solutions from our competing vendors. To the extent users do not subscribe to our bundled offering, we intend to encourage use of more of the Encompass services we currently offer, such as document preparation, electronic document management ("EDM"), compliance services, product and pricing services, fraud services, income tax verification services, flood services, appraisal services, website hosting and customer relationship management. As our customers opt for supplemental on-demand software and services, we generate additional revenues. These are services the lender uses to originate loans and by encouraging our customers to use these through the Encompass platform we can help offer the lender greater efficiency and cost savings and continue to drive additional revenue per user. We also intend to develop additional products and services to sell to our Encompass users.

Invest in new product & platform development. We are investing in the development of the next generation Encompass platform, known as Encompass NG, as well as the recently announced Encompass Connect solutions, each of which is built on the new Encompass Lending Platform and utilize Application Program Interfaces ("APIs") to

offer unique capabilities that help improve visibility and collaboration between loan officers, third-party originators, developers and homebuyers.

Expand the use of the Ellie Mae Network. The Ellie Mae Network provides mortgage originators electronic access to many of the investors and most of the service providers, that they need to interact with in order to process and fund loans. These transactions include electronic ordering of credit reports, appraisal services, title and flood reports and accessing the automatic underwriting systems of Fannie Mae and Freddie Mac. We will continue to encourage providers of settlement services to deliver these services electronically through the Ellie Mae Network, and we will continue to encourage adoption of these services by our

customers. By integrating and expanding our current and new services, we aim to provide our customers a more comprehensive solution.

Sell enhanced Ellie Mae Network offerings to investors, lenders, and service providers. We intend to continue to add functionality and services to the Ellie Mae Network so investors, lenders, and service providers can more effectively do business with mortgage originators using Encompass. Investors and lenders can populate mortgage originators' Encompass software with specific compliance, underwriting, and documentation requirements for loans prior to delivery in order to screen loans for quality and regulatory compliance.

Investment in our Business. We are investing aggressively in initiatives that we believe will help us continue to grow our business, improve our products and services, and strengthen our competitive advantage while bringing sustainable, long-term value to our customers. During 2016, we increased our investments in our sales and client services capabilities, research and development, data security, and technology infrastructure to support our user additions and overall business growth. These investments include expanding our talent across the organization by hiring additional personnel. In order to continue supporting our customers and to further differentiate ourselves, we currently anticipate that throughout 2017 we will continue to invest in key areas such as research and development, enterprise sales, services, technical support, data security, and data center infrastructure. This investment will include the development of current infrastructure to accommodate new users and our next generation Encompass platform, which we expect to incrementally introduce during 2017 and 2018.

Acquisitions. Our industry is highly fragmented, and we believe there are strategic opportunities available to acquire technology-based companies that will complement and increase the attractiveness of our solutions. For example, in October 2015, we acquired substantially all of the assets of Mortgage Returns, LLC, or Mortgage Returns, a provider of on-demand customer relationship management and marketing automation solutions for mortgage lenders. With the acquisition of Mortgage Returns, we are responding to the needs of our customers by adding a robust CRM solution for lenders of all sizes. We expect to continue to evaluate and explore strategic opportunities that will enhance the breadth and depth of our solutions, and furthers our mission of automating the entire end-to-end mortgage process for our customers.

Products and Services

Encompass

Encompass is our proprietary, comprehensive mortgage management software solution built on the Encompass Lending Platform that combines loan origination and enterprise management software for mortgage originators into an all-in-one system, and also provides seamless access to the investors, lenders, and service providers on the Ellie Mae Network. The Encompass Lending Platform gives customers, partners and independent software vendors a secure, scalable platform plus a suite of APIs to enable them to extend Encompass with new functionality, easily integrate Encompass with external systems and data, and build custom applications that integrate with Encompass in the cloud. Encompass helps users structure and streamline their mortgage origination process and facilitates collaboration among internal departments of a mortgage origination company. It supports efficiency in gathering, reviewing, and verifying mortgage related data and in producing accurate documentation. It also enables enforcement of rules and business practices designed to ensure loan quality, adherence to processing standards, and regulatory compliance. Encompass provides the following features and benefits:

Line ompass provides and	
Feature	Benefits
Customer Acquisition	Sales and marketing tools to help acquire and grow new business and pre-qualify
and Relationship	prospective borrowers, while also allowing users to manage contacts, leads, and marketing
Management	campaigns.
	Integration to custom branded websites to help attract new borrowers and create new loans
	through an online application that flows directly into the Encompass loan pipeline.
	Integration to a self-service portal where borrowers can research and apply for a loan
	online. Automatic lead follow-up and customer retention through campaign management
	capabilities that allow design and execution of multi-step marketing campaigns.
	Pre-qualification tools to start loan applications, access integrated pricing engines and easily find appropriate loan products and prices for a borrower.

Automatic status updates posted to a branded website to keep customers and their real estate and other designated agents informed throughout the loan process. Tools used to track the effectiveness of marketing and relationship building activities.

Feature Processing	<ul> <li>Benefits</li> <li>Configurable pipeline, forms and workflow enable faster loan processing, reduced errors and more efficient business operations.</li> <li>Support for multiple business channels using configurable workflows.</li> <li>"Alert" management allows focus on urgent and relevant issues.</li> <li>Collaboration tools keep stakeholders informed and reduce the need to manually notify other employees, partners and borrowers.</li> <li>Seamless access to electronic document management simplifies document handling and increases data security.</li> </ul>
Risk Management and Business Reporting	<ul> <li>Centralization of all business data and electronic images.</li> <li>Built-in rules and safeguards to set and enforce business practices.</li> <li>Management dashboards highlighting key performance indicators. Predefined reports provide out-of-the-box intelligence and can be modified with a custom report writer.</li> </ul>
Connectivity, Personalization and Integration	<ul> <li>Seamless and secure connections to thousands of service providers and investors on the Ellie Mae Network.</li> <li>Workflow management to define customer-specific business processes.</li> <li>User-defined experience through a personalized homepage. Integration with third-party applications through a software development kit to leverage existing technology investments.</li> </ul>
Underwriting	Ability to collaborate with all origination team members and respond effectively to underwriting requests and track underwriting conditions. Ability to communicate loan conditions, request and receive mortgage documents and track conditions and documents in a single system. Access to electronic copies of borrower documents within the loan file and compare them with actual loan data to reduce risk of data inconsistencies.
Secondary Marketing and Trade Management	<ul> <li>Ability to manage lock requests and accurately track buy-side and sell-side pricing.</li> <li>Ability to allocate loans that qualify for trades, track progress and capture key trade details.</li> <li>Ability to receive deadline-notification alerts to help avoid late-delivery fees.</li> </ul>
Closing and Funding	Ability to enter closing data, perform audits and order closing documents all within a single loan file. Automatic population of closing data on funding worksheets, helping to reduce errors and enable faster funding.
Post-Closing, Shipping and Delivery	<ul><li>Comprehensive tracking, fulfillment and shipping of loan package.</li><li>Tools to manage interim servicing before selling loans to investors.</li></ul>
Advanced Configuration and Business Rule Management	Enterprise-level functionality for higher level security, more granular control of processes and flexible customization of the software. Comprehensive control over workflow, business rules, processes and user groups.

Mortgage originators using Encompass pay monthly per-user subscription fees or fees based on their monthly loan volume, either separately or as a bundled package, subject to monthly base fees. This Success Based Pricing model also includes our Encompass Docs Solution and Encompass Compliance Service. Historically, we offered an on-premise version of Encompass. As

of June 30, 2016, we completed the migration of customers to our on-demand Encompass offering, and we do not expect on-premise revenues in the future.

**Encompass Solutions and Services** 

Additional solutions offered within our on-demand platform include the following:

Encompass Lending Platform and Encompass Developer Connect

The Encompass Lending Platform and Encompass Developer Connect gives customers, partners and independent software vendors a secure suite of APIs and developer resources to enable them to extend Encompass with new functionality, easily integrate Encompass with external systems and data, and build custom applications that integrate with Encompass in the cloud.

Sales and Marketing Solutions

Encompass CRM: Encompass CRM, includes a suite of sales and marketing tools that allows users to manage contacts, leads and marketing campaigns. It provides one-to-one marketing campaign capabilities for lender's customers, prospects and referral partners, and robust business intelligence reporting and compliance controls for marketing and sales efforts.

Encompass WebCenter: Encompass WebCenter, which is being replaced by Encompass Consumer Connect, provides the ability to create and customize professional websites for lenders, allowing prospective borrowers to initiate loan applications online.

Encompass Consumer Connect: Beginning in 2017, Encompass WebCenter customers will be upgrading to Encompass Consumer Connect. Built on the Encompass Lending Platform, Encompass Consumer Connect enables lenders to deliver a branded and unique self-service online loan origination experience for borrowers. Consumers will have the power to easily walk through and complete a simple, guided mortgage application online, stay informed at every step of the loan process, conduct research and access rates and information 24/7, securely send and receive documents and accelerate the application process by running credit reports and online asset verifications. Encompass TPO WebCenter: Encompass TPO WebCenter, which is being replaced by Encompass TPO Connect, is a web-based extension of Encompass that enables loan level interaction between a TPO, and a lender. Encompass TPO Connect: Beginning in 2017, Encompass TPO WebCenter customers will be upgrading to Encompass TPO Connect. Built on the Encompass Lending Platform, Encompass TPO Connect provides a customizable and interactive web experience for wholesale and correspondent lending channels. It gives lenders and investors a modern and collaborative web experience for their third-party origination, or TPO, partners that promotes compliance, data integrity, and easy bi-directional communication throughout the entire loan process. Encompass Loan Officer Connect: Built on the Encompass Lending Platform, Encompass Loan Officer Connect is a mobile extension of Encompass designed to make loan officers more effective and efficient when serving their borrowers.

Loan Quality and Compliance Solutions

Ellie Mae Total Quality Loan Program: The Ellie Mae Total Quality Loan Program, or TQL, is a centralized platform of services within Encompass that facilitates improved consistency, efficiency, and loan quality. TQL enables the ordering of multiple necessary services, such as compliance, income verification, fraud checks, collateral risk, and flood certification, from one tool. Through the creation of reports and dashboards, TQL also enables lenders to monitor and optimize efficiency and loan quality, thus optimizing profitability. If selling mortgages to investors, TQL also aligns the ordered services with those required by the specific investor to help expedite the sales process for both lender and investor.

Encompass Compliance Service: Encompass Compliance Service analyzes mortgage loan data for compliance with a comprehensive set of federal and state laws and regulations as well as institutionally mandated compliance policies. Encompass Compliance Service is integrated with Encompass but can be used with other loan origination software as well.

Encompass 4506-T Service: Encompass 4506-T Service, which we license from a third party, is an integrated income verification solution that allows users to electronically order tax return data from the Internal Revenue Service, quickly receive reports back, and compare and validate the income stated on the loan application with the borrower's actual tax returns.

Encompass Flood Service: Encompass Flood Service, which we license from a third party, allows Encompass users to order and transfer basic and life-of-loan flood zone determination electronically. Documentation and data are stored automatically for review and investor delivery.

Encompass Fraud Service: Encompass Fraud Service, which we license from a third party, allows Encompass users to order collateral and non-collateral based fraud risk reports from within Encompass. Documentation received back is automatically stored for review with alerts that highlight specific areas of concern as well as recommended next steps for investigating and curing.

Efficient Processing and Closing Solutions

Encompass Electronic Document Management: Encompass EDM gives Encompass users the ability to go paperless and receive, store and manage documents, as well as deliver any documents electronically and securely to borrowers, real estate agents, lenders, and settlement service providers.

Encompass Docs Solution: Encompass Docs Solution is an integrated, comprehensive initial disclosure, and closing document preparation solution that electronically generates the dozens of documents a borrower must receive and sign prior to the funding of a loan. Because mortgage originators using Encompass Docs Solution do not have to move loan data from their loan origination system to a separate closing system, the Encompass Docs Solution increases the accuracy and efficiency of the document preparation to closing process.

Encompass Appraisal Center: Encompass Appraisal Center enables Encompass users to seamlessly order, track, and retrieve appraisal reports from within Encompass. Users can manage their own panel of independent appraisers or work with one of our integrated appraisal management companies.

Encompass Title & Closing Center: Encompass Title & Closing Center<sup>TM</sup> streamlines the closing process by enabling lenders to order title through workflow in Encompass and seamlessly connect with settlement agents through a secure browser-based portal.

Integrated Pricing and Secondary Marketing

Encompass Product and Pricing Service: Encompass Product and Pricing Service allows Encompass users to automatically compare qualified loan products with current pricing and easily pinpoint the best program for a borrower. Seamless two-way workflow sends information directly from the loan file to the product and pricing engine and adjustment information directly back into Encompass.

Secondary Marketing: Encompass Secondary Marketing provides lock request management, post-closing condition tracking and tools for fulfillment and trades, such as purchase advice reconciliation, interim servicing and trade management. Trade Management allows lenders to track both Mortgage Backed Securities trades with broker/dealers as well as trades with aggregators.

The Ellie Mae Network

A key component of the Encompass platform is the Ellie Mae Network, which enables mortgage originators to choose from, and connect to, a broad array of investors and third-party service providers essential to the processing and funding of loans. Key functions of the Ellie Mae Network include the following:

Mortgage originators can electronically and securely submit loan files to the investors to whom they intend to sell them, in order to have the loans underwritten and priced and to have loan rates locked.

Mortgage originators can electronically order settlement services, including credit, title, appraisal, flood, compliance, mortgage insurance, fraud detection, and other reports.

Investors and settlement service providers can gain instant electronic access to a large number of mortgage originators, potentially increasing their revenue opportunities and lowering their marketing, loan processing, and customer support costs.

Investors and service providers can access electronic and real-time marketing and quality enforcement services that facilitate business interactions with mortgage originators.

Investors and service providers enter into contracts with us that allow their proprietary operating systems to inter-operate with the Ellie Mae Network. Investors and service providers generally pay us fees on a per transaction basis when the mortgage originator orders these services through the Ellie Mae Network. The table below describes some of the services that mortgage originators may order during the mortgage origination process.

Credit Report	A report verifying a loan applicant's credit standing to statistically predict the likelihood of the applicant repaying future debts.	
Product Eligibility and Pricing Engine	A service that allows a mortgage originator to compare loans offered by different lenders and investors to determine the best product and price available to a particular borrower.	
Automated Underwriting	A service provided by Fannie Mae and Freddie Mac that analyzes and determines whether a loan meets their acquisition requirements.	
Data Transmission to and from Lenders and Investors	Mortgage originators transmit data for loan underwriting, pricing, and registration prior to delivery of the loan package to the lender.	
Appraisal Report	An estimate of the value of the property securing the mortgage conducted by a licensed appraiser and used by the lender to determine whether the loan is adequately collateralized.	
Title Report; Insurance	A report ordered on the property to examine public records to ensure that no one except the seller or borrower has a valid claim on the property and to disclose past and current facts regarding ownership of and liens on the property; title insurance protects the insured against any loss caused by defect of title to the property.	
Flood Certification	A report that determines whether the property is located in a flood hazard area based on federal flood regulations and whether the lender or investor will require flood insurance on the property.	
Compliance Review	A service that reviews a loan file to confirm whether a loan complies with federal, state, and local regulations.	
Fraud Detection	A service that searches through a number of data fields on a loan application, identifies inaccurate or inconsistent data or suspicious circumstances, and delivers a fraud filter score report.	
Document Preparation	A service that automates the process of preparing the legal documents required for closing a loan.	
Mortgage Insurance	Insurance that protects mortgage lenders against loss in the event of default by the borrower, which can allow lenders to originate loans with lower down payments.	
Income, Identity and Employment Verifications AllRegs	Services that automate the verification of each of a borrower's income, identity, and employment through a variety of sources, including the Internal Revenue Service, Social Security Administration, and other third parties.	
Compliance Management System: Our Compliance Management System leverages components from the AllRegs		

product line to serve as a comprehensive compliance management system for lenders. This includes the AllRegs Policy and Education Manager and AllRegs Online.

The AllRegs Policy and Education Manager includes:

AllRegs Education: Through AllRegs Education, we offer courses related to the mortgage industry. Customers can choose from a variety of delivery options, including self-paced training, instructor-led online courses, webinars, or live classroom training. Our courses allow our customers to meet continuing education requirements for state-licensed mortgage loan originators, as well as certification programs for mortgage industry professionals.

AllRegs Policy and Procedure Manuals: We help organizations of all sizes author, publish, and maintain policy manuals, procedure templates, and lending handbooks.

AllRegs Online: We offer access to a comprehensive online database consisting of thousands of government and conventional lending guidelines and forms, as well as federal and state laws and regulations. We also provide access to federal disclosures and forms and state compliance resources including pending legislation and email updates, and we are the exclusive electronic publisher of certain mortgage lending guidelines for Fannie Mae and Freddie Mac and the Federal Home Loan Bank.

AllRegs Professional Services: We offer documentation services that allow our customers to manage internal mortgage lending compliance. We also offer management of our customers' document and guideline publishing with private label branding. Additionally, we provide custom training solutions as well as a robust learning and content management tool.

Data & Analytics: We track and make available information regarding investor loan products from many different mortgage investors. Our product AllRegs Market Clarity® service enables mortgage originators to search across these numerous loan products, allowing them to select appropriate loan programs for their borrowers. Sales and Marketing

Our sales force consists of four distinct teams who are deployed across the country in Sales Development, New Account Acquisition, Solution Engineering, and Account Management. These teams manage and grow our customer accounts and focus on continuing to expand our customer base. They also encourage adoption of the Ellie Mae Network and our professional services, manage new product introductions, and cross sell solutions added to our portfolio as a result of acquisitions.

To build brand awareness and generate sales leads, we conduct digital marketing campaigns, webinars, public relations campaigns, and advertising. We attend and sponsor many mortgage and banking industry conferences and promote Ellie Mae's annual user conference.

Professional Services, Technical Support, and Education

**Professional Services** 

Our professional services organization promotes best practice implementations and ongoing software upkeep to support our customers' preferred workflows and integrate with other critical systems while improving productivity and supporting compliance. Our professional services implementation team is typically comprised of implementation consultants, project managers, business analysts, product specialists, and custom development resources. Our implementation team assists customers with configuration of our products for successful transition and adoption. Once implemented, our advisory team offers assistance with ongoing performance tuning and continual best practice configuration adjustments.

Technical Support & Services

Our technical support and services organization applies expertise in compliance, business workflows, and product knowledge to enable our customers to achieve better levels of productivity and more effective use of Ellie Mae technologies which result in maximization of return on investment. This is achieved through direct interactions with a dedicated support team and experienced support engineers utilizing systems, processes, and knowledge developed to facilitate customer success.

**Education Services** 

Our education organization develops and delivers training curriculum which facilitates the foundation of knowledge across our user base. Education is delivered live in classroom settings at our facilities, and on-location, as well as virtually through online on-demand formats. Our curriculum includes foundational training in the use and workflows of our various products and services, as well as advanced certification programs oriented toward the advanced customer who wishes to gain the most out of their solution.

Technology

Our technology infrastructure supports all of our SaaS products and services.

Data Centers and Network Access

Our primary data centers are hosted by a leading SOC 1/SSAE-16 Type II certified provider of hosting services in Santa Clara, California and Chicago, Illinois. Applications we provide will run actively in either of these two sites at any time. In 2016, we started moving towards a hybrid cloud architecture that leverages our own data centers as well as an infrastructure as a service platform, commonly referred to as a "public cloud." Moving towards a hybrid cloud architecture provides us with the scalability to expand our platform and application services, as well as increase availability and cost efficiencies to deliver on our product roadmap and service quality.

The hybrid cloud architecture hosts Encompass, the Ellie Mae Network and the other Encompass solutions and services. In the event of a complete site failure, such as may occur during a regional natural disaster, all of the services in a site can be recovered to the other data center or public cloud platform as part of our disaster recovery plan.

In 2015, we acquired substantially all of the assets of Mortgage Returns, which operates a data center hosted by a leading SOC 1 certified provider in St. Louis, Missouri. Currently, our Encompass CRM application runs out of this site. During 2015 and 2016, a substantial investment was made to upgrade the data center infrastructure utilized by Mortgage Returns. This effort significantly increased overall capacity and performance to meet growing demand for Mortgage Returns' services. In 2017, we plan to continue to invest in the data center infrastructure supporting our Encompass CRM application and also expand this into a hybrid cloud infrastructure. Network Security

All sensitive data transmitted over public networks is encrypted using industry standard encryption protocols in order to protect sensitive data against third-party disclosure in transit. Servers and network components are secured with access control mechanisms and protected by hardened firewalls, virus protection, and intrusion prevention/detection systems. Security services and tools are monitored and updated in order to address emerging vulnerabilities. Even with our current security monitoring and detection systems, we cannot guarantee that our security measures will prevent security breaches. We are committing significant resources to protect against and remedy any potential security breaches and their consequences and intend to keep doing so in the future. New threats and vulnerabilities are identified frequently and there are often time lags before our vendors deploy mitigations. In 2016, we made substantial investment in our network security infrastructure, including headcount and third party tools and systems. In 2017 and beyond, we will continue to make substantial investments in our network security infrastructure to protect the confidentiality and integrity of our customer data.

Research and Development

We devote substantial resources to enhance the features and functionality of our offerings as well as developing new products and services. We are developing the next generation Encompass platform, known as Encompass NG, as well as the recently announced Encompass Connect solutions that leverage our new APIs and platform capabilities. These new products include our Encompass Consumer Connect solution to better equip our customers to deploy customized borrower-facing websites, Encompass TPO Connect which helps our customers better manage third-party originations with their partners, Encompass Loan Officer Connect which exposes a rich set of loan officer-facing functionality on mobile devices and Encompass Developer Connect which provides developers with APIs, tools and developer portal. Intellectual Property

Our success depends in large part on our proprietary products and technology for which we seek protection from a combination of patent, copyright, trademark, and trade secret laws and other agreements with employees and third parties. We require our officers, employees, and consultants to enter into standard agreements containing provisions requiring the confidentiality of proprietary information and assignment to us of all inventions made during the course of their employment or consulting relationship. We also enter into nondisclosure agreements with our commercial counterparties and limit access to, and distribution of, our confidential information.

We are committed to developing and protecting our intellectual property and, where appropriate, file patent applications to protect our technology. Our existing patents expire between 2020 and 2035. Our present and future patents may provide only limited protection for our technology and may not be sufficient to provide competitive advantages to us. Third parties may infringe or misappropriate our proprietary rights. Competitors may also independently develop technologies that are substantially equivalent or superior to the technology we offer in our products and services.

We hold a number of registered and unregistered trademarks, service names and domain names that are used in our business in the United States.

#### Competition

The mortgage origination software market is highly competitive. There are many software providers catering to mortgage brokerages and mortgage lenders. Our current principal software competitors include: Byte Software Inc., a subsidiary of CBCInnovis; Calyx Technology, Inc.; DH Corporation; LendingQB, Mortgage Builder Software, Inc., a subsidiary of Altisource Portfolio Solutions SA; Mortgage Cadence, which is owned by Accenture PLC; Wipro Gallagher Solutions, which is owned by Wipro, Ltd. and LoanSphere Empower and LoanSphere LendingSpace, which are owned by Black Knight Financial Services, Inc., also provide connectivity between their software users and lenders and service providers.

Competition with Software Providers

We compete against software providers based on our ability to provide:

a comprehensive, integrated software solution that provides all business-critical functions including customer acquisition, loan processing, task management, communication with borrowers and other mortgage origination participants, reporting, regulatory compliance, and general enterprise management;

solutions that create efficiencies in gathering, reviewing, and verifying mortgage-related data and producing accurate documentation;

on-demand solutions that reduce the need for IT infrastructure and overhead while providing the ability to update capabilities and adopt new regulations in a timely manner;

customizable business rules to automate processes, promote accountability, and enforce business practices that help assure loan quality and regulatory compliance;

• a database architecture designed to reduce data errors and facilitate collaboration among departments within a mortgage origination company and comprehensive monitoring of the business of the entire enterprise;

attractive pricing options, such as our Success Based Pricing model, allowing customers to time payments to cash flow;

an integrated network to submit loan files electronically and securely to lenders and electronically order all of the services necessary to originate a loan;

a solution that is secure and maintains the confidentiality of our customers' data; and

a solution that is reliable with minimal planned and unplanned downtime.

Competition with Service Providers

With the exception of our Encompass Compliance Service, Encompass CRM, and AllRegs, we only offer our other Encompass software services to Encompass users. There are many other service providers that also offer our Encompass users competing software services, including:

Borrower-facing Websites. We compete against providers of borrower-facing websites for mortgage originators, including: D+H Corporation; Blue Igloo, Inc. (dba Roostify), and new entrants to our space.

Document Preparation Services. We compete against document preparation service providers, including: DigitalDocs, Inc.; DocMagic Inc.; LenderLive Network, Inc.; MRG Document Technologies; Mortgage Banking Systems, Inc. (dba ProClose), owned by LogicEase Solutions Inc.; and Wolters Kluwer Financial Services, Inc.

Compliance Services. We compete against compliance software service providers, including: Interthinx, Inc., a subsidiary of First American Financial Corporation; ComplianceEase, owned by LogicEase Solutions Inc.; and Wolters Kluwer Financial Services, Inc.

Product and Pricing Services. We compete against product and pricing service providers, including: Insight Lending Solutions, Inc.; Mortech, Inc., a Zillow business; LoanLogics formerly NYLX, Inc.; and Optimal Blue, LLC. Electronic Document Management. We compete against electronic document management providers, including: Encomia LP; SigniaDocs, Inc.; VirPack Corporation; and Xerox Mortgage Services, Inc.

We compete against these providers not only based on the quality of the service we offer, but also on the integration of each specific service provided within Encompass's overall workflow. We believe that the integration of the services with Encompass enhances mortgage originators' control over the mortgage origination process and reduces errors and costs through the seamless exchange of data across applications and services.

Competition Regarding the Ellie Mae Network

The Ellie Mae Network is only available to mortgage originators using Encompass. The principal competition to the use of the Ellie Mae Network remains traditional methods of exchanging data and documents among mortgage industry participants by email, facsimile, phone, courier, and mail. In addition, mortgage originators may use a standalone web browser to go individually to each investor, lender, or service provider's website and then manually upload loan data or enter information into the website. Mortgage originators may continue to use these methods due to habit, personal business relationships or for other reasons, despite the disadvantages of duplicative efforts, time delays, errors and costs, redundant paper documentation, and potential privacy and security breaches.

Lenders and service providers, including those who participate on the Ellie Mae Network, can and do connect with mortgage originators that are not Encompass users in a variety of ways, including through other networks between mortgage originators and lenders and service providers such as Black Knight Financial Services, Inc.

We compete with respect to the Ellie Mae Network based on offering mortgage originators accessibility to a critical mass of investors, lenders, and service providers, and enabling mortgage originators to transact all aspects of the mortgage origination process over the network. In addition, we compete with respect to the Ellie Mae Network by providing investors, lenders, and service providers with superior technological connectivity with mortgage originators, which enables them to lower costs, reduce errors and increase speed.

We believe we generally compete favorably with our competitors; however, some of our actual and potential competitors enjoy substantial competitive advantages over us, such as longer operating histories and significantly greater financial, technical, marketing, and other resources.

**Government Regulation** 

The U.S. mortgage industry is heavily regulated. Mortgage originators, lenders, investors, and service providers with which we do business are subject to federal, state, and local laws that regulate and restrict the manner in which they operate in the residential mortgage industry, including Regulation X of RESPA, Regulation Z of TILA, the Mortgage Disclosure Improvement Act, and the Secure and Fair Enforcement for Mortgage Licensing Act of 2008, as amended. In addition, the Dodd-Frank Act increased regulation of the mortgage industry, including: generally prohibiting lenders from making residential mortgage loans unless a good faith determination is made of a borrower's creditworthiness based on verified and documented information; requiring the CFPB to enact regulations to help assure that consumers are provided with timely and understandable information about residential mortgage loans that protect them against unfair, deceptive, and abusive practices; and requiring federal regulators to establish minimum national underwriting guidelines for residential mortgages that lenders will be allowed to securitize and sell to third-party investors without retaining any of the loans' default risk. Although we are not directly subject to these laws and regulations, changes to these laws and regulations could broaden the scope of parties or activities subject to regulation and require us to comply with their restrictions, and new products and services developed by us may be subject to, or have to reflect, these laws or regulations.

In addition, we are subject to general business laws and regulations, regulations governing federal contractors, and laws and regulations specifically governing the Internet, such as those covering taxation, tariffs, user privacy, data protection, pricing, content, copyrights, distribution, electronic contracts and other communications, consumer protection, broadband residential Internet access, and the characteristics and quality of services. Employees

At December 31, 2016, we had 1,069 full-time employees, including 171 in sales and marketing, 767 in research and development and technology, and 131 in general and administrative functions. None of our employees are covered by a collective bargaining agreement.

#### Facilities

Our corporate headquarters are located in Pleasanton, California, totaling approximately 280,680 square feet, under a lease expiring in December 2025. We also have staff operating in branch offices in Calabasas, California; Irvine, California; San Diego, California; Eagan, Minnesota; St. Louis, Missouri; Omaha, Nebraska; and Parsippany, New Jersey.

#### ITEM 1A. RISK FACTORS

You should carefully consider the risks described below and the other information in this report. If any of the following risks materialize, our business could be materially harmed, and our financial condition and results of operations could be materially and adversely affected. The risks described below are not the only ones facing us. Additional risks not currently known to us or that we currently believe are immaterial may also impair our business, results of operations, financial condition, and liquidity.

The following discussion of risk factors contains forward-looking statements. These risk factors may be important to understanding other statements in this Annual Report on Form 10-K. The following information should be read in conjunction with the consolidated financial statements and related notes in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Because of the following risks, as well as other factors affecting our financial condition and operating results, past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods.

Any future outages or system interruptions that impair access to Encompass, the Ellie Mae Network or our other services could damage our reputation and brand and may substantially harm our business and operating results. The satisfactory performance, reliability, and availability of Encompass, the Ellie Mae Network and our other services are critical to our reputation and our ability to attract and retain Encompass users and Ellie Mae Network participants. Because our services are complex and incorporate a variety of hardware and proprietary and third-party software, our services may have errors or defects that could result in unanticipated downtime for our customers. Internet-based services frequently contain undetected errors when first introduced or when new versions or enhancements are released, and we have from time to time found errors and defects in our services and new errors and defects in our services may be detected in the future.

Moreover, we have experienced and may in the future continue to experience temporary system interruptions to Encompass, the Ellie Mae Network, or our other services for a variety of other reasons, including network failures, power failures, problems with Encompass and other third-party firmware updates, as well as an overwhelming number of users or Ellie Mae Network participants trying to access our services during periods of strong demand. In addition, our services may be subject to security or denial of services attacks which result in service interruptions or our customers may use our services in unanticipated ways that may cause a disruption in services for other customers. Since our customers use our service for important aspects of their business, any errors, defects, disruptions in service or other performance problems could result in negative publicity, damage to our reputation and brand, reduce our revenue, increase our operating expenses, negatively impact our ability to run our business, hinder our ability to enroll new customers, cause us to incur legal liability or issue refunds or service credits to our customers and cause us to lose current customers, all of which could substantially harm our business and operating results.

We utilize a hybrid cloud approach to our third-party data centers consisting of (i) two primary production data centers, located in Santa Clara, California, and Chicago, Illinois, which are each hosted by a third-party service provider and (ii) a network of Amazon Web Services ("AWS") data centers which provides a distributed computing infrastructure platform for business operations. We maintain regular oversight but have little direct control over our two primary data centers. In the case of AWS, we do not control any aspects of the AWS data center operations and do not own any of the underlying computing hardware. We rely on these third-party service providers to provide continuous and uninterrupted access to our products and services, including Encompass and the Ellie Mae Network. If for any reason our relationship with any of these third parties were to end unexpectedly, it could require a significant amount of time to transition the hosting of our computing infrastructure to new third-party service providers. We are also subject to interruptions beyond our and our third-party service providers' control, such as disruptions or congestion in the portions of the Internet linking us to our customers. We are dependent on third parties for the implementation and maintenance of certain aspects of our systems and because some of the causes of system interruptions may affect our customers' experience or cause us to lose customers, and may materially harm our reputation and operating results.

Our failure to secure the confidential information of the customers of the users of our software and services could damage our reputation and brand and substantially harm our business and operating results. We collect, process, transmit, and maintain certain confidential information relating to the customers (borrowers and loan applicants) of the users of our software and services, including personally identifiable information. This information resides on data center servers hosted by third-party providers, and is transmitted to, across, and from our networks. While we have security measures in place to protect this information and prevent security breaches, these security measures may be compromised as a result of third-party action, including intentional misconduct by computer hackers, advanced persistent cyber-attacks (by hacktivists or cybercriminal organizations), employee error or malfeasance, service provider or vendor error, malfeasance or other intentional

or unintentional acts by third parties. Furthermore, our customers' data, including personally identifiable information, may be lost, exposed, or subject to unauthorized access and/or use as a result of accidents, errors, or malfeasance by our employees, independent contractors, or others working with us or on our behalf. Our servers and systems, and those of our service providers, may also be vulnerable to computer malware, break-ins, denial-of service attacks, and similar disruptions from unauthorized tampering with our computer systems, which could result in someone obtaining unauthorized access to our customers' data or our data, including our intellectual property and other confidential business information. Because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. The possession and use of personal information in conducting our business subjects us to legislative and regulatory burdens that may require notification to customers in the event of a security breach, restrict our use of personal information, and hinder our ability to acquire new customers or market to existing customers.

We cannot guarantee that our security measures will prevent security breaches or the loss or exposure of confidential information or other information we maintain or process. Any actual or perceived compromise of our security could result in the loss of customer data, intellectual property or trade secrets, and could damage our reputation and brand, negatively affect our ability to attract new customers and retain existing customers, adversely affect investor confidence, and expose us to a risk of litigation or regulatory actions and orders, penalties for violation of applicable laws, regulations, or contractual obligations and/or other liabilities, which would substantially harm our business and operating results. We will need to expend significant resources to protect against and remedy any potential security breaches and their consequences, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts and consultants.

Our future performance will be highly dependent on our ability to continue to attract new Encompass customers and users of our other service offerings.

To maintain or increase our revenues, we may need to increase the number of users of our Encompass software and other service offerings, and the failure to do so may have a materially adverse impact on our business. If we are unable to increase the number of Encompass customers or users of our other services, our business may be materially adversely affected. Our success will depend on both (i) the willingness of mortgage lenders to continue to accept the SaaS model for delivering software applications that they view as critical to the success of their business and (ii) our ability to successfully deliver new SaaS service offerings.

It is difficult to predict customer adoption rates and demand for our services, the future growth rate and size of the mortgage technology market or the entry of competitive applications. The growth of the mortgage technology market depends on a number of factors, including the cost, performance, and perceived value associated with product offerings, most notably SaaS offerings such as our own, including the extent to which SaaS companies are successful in continuing to address security and reliability concerns. If other SaaS providers experience security incidents, loss of customer data, disruptions in delivery or other problems, the market for SaaS applications as a whole, including our own products and services, may be negatively affected. If there is a reduction in demand for mortgage technology caused by technological challenges, weakening economic conditions, security or privacy concerns, competing technologies, and products, decreases in spending by mortgage lenders, it could result in decreased revenues and our business could be adversely affected. In addition, we will need to continue to expand and optimize our sales infrastructure in order to grow our customer base and our business. Identifying and recruiting qualified personnel and training them in the use of our software requires significant time, expense, and attention.

If we are not able to provide successful enhancements, new features and modifications to our services, our business could be adversely affected. Further, impairment of software-related assets and other assets may materially adversely affect our operating results.

If we are unable to provide enhancements, new features, and modifications of our existing services, including the successful completion and deployment of our next generation Encompass software and the Encompass Lending Platform and changes to our services to reflect changes in laws and regulations relating to residential mortgage lending, our business and operating results could be adversely affected. In addition, if we do not successfully manage the migration of our customers to our next generation Encompass software or if the transition takes longer than

expected, customers may not experience the benefits of new enhancements and features and our business and operating results could be adversely affected. In addition, we will need to continuously modify and enhance our services to keep pace with changes in software, communication, browser, database and SaaS infrastructure technologies. We may not be successful in either developing these modifications and enhancements or in bringing them to market in a timely fashion which could increase our costs and adversely affect our business. The failure of our services to operate effectively with future technologies could reduce the demand for our services, result in customer dissatisfaction and adversely affect our business.

We have invested and continue to invest significant resources to develop and acquire technology related to our services that is capitalized to property and equipment or intangible assets and treated as an asset on our balance sheet. We may not launch this new technology, the launch of such technology may result in disruptions to our business operations or such technology might not meet our and our customers' expectations. Also, changes to any of our implementation strategies or the failure of this technology to meet our and our customers' expectations could result in the impairment of software-related assets, and our future operating

results could be materially adversely affected if we are required to write down the carrying value of capitalized software development or other intangible assets.

Mortgage lending volume may decrease materially in 2017 and future years, which could materially adversely affect our business.

Mortgage lending volume may decrease materially in 2017 and future years, which could materially adversely affect our business. Factors that adversely impact mortgage lending volumes include increasing mortgage interest rates, reduced consumer and investor demand for mortgages, more stringent underwriting guidelines, decreased liquidity in the secondary mortgage market, high levels of unemployment, high levels of consumer debt, lower consumer confidence, changes in tax and other regulatory policies, the number of existing mortgages eligible for refinancing, and other macroeconomic factors.

Mortgage interest rates are influenced by a number of factors, including monetary policy. In December 2016, the Federal Reserve Bank raised the target federal funds rate from between 0.25% and 0.50% to between 0.50% and 0.75%, and signaled that the federal funds rate could be increased further over the next several years. This increase in the federal funds rate contributed to an increase in mortgage rates in the fourth quarter of 2016 and first quarter of 2017 and may result in future mortgage interest rate increases. Increases in mortgage refinancings. In addition, our on-demand revenues typically, but not always, track the seasonality of the residential mortgage industry, with increased activity in the second and third quarter and reduced activity in the first and fourth quarters as home buyers tend to purchase their homes during the spring and summer in order to move to a new home before the start of the school year. As a result, a higher percentage of our on-demand revenues have historically been recognized during those quarters.

We currently estimate that approximately 35% to 45% of our revenues have some direct sensitivity to volume. A decrease in residential mortgage volumes could materially adversely affect our business and operating results. Furthermore, a significant decrease in mortgage volume could negatively impact our customers, resulting in a reduction of their Encompass users, consolidation with other lenders or cessation of operations. If any of these occurs, it could materially adversely affect our business and operating results.

We cannot accurately predict subscription renewal or upgrade rates and the impact these rates may have on our future revenues and operating results.

Our customers have no obligation to renew their subscriptions for our service after the expiration of their initial subscription period, which ranges from one to five years. They may also choose to renew their subscriptions at lower levels. In addition, in the first year of a subscription, customers often purchase a higher level of professional services than they do in renewal years. As a result, our ability to grow is dependent in part on customers purchasing additional subscriptions and services after the initial subscription term. We cannot accurately predict renewal rates given our varied customer base and the number of multi-year subscription contracts. Our customers' renewal rates may decline or fluctuate because of several factors, including their satisfaction or dissatisfaction with our services, the prices of our services, changes to the standard prices of our services, the prices of services offered by our competitors or reductions in our customers' spending levels due to the macroeconomic environment or other factors. If our customers do not renew their subscriptions for our services, renew on less favorable terms or do not purchase additional subscriptions or services, our revenues may grow more slowly than expected or decline and our profitability and gross margin percentage may be harmed.

Our future performance will be highly dependent on our ability to expand the use of settlement services on, and increase the number of transactions effected through, the Ellie Mae Network.

To grow our base of Ellie Mae Network participants, we and settlement service providers must continue to enhance the features and functionality of offerings to them. In addition, increasing the number of settlement service transactions effected through the Ellie Mae Network will depend, in part, on settlement service providers enhancing their technical capabilities, which is largely beyond our control.

We must also convince a variety of potential Ellie Mae Network participants, including mortgage lenders, originators, settlement service providers, and mega lenders, of the benefits of electronic origination and network participation as compared to traditional mortgage origination methods including paper, facsimile, courier, mail, and email.

We cannot guarantee that our Ellie Mae Network and other service offerings will achieve market acceptance. In the event these efforts are not successful, our business and growth prospects would be adversely affected.

We expect a number of factors to cause our operating results to fluctuate on a quarterly and annual basis, which may make it difficult to predict our future performance.

Our revenues and operating results have in the past varied and could in the future vary significantly from quarter-to-quarter and year-to-year because of a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be indicative of future operating results. In addition to other risk factors discussed in this section, factors that may contribute to the variability of our quarterly and annual results include:

the number of Encompass users;

the volume of mortgages originated by Encompass users, especially users on our Success Based Pricing model; transaction volume on the Ellie Mae Network;

fluctuations in mortgage lending volume;

the relative mix of purchase and refinance volume handled by Encompass users;

the level of demand for our services;

the timing of the introduction and acceptance of new services and Ellie Mae Network service providers;

any write-downs in the value of our property and equipment, goodwill or intangible assets as a result of our investment or acquisition activities;

costs associated with defending intellectual property infringement and other litigation claims;

changes in accounting rules applicable to our business; and

changes in government regulation affecting mortgage lenders and Ellie Mae Network participants or our business, and potential structural changes in the U.S. residential mortgage industry.

Due to these and other factors, our future results may not reach our financial projections. In addition, our operating results in future periods may not meet the expectations of investors or public market analysts who follow our company, which could cause our stock price to decline rapidly and significantly. The results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

Since part of our sales efforts are targeted at larger customers, our sales cycle may become longer and more expensive, we may encounter pricing pressure and implementation challenges, and we may have to delay revenue recognition for some complex transactions, all of which could harm our business and operating results.

Part of our business strategy is to target larger mortgage lenders that handle greater volumes of loans. As we target more of our sales efforts at larger customers, we could face greater costs, longer sales cycles, and less predictability in completing some of our sales. In this market, the customer's decision to use our products and services may be an enterprise-wide decision and, if so, this type of sale could require us to provide greater levels of education regarding the use and benefits of our products and services. In addition, larger customers may demand more complex integration, implementation services, and features. As a result of these factors, these sales opportunities may require us to devote greater sales support and professional services resources to individual customers, driving up costs and time required to complete sales and diverting our own sales and professional services resources to a smaller number of larger transactions, while potentially requiring us to delay revenue recognition on some of these transactions until the technical or implementation requirements have been met.

If we are unable to scale our operations and increase productivity, we may not be able to successfully implement our business plan.

We continue to experience significant growth in our customer base, which has placed a strain on our management and administrative, operational, and financial infrastructure. Additional investments in our implementation capabilities, technical support, technical operations, research and development, and general and administrative functions will be required to scale our operations and increase productivity, address the needs of our customers, further develop and enhance our products and services, and scale with the overall growth of our company.

In addition, professional services, such as implementation services, are a key aspect of on-boarding new customers. The implementation process is complicated and we will need to scale our capabilities in this area to meet future revenue targets. If a customer is not satisfied with the quality of work performed by us or with the type of services or solutions delivered, then we could incur additional costs to address the situation, the profitability of that work might be impaired, and the customer's dissatisfaction with our products and services could damage our ability to obtain additional work from that customer. In addition, negative publicity related to our customer relationships, regardless of

its accuracy, may further damage our business by affecting our ability to compete for new business with current and prospective customers.

Our growth strategy will require significant expenditures and resources to improve our technology, systems, and operational infrastructure in order to support a growing number of customers. We will need to make such expenditures with no assurance that the volume of our business or revenues will actually increase.

Our strategy of growing our business and increasing the number of Encompass users has placed and may continue to place significant demands on our technology systems and operational infrastructure. As our operations grow in size, scope, and complexity, we will need to expand, improve, and upgrade our technology systems and, operational infrastructure, including the capabilities of the third-party data centers we utilize to offer an increasing number of customers enhanced solutions, features and functionality, and to ensure that our services are reliable.

Our growth and the improvement of our technology systems and operational infrastructure will require significant lead time and substantial financial, operational and technical resources in advance of the anticipated increase in the volume of business, with no assurance that the volume of business or our revenues will actually increase.

We have experienced rapid growth. If we fail to manage our growth effectively, we may be unable to execute our business plan, maintain high levels of service and operational controls or adequately address competitive challenges. We have experienced, and are continuing to experience, a period of rapid growth in our customers, headcount, and operations. In particular, we grew from approximately 270 employees as of December 31, 2011 to approximately 1,069 employees as of December 31, 2016, and have also significantly increased the number of customers and active users of Encompass. We anticipate that we will significantly expand our operations and headcount in the near term, and will continue to expand our customer base. This growth has placed, and future growth will place, a significant strain on our management, general and administrative resources, and operational infrastructure.

Our success will depend in part on our ability to manage this growth effectively and to scale our operations. To manage the expected growth of our operations and personnel, we will need to continue to improve our operational, financial and management controls, and our reporting systems and procedures. As we continue to grow, we also need to ensure that our policies and procedures evolve to reflect our current operations and are appropriately communicated to and observed by employees, and that we appropriately manage our corporate information assets, including confidential and proprietary information. Failure to effectively manage growth could result in difficulty or delays in deploying customers, declines in quality or customer satisfaction, increases in costs, difficulties in introducing new features or other operational difficulties, and any of these difficulties could adversely impact our business performance and results of operations.

Completing and integrating future acquisitions could disrupt our business, harm our financial condition, and operating results or dilute or adversely affect the price of our common stock.

Our success will depend in part on our ability to expand our solutions and services and to grow our business in response to changing technologies, customer demands and competitive pressures. In some circumstances, we may pursue growth through the acquisition of complementary businesses, solutions or technologies rather than through internal development.

The identification of suitable acquisition candidates can be difficult, time-consuming, and costly, and we may not be able to complete acquisitions successfully. Moreover, if such acquisitions require us to seek additional debt or equity financing, we may not be able to obtain such financing on terms favorable to us or at all. Acquisitions and investments involve numerous risks which may have a negative impact on our results of operations, including: write-offs of acquired assets or investments;

potential financial and credit risks associated with acquired customers;

unknown liabilities associated with the acquired businesses;

unanticipated expenses related to acquired technology and its integration into existing technology;

limitations to our ability to recognize revenue from acquired deferred revenue;

depreciation and amortization of amounts related to acquired intangible assets, fixed assets, and deferred compensation; and

adverse tax consequences of any such acquisitions.

Even if we successfully complete an acquisition, we may not be able to assimilate and integrate effectively the acquired business, technologies, solutions, assets, personnel or operations, particularly if key personnel of an acquired company decide not to work for us. We may encounter difficulty in incorporating acquired technologies into our service and maintaining the quality standards that are consistent with our brand and reputation. In addition, we may

issue debt or equity securities to complete an acquisition, which could dilute our stockholders' ownership and adversely affect the price of our common stock.

The residential mortgage industry is heavily regulated and changes in current legislation or new legislation could adversely affect our business.

The U.S. mortgage industry is heavily regulated. Federal and state governments and agencies could enact legislation or other policies that could negatively impact the business of our Encompass users and other Ellie Mae Network participants. In particular, the recent U.S. presidential transition and transformation in the makeup of the U.S. Congress may impact the substance and timing of legislation relating to the U.S. mortgage industry. Any changes to existing laws or regulations or adoption of new laws or regulations that increase restrictions on the residential mortgage industry may decrease residential mortgage volume or otherwise limit the ability of our Encompass users and Ellie Mae Network participants to operate their businesses, resulting in decreased usage of our solutions. In addition, reduced regulatory requirements may reduce the demand for certain of our products and services, including the Encompass Compliance service.

Changes in current legislation or new legislation may increase our costs by requiring us to update our products and services and if our products and services fail to address relevant mortgage lending laws and regulations our business could be adversely affected.

Changes to existing laws or regulations or adoption of new laws or regulations relating to the residential mortgage industry may require us to incur significant costs to update our products and services so that our customers remain compliant with such laws and regulation. Our Encompass Compliance Service analyzes mortgage loan data for compliance with consumer protection laws and institutionally mandated compliance policies and must continually be updated to incorporate changes to such laws and policies. The Dodd-Frank Act has caused and will continue to cause us to make similar updates to Encompass, Encompass Compliance Service, Encompass Product and Pricing Service, Encompass Docs Solution, TOL, and the Ellie Mae Network to address, among other things, regulations that protect consumers against unfair, deceptive, and abusive practices by lenders. For example, additional tools and product updates were required to address the Ability-to-Repay/Qualified Mortgage and Federal and State High Cost rules that became effective in January 2014. In addition, we have updated certain products to comply with the TILA-RESPA Integrated Disclosure rule changes and the 2013 Loan Originator Rule under the Truth in Lending Act (Regulation Z) (TILA-RESPA Amendments) that became effective October 3, 2015. The final rule amending Regulation C to implement amendments to the Home Mortgage Disclosure Act (HMDA) made by section 1094 of the Dodd-Frank Act was published on October 15, 2015. It includes various effective compliance dates, starting with January 1, 2017 through May 30, 2020. The final "Qualified Residential Mortgage" rule which implements the risk retention requirements in the Dodd-Frank Act became effective on December 24, 2015. On August 23, 2016 Fannie Mae and Fannie Mac published the first material updates to the Uniform Residential Loan Application (URLA) in more than 20 years which will become effective in 2018. These additions and updates have caused us to incur significant expense, and future updates will likely similarly cause us to incur significant expense. For example, if the new U.S. presidential administration and U.S. Congress significantly change or repeal the mortgage lending portions of the Dodd-Frank Act or the CFBP announces new rules or repeals previously announced rules, we may need to incur significant expense to make updates to our products and services. In addition, if our products and services fail to address relevant laws and regulations, we could be subject to claims by our customers that we have breached our customer contracts as well as potential claims by borrowers or government agencies. Such claims could result in substantial costs and we could incur judgments or enter into settlements of claims that could have a material adverse effect on our business and operating results. Furthermore, if our products and services fail to address relevant laws and regulations this could result in negative publicity, damage to our reputation and brand, hinder our ability to enroll new customers and cause us to lose current customers, all of which could substantially harm our business and operating results. Potential structural changes in the U.S. residential mortgage industry, in particular plans to diminish the role of Fannie Mae and Freddie Mac, could disrupt the residential mortgage market and have a material adverse effect on our business.

Fannie Mae and Freddie Mac play a very important role in providing liquidity, stability, and affordability in the current U.S. residential mortgage market. In particular, they participate in the secondary mortgage market by purchasing mortgage loans and mortgage-related securities for investment and by issuing guaranteed mortgage-related securities. There have been numerous executive branch proposals as well as proposed federal legislation which may wind down or recapitalize Fannie Mae and Freddie Mac and/or eliminate or reduce the government's role in the

housing market. Any significant structural change to the role of Fannie Mae and Freddie Mac or to the U.S. residential mortgage industry may cause significant disruption to the residential mortgage market. If we are unable to react effectively and quickly to changes in the residential mortgage industry or if such changes reduce the volume of mortgage lending, our business could be harmed.

We may be limited in the way in which we market our business or generate revenue by U.S. federal law prohibiting referral fees in real estate transactions, and if we are found to be in violation of such laws we would be subject to significant liability.

RESPA generally prohibits the payment or receipt of fees or any other thing of value for the referral of business related to a residential real estate settlement service and prohibits fee shares or splits or unearned fees in connection with the provision of such services. Encompass software and services and the Ellie Mae Network were designed with payment methods that are intended to comply with the restrictions under RESPA. Nonetheless, RESPA may restrict our ability to enter into marketing and distribution arrangements with third parties for existing or newly developed products and services, particularly to the extent that such arrangements may be characterized as involving payments for the referral of residential real estate settlement service business. Additionally, any amendments to RESPA, court opinions interpreting the provisions of RESPA, or changes in the manner that RESPA is interpreted by the regulatory agencies responsible for enforcing RESPA, that result in restrictions on our current payment methods, or any determination that our payment methods have been and currently are subject to the restrictions under RESPA, could have a material adverse effect on our business. If we were found to be in violation of RESPA rules, we would be exposed to significant potential liability that could have a material adverse effect on our reputation and business. We depend on key and highly skilled personnel to operate our business, and if we are unable to retain our current or hire additional personnel, our ability to develop and successfully market our business could be harmed. We believe our future success will depend in large part upon our ability to attract and retain highly skilled managerial, technical, finance, creative, and sales and marketing personnel. Moreover, we believe that our future success is highly dependent on the contributions of our named executive officers. All of our officers and other employees are at-will employees, which means they may terminate their employment relationship with us at any time, and their knowledge of our business and industry would be extremely difficult to replace. In addition, the loss of any key employees or the inability to attract or retain qualified personnel could delay the development and introduction of, and harm our ability to sell, our solutions and harm the market's perception of us. Competition for qualified personnel is particularly intense in the San Francisco Bay Area, where our headquarters are located. Qualified individuals are in high demand, and we may incur significant costs to attract them. We may be unable to attract and retain suitably qualified individuals who are capable of meeting our growing sales, operational and managerial requirements, or may be required to pay increased compensation in order to do so. If we are unable to attract and retain the qualified personnel we need to succeed, our business will suffer.

Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. Most of our named executive officers are vested in a substantial amount of stock options and Performance Awards. Employees may be more likely to leave us if the shares they own or the shares underlying their vested options have significantly appreciated in value relative to the original purchase prices of the shares or the exercise prices of the vested options, or if the exercise prices of the options that they hold are significantly above the market price of our common stock. If we are unable to retain our named executive officers or other key employees, our business will be harmed.

We operate in a highly competitive market, which could make it difficult for us to attract and retain Encompass users and Ellie Mae Network participants.

The mortgage origination software market is highly competitive. There are many software providers that compete with us by offering loan origination software to mortgage originators, such as: Byte Software Inc., a subsidiary of CBCInnovis; Calyx Technology, Inc.; DH Corporation; Lending QB, Mortgage Builder Software, Inc., a subsidiary of Altisource Portfolio Solutions SA; Mortgage Cadence, which is owned by Accenture PLC; Wipro Gallagher Solutions, which is owned by Wipro, Ltd.; and LoanSphere Empower and LoanSphere LendingSpace, which are owned by Black Knight Financial Services, Inc. Some software providers, including Calyx Technology, Inc. and Black Knight Financial Services, Inc., also provide connectivity between their software users and lenders and service providers to make such services available to mortgage lenders. We also compete with compliance, document preparation service, and product eligibility and pricing service providers that are more established than us. There is vigorous competition among providers of these services and we may not succeed in convincing potential customers using other services to switch to ours. In addition, some of our competitors are consolidating which facilitates greater cross-selling of services, which could weaken our ability to differentiate our offering in the market. Some of our

competitors also offer services on a per closed loan basis, which could adversely impact the effectiveness of our Success Based Pricing strategy for increasing the number of Encompass customers. If we are unsuccessful in competing effectively by providing attractive functionality, customer service or value, we could lose existing Encompass users to our competitors and our ability to attract new Encompass users could be harmed. There are many service providers that offer our Encompass users competing services, including borrower-facing websites, customer relationship management solutions, document preparation services, compliance services, product eligibility and pricing services, and electronic document management services. We may be unsuccessful in continuing to differentiate our Encompass service offerings to the extent necessary to effectively compete in some or all of these markets.

The Ellie Mae Network is only available to mortgage originators using Encompass. The principal alternative to the use of the Ellie Mae Network by Encompass users remains traditional methods of exchanging data and documents among mortgage industry participants by email, facsimile, phone, courier, and mail. In addition, mortgage originators may use standalone web browsers to go individually to each investor, lender or service provider's website, and then manually upload loan data or enter information into the website. Mortgage originators may continue to use these methods due to habit, personal business relationships or otherwise. The success of the Ellie Mae Network depends on our ability to achieve and offer access to both the critical mass of investors, lenders, and service providers necessary to attract and retain mortgage originators using Encompass on the Ellie Mae Network and the critical mass of active mortgage originators necessary to attract and retain investors, lenders, and service providers on our network. Some of our actual and potential competitors have longer operating histories and significantly greater financial, technical, marketing, and other resources than we do and, as a result, these companies may be able to respond more quickly to changes in regulations, new technologies or customer demands, or devote greater resources to the development, promotion, and sale of their software and services than we can. In addition, we may face increased competition as a result of continuing industry consolidation. We expect the mortgage origination market to continue to attract new competitors and there can be no assurance that we will be able to compete successfully against current or future competitors or that competitive pressures we face will not materially adversely affect our business. Failure to adapt to technological changes may render our technology obsolete or decrease the attractiveness of our solutions to our customers.

If new industry standards and practices emerge, or if competitors introduce new solutions embodying new services or technologies, Encompass and the Ellie Mae Network technology may become obsolete. Our future success will depend on our ability to:

enhance our existing solutions;

develop and potentially license new solutions and technologies that address the needs of our prospective customers; and

respond to changes in industry standards and practices on a cost-effective and timely basis.

We must continue to enhance the features and functionality of Encompass, our other services, and the Ellie Mae Network. The effective performance, reliability, and availability of Encompass, our other services, and the Ellie Mae Network infrastructure are critical to our reputation and our ability to attract and retain Encompass users, users of our other services and Ellie Mae Network participants. If we do not continue to make investments in product development and, as a result, or due to other reasons, fail to attract new and retain existing mortgage originators, lenders, investors, and service providers, we may lose existing Ellie Mae Network participants, which could significantly decrease the value of the Ellie Mae Network to all participants and materially adversely affect our business.

We are subject to the risks of current and future legal proceedings, which could have a material adverse effect on our business, financial condition, results of operations, and future prospects.

At any given time, we are a defendant in various legal proceedings and litigation matters arising in the ordinary course of business including commercial and employment disputes. We can give no assurance that the outcome of any such matter would not have a material adverse effect on our consolidated financial condition, results of operations or cash flows. We are unable to predict the ultimate outcome of these disputes or the actual impact of these matters on our profitability at this time, and any views we form as to the viability of these claims or the financial exposure in which they could result, could change from time to time as the matters proceed through their course, as facts are established, and various judicial determinations are made.

If we agree to settle these matters or judgments are secured against us, we may incur charges which may have a material and adverse impact on our business, financial conditions, results of operations, and future prospects. Failure to adequately protect our intellectual property could harm our business.

The protection of our intellectual property rights, including our proprietary Encompass software and Ellie Mae Network technology, is crucial to the success of our business. We rely on a combination of patent, copyright, trademark and trade secret law, and contractual restrictions to protect our intellectual property. Our present and future patents may provide only limited protection for our technology and may not be sufficient to provide competitive advantage to us. Furthermore, we cannot guarantee any patents will be issued to us as a result of our patent applications. We also rely in part on confidentiality and invention assignment agreements with our employees,

independent contractors, and consultants. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our Ellie Mae Network and Encompass features and functionality or obtain and use information that we consider proprietary. Enforcing our proprietary rights is difficult and may not always be effective.

We have registered "Ellie Mae," "Encompass," and "AllRegs" and certain of our other trademarks as trademarks in the United States. Competitors may adopt service names similar to ours, thereby impeding our ability to build brand identity and possibly leading to customer confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of the terms Ellie Mae, Encompass or our other trademarks.

Litigation or proceedings before the U.S. Patent and Trademark Office or other governmental authorities and administrative bodies in the United States and abroad may be necessary in the future to enforce our intellectual property rights, protect our patent and copyright rights, trade secrets and domain names, and determine the validity and scope of the proprietary rights of others. Our efforts to enforce or protect our proprietary rights may be ineffective and could result in substantial costs and diversion of resources and could harm our business. Assertions that we infringe third-party intellectual property rights could result in significant costs and substantially

harm our business.

Other parties have asserted, and may in the future assert, that we have infringed their intellectual property rights. In addition, we generally agree to indemnify our customers against legal claims that our software products infringe intellectual property rights of third parties and, in the event of an infringement, to modify or replace the infringing product or, if those options are not reasonably possible, to refund the cost of the software, as pro-rated over a period of years. We cannot predict whether assertions of third-party intellectual property rights or claims arising from such assertions will substantially harm our business and operating results. If we are forced to defend against any infringement claims, whether they are with or without merit or are determined in our favor, we may face costly litigation and diversion of technical and management personnel. Furthermore, an adverse outcome of a dispute may require us to: pay damages, potentially including treble damages and attorneys' fees if the infringement were found to be willful; cease providing solutions that allegedly incorporate the intellectual property of others; expend additional development resources to redesign or re-engineer our solutions and products, if feasible; and enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies. We cannot be certain of the outcome of any litigation. Any royalty or licensing agreement, if required, may not be available to us on acceptable terms or at all. Our failure to obtain the necessary licenses or other rights could prevent the sale or distribution of some of our products and services and, therefore, could have a material adverse effect on our business. Our internal information technology systems are critical to our business. System integration and implementation issues could disrupt our operations, which could have a material adverse impact on our business or results in significant deficiencies or material weaknesses in our internal controls.

We rely on the efficient and uninterrupted operation of complex information technology systems, including systems for customer billing, human resources, enterprise resource planning and customer relationship management. As our business has grown in size and complexity, the growth has placed, and will continue to place, significant demands on our internal information technology systems. To effectively manage this growth, we must commit significant financial resources and personnel to maintain and enhance existing systems and develop or acquire new systems to keep pace with continuing changes in our business and information processing technology as well as evolving industry, regulatory and accounting standards. If the information we rely upon to run our businesses is determined to be inaccurate or unreliable, if we fail to properly maintain or enhance our internal information technology systems, we could have operational disruptions, customer disputes, significant deficiencies or material weaknesses in our internal controls, have increases in operating and administrative expenses, lose our ability to produce timely and accurate financial reports, or suffer other adverse consequences.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements could be impaired, which could result in a loss of investor confidence in our financial reports, significant expenses to remediate any internal control deficiencies, and ultimately have an adverse effect on the market price of our common stock.

As a publicly-traded company, we are subject to compliance with, among other regulations, Section 404 of the Sarbanes-Oxley Act of 2002, or SOX, which requires that we test our internal control over financial reporting and disclosure controls and procedures. Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Our compliance with SOX requires that we incur

substantial expense and expend significant management time on compliance-related issues. If we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could harm our operating results and lead to a decline in our stock price. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the New York Stock Exchange, regulatory investigations, civil or criminal sanctions, and class action litigation.

As a third-party technology service provider of mission-critical products and services to many financial institutions that are regulated by one or more member agencies of the Federal Financial Institutions Examination Council, or FFIEC, we are subject to an IT examination by the member agencies of the FFIEC. As a result, the FFIEC conducts recurring IT Examinations in order to identify existing or potential risks associated with our operations that could adversely affect the financial institutions to whom we provide products and services, evaluate our risk management systems, and controls and determine our compliance with applicable laws that affect the products and services we provide to financial institutions. In addition to examining areas such as our management of technology, data integrity, information confidentiality, and service availability, the reviews also assess our financial stability. In June 2014, the FDIC, a member agency of the FFIEC, completed its IT examination, and found that, while the services we provide to our client banks are satisfactory, several matters required further attention, some of which were repeat findings and recommendations from the FDIC's 2012 examination. Although management has developed a plan for addressing these matters, we cannot be assured that the plan will satisfy the FDIC or applicable law. A sufficiently unfavorable review from the FFIEC in the future could have a material adverse effect on our business and financial condition. If one or more U.S. states or local jurisdictions successfully assert that we should have collected or in the future should collect additional sales or use taxes on our fees, we could be subject to additional liability with respect to past or future sales, and the results of our operations could be adversely affected.

We do not collect state and local sales and use taxes on all sales in all jurisdictions in which our customers are located, based on our belief that such taxes are not applicable. Sales and use tax laws and rates vary by jurisdiction and such laws are subject to interpretation. Jurisdictions in which we do not collect sales and use taxes may assert that such taxes are applicable, which could result in the assessment of such taxes, interest, and penalties, and we could be required to collect such taxes in the future. This additional sales and use tax liability could adversely affect the results of our operations.

Our business is subject to the risks of earthquakes, fires, floods, and other natural catastrophic events and to interruption by man-made problems such as terrorism.

Our systems and operations are vulnerable to damage or interruption from earthquakes, fires, floods, power losses, telecommunications failures, terrorist attacks, acts of war, and similar events. For example, a significant natural disaster, such as an earthquake, fire or flood, could have a material adverse impact on our business, operating results and financial condition, and our insurance coverage may be insufficient to compensate us for losses that may occur. Our corporate offices and one of the facilities we lease to house our computer and telecommunications equipment are located in the San Francisco Bay Area, a region known for seismic activity. In addition, acts of terrorism, which may be targeted at metropolitan areas with higher population density than rural areas, could cause disruptions in our or our customers' businesses or the economy as a whole. We may not have sufficient protection or recovery plans in certain circumstances, such as natural disasters affecting the San Francisco Bay Area, and our business interruption insurance may be insufficient to compensate us for losses that may occur.

Our stock price is volatile and purchasers of our common stock could incur substantial losses.

The trading price of our common stock may be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this "Risk Factors" section and elsewhere in our filings with the SEC, these factors include:

our operating performance and the operating performance of similar companies;

the overall performance of the equity markets;

the number of shares our common stock publicly owned and available for trading;

threatened or actual litigation;

changes in laws or regulations relating to our solutions;

any major change in our board of directors or management;

publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;

large volumes of sales of our shares of common stock by existing stockholders; and

general political and economic conditions.

In addition, the stock market in general has experienced extreme price and volume fluctuations. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the

market price of a company's securities. This litigation, if instituted against us, could result in very substantial costs, divert our management's attention and resources and harm our business.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States are subject to interpretation by the Financial Accounting Standards Board (FASB), the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change. For example, the adoption of ASC 606, a new revenue recognition standard which becomes effective in fiscal 2018, could impact the timing of recognition of certain revenue streams, as well as how we account for certain commissions. Further, the evaluation and implementation of new standards, including ASC 606, may require additional resources and system configurations that could increase our operating costs.

Our stock repurchase program may be suspended or terminated at any time, which may result in a decrease in the trading price of our common stock.

Our board of directors previously approved a stock repurchase program under which we are authorized to repurchase up to \$75.0 million of our common stock over a 36-month period ending in May 2017, \$42.8 million of which remains available as of December 31, 2016. Such stock repurchases may be limited, suspended, or terminated at any time without prior notice. There can be no assurance that we will repurchase additional shares of our common stock under our stock repurchase program or that any future repurchases will have a positive impact on the trading price of our common stock or earnings per share. Important factors that could cause us to limit, suspend or terminate our stock repurchase program include, among others, unfavorable market conditions, the trading price of our common stock, the nature of other investment or strategic opportunities presented to us from time to time, the rate of dilution of our equity compensation programs, the availability of adequate funds, and our ability to make appropriate, timely, and beneficial decisions as to when, how, and whether to purchase shares under the stock repurchase program. If we limit, suspend or terminate our stock repurchase program, our stock price may be negatively affected.

If securities or industry analysts discontinue publishing research or publish inaccurate or unfavorable research about our business, our stock price could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price to decline.

Certain provisions in our charter documents and Delaware law could discourage takeover attempts and lead to management entrenchment.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying or preventing changes in control or changes in our board of directors. These provisions include:

a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;

no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;

the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;

the ability of our board of directors to determine to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;

a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and

advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to certain anti-takeover provisions under Delaware law. Under Delaware law, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. ITEM 1B.UNRESOLVED STAFF COMMENTS

Not applicable.

**ITEM 2. PROPERTIES** 

The following table sets forth the location and approximate square footage of each of our principal properties. All properties are leased under operating leases that expire at various times through 2025.

Location Primary Use Approximate Square Footage

Pleasanton, CA Headquarters 280,680

Calabasas, CA	Branch office	3,400
Irvine, CA	Branch office	4,600
San Diego, CA	Branch office	4,880
Eagan, MN	Branch office	4,800
St. Louis, MO	Branch office	10,000
Omaha, NE	Branch office	20,100

Parsippany, NJ Branch office 2,200

In addition, we believe that our branch offices are adequate for our current needs and that suitable additional or substitute space will be available as needed to accommodate foreseeable expansion of our operations.

#### ITEM 3. LEGAL PROCEEDINGS

Information pertaining to our legal proceedings is incorporated by reference from Note 8 of the Notes to Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information for Common Stock

Our common stock has been traded on the New York Stock Exchange, or NYSE, under the symbol "ELLI" since April 15, 2011. The following table sets forth the high and low sales prices of our common stock as reported on the NYSE for the periods indicated.

	Low	High	
Year ended December 31, 2015			
First Quarter	\$39.29	\$57.36	
Second Quarter	\$54.60	\$71.52	
Third Quarter	\$64.83	\$82.92	
Fourth Quarter	\$58.35	\$78.71	
Year ended December 31, 2016			
First Quarter	\$57.88	\$91.16	
Second Quarter	\$74.11	\$94.20	
Third Quarter	\$90.25	\$105.98	
Fourth Quarter	\$77.60	\$109.99	
Holders of Our Common Shares			

As of February 16, 2017, there were approximately 49 holders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

**Dividend Policy** 

We have never declared or paid, and do not anticipate declaring or paying, any cash dividends on our common stock. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on then existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

### Performance Graph

The following graph compares the total cumulative shareholder return on our common stock with the total cumulative return of the NYSE Composite Index, and the S&P 500 North American Technology-Software Index for each of the last five fiscal years ended December 31, 2016.

	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Ellie Mae, Inc.	100.00	491.15	475.58	713.63	1,066.02	1,481.06
NYSE Composite	100.00	115.99	146.47	156.36	149.97	167.87
S&P 500 North American	100.00	117.43	153.95	175.32	197.22	209.46
Technology-Software						

Assumes that \$100.00 was invested in our common stock and in each index at market closing prices on December

\*31, 2011, and that all dividends were reinvested. No cash dividends have been declared on our common stock since our initial public offering. Stockholder returns over the indicated period should not be considered indicative of future share prices or stockholder returns.

This performance graph shall not be deemed "filed" for purposes of Section 18 of the Exchange Act of 1934, or incorporated by reference into any filing of Ellie Mae, Inc. under the Securities Act of 1933, as amended except as shall be expressly set forth by specific reference in such filing.

Recent Sales of Unregistered Securities None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The table below sets forth the information with respect to purchases made by or on behalf of the Company or any "affiliated purchaser" (as the term is defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934, as amended) of our common stock during the year ended December 31, 2016:

**ISSUER PURCHASES OF EQUITY SECURITIES** 

ISSOLICI ORCHMELS OF EQUITIONE	CITILS		Total Number	Approximate
			of Shares	Dollar Value or
	Total		Purchased	Shares that
			as	May
	Number	Average	Part of	Yet be
	of		Publicly	Purchased
Shares Price	Price	Announced	Under the	
	Shares	Paid	Plans	Plans
Period	Purchased	per	or	or Programs
1 chod		Share	Programs	(1)
January 1, 2016 to January 31, 2016	—	\$ <i>—</i>		\$43,469,986
February 1, 2016 to February 28, 2016		\$ <i>—</i>	_	\$43,469,986
March 1, 2016 to March 31, 2016		\$ <i>—</i>	_	\$43,469,986
April 1, 2016 to April 30, 2016		\$ —		\$43,469,986
May 1, 2016 to May 31, 2016		\$ <i>—</i>	—	\$43,469,986
June 1, 2016 to June 30, 2016		\$ —		\$43,469,986
July 1, 2016 to July 31, 2016		\$ —		\$43,469,986
August 1, 2016 to August 31, 2016		\$ —		\$43,469,986
September 1, 2016 to September 30, 2016		\$ —		\$43,469,986
October 1, 2016 to October 31, 2016		\$ —		\$43,469,986
November 1, 2016 to November 30, 2016	_	\$ —		\$43,469,986
December 1, 2016 to December 31, 2016	8,333	\$ 79.62	8,333	\$42,806,483

<sup>(1)</sup> On May 21, 2014, our board of directors approved a stock repurchase program under which we are authorized to repurchase up to \$75.0 million of our common stock, which expires in May 2017. Shares under the program are retired upon the repurchase. Amount remaining to be purchased are exclusive of commissions.

#### ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The consolidated statements of operations data for the years ended December 31, 2016, 2015, and 2014 and the consolidated balance sheets data as of December 31, 2016 and 2015 are derived from our audited consolidated financial statements included elsewhere in this report. The consolidated statements of operations data for the years ended December 31, 2013 and 2012 and the consolidated balance sheets data as of December 31, 2014, 2013, and 2012 are derived from our audited consolidated financial statements not included elsewhere in this report. Our historical results are not necessarily indicative of future performance. You should read the following selected consolidated financial data below in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, related notes and other financial information included elsewhere in this report. The selected consolidated financial data in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this report.

	Year ended December 31,						
	2016	2015	2014	2013	2012		
	(in thousands, except share and per share data)						
Consolidated Statements of Operations Data:							
Revenues	\$360,285	\$253,937	\$161,537	\$128,481	\$101,845	5	
Cost of revenues <sup>(1)</sup>	120,145	84,208	46,283	32,630	23,114		
Gross profit	240,140	169,729	115,254	95,851	78,731		
Operating expenses:							
Sales and marketing <sup>(1)</sup>	54,704	38,208	26,544	21,331	17,887		
Research and development <sup>(1)</sup>	58,501	40,451	28,228	24,695	18,053		
General and administrative <sup>(1)</sup>	71,318	57,212	39,361	30,853	21,601		
Total operating expenses	184,523	135,871	94,133	76,879	57,541		
Income from operations	55,617	33,858	21,121	18,972	21,190		
Other income (expense), net	989	619	488	460	(43	)	
Income before income taxes	56,606	34,477	21,609	19,432	21,147		
Income tax provision	18,830	12,219	6,786	6,114	1,683		
Net income	\$37,776	\$22,258	\$14,823	\$13,318	\$19,464		
Net income per share of common stock:							
Basic	\$1.21	\$0.76	\$0.53	\$0.50	\$0.83		
Diluted	\$1.15	\$0.72	\$0.50	\$0.47	\$0.76		
Weighted average shares outstanding:							
Basic							