2016 ANNUAL REPORT

Delivering Great Digital Education At Scale
We intend to continue delivering high-quality outcomes for students, while maintaining our industry leadership as a provider of technology, services and data architecture to launch and scale domestic graduate programs, or DGPs, in new and existing degree verticals for the world’s best universities. If we continue to execute on this strategy, we believe that our domestic graduate business could grow to $3 billion or more in annual steady state revenue at maturity.

2016 was a great year. Our revenue increased by 37 percent, well exceeding our target of 30 percent year-over-year revenue growth. And while we exceeded our target revenue growth rate in 2016, we also became adjusted EBITDA profitable for the first time on a full-year basis. At $4.5 million, adjusted EBITDA margin for the full year 2016 was 2 percent. To give you a sense of how far we’ve come, our adjusted EBITDA margin for the full year 2013 prior to our initial public offering was negative 26 percent.

Since IPO, we have told investors that it was our plan to balance revenue growth with margin expansion through the point of full-year adjusted EBITDA profitability. We have delivered on that plan for the past three years, incrementally increasing our annual new DGP launches as a result. At the end of 2016, we had launched and were operating 24 DGPs.

But now that we have achieved adjusted EBITDA profitability, it is our intention to increase the annual launch cadence of DGPs and pursue revenue growth while still maintaining small margin improvement on the bottom line. In early 2017, we confirmed our new DGP launch targets for the next four years: 10 DGPs in 2017, 13 DGPs in 2018, 16 DGPs in 2019 and 19 DGPs in 2020. This means we would more than triple our total launched DGPs by the end of 2020. We believe that this dramatic step-up in launches will keep revenue growth above 30 percent for the foreseeable future.

But 2016 was not all about revenue growth. As mentioned above, 2U reached adjusted EBITDA profitability for the first time on a full-year basis. And even though we expect that our overall margin improvement will slow as we increase our program launch cadence in the coming years, we saw significant cohort margin improvement in 2016 as our launched DGPs continue to mature and scale. The cohort margin table below shows just how well our launch cohorts performed in 2016 and validates our view that the DGPs we have launched are achieving the financial results that we expect over time. We expect that to continue as we launch additional DGPs in the coming years.

Yes, the business is doing well. Our current DGPs are performing well. Our expected launch cadence is set through 2020. Our partners are happy, and we do not have a contract up for renewal until 2021. If we meet our launch targets and continue to scale launched programs, 2U is poised for success over many years.

Our Strategy

Today, we partner with great U.S. colleges and universities to launch and scale graduate degree programs, which we call our Domestic Graduate Program (DGP) business. Our strategy for expansion and growth within the DGP segment includes:

- NEW VERTICALS
- MULTIPLE PROGRAM VERTICALS
- SCALE PROGRAMS
- NON-DEGREE
- INTERNATIONAL
- UNDERGRADUATE

Our Partners

As of April 20, 2017

18 UNIVERSITIES
41 ANNOUNCED DOMESTIC GRADUATE PROGRAMS
24 VERTICALS
12 MULTIPLE PROGRAM VERTICALS

24,776 Students Enrolled
Incarnation through December 31, 2016

We educate, support and graduate their students.

infrastructure colleges and universities need to attract, enroll, expand and operate at scale, and provides the comprehensive suite of technology and services allows our clients’ programs to fuse with technology-enabled services, which we optimize with data analytics and machine learning techniques. This suite of technology and services allows our clients’ programs to expand and operate at scale, and provides the comprehensive infrastructure colleges and universities need to attract, enroll, educate, support and graduate their students.

A Comprehensive Bundle

Our solutions consist of our cloud-based SaaS technology fused with technology-enabled services, which we optimize with data analysis and machine learning techniques. This suite of technology and services allows our clients’ programs to expand and operate at scale, and provides the comprehensive infrastructure colleges and universities need to attract, enroll, educate, support and graduate their students.

Fellow Stockholders –

Back in 2008, a small team believed that we could help transform a great university into a better digital version of itself. Digital transformation was possible. Online education could be great if you could convince some of the world’s best universities to do it.

To believe that you could build and scale the online education platform to do it. To believe that online students have the same success and passion as on-campus students and therefore should have the same rights and privileges as on-campus students. To believe that online education could actually be good. Not just OK — but truly excellent.

To believe that quality education was possible on the internet if you didn’t do it the old, tried way of those that came before. To believe that institutional power and scale could be focused on this new form of delivery, elevating the back row in education.

Most people thought we were a little, or a lot, crazy. But if we could succeed in changing incredible universities, with their distinct and powerful ethos of
to the new digital transformation, we would build a very successful business.

Over the past nine years, my management team has heard me continuously preach about the importance of staying focused on delivering great digital education at scale, enabling high-quality student outcomes and helping our partners succeed in their digital transformation.

Our business, as envisioned back in 2008, is now showing the full promise of what we believed was possible.

We are generating high-quality student outcomes. From inception to the end of 2016 — 24,776 students enrolled or graduated. 38,979 placements in 24,752 placement sites. 83 percent retention across academic disciplines ranging from data science to speech pathology. 2U, Inc. is a company that does well by doing good — I love that. And we are breaking down barriers ranging from data science to speech pathology. 2U, Inc. is a company that does well by doing good — I love that. And we are breaking down barriers ranging from data science to speech pathology.

Our growth strategy rests on leveraging our improved bundle of technology, services and data architecture to launch and scale domestic graduate programs, or DGPs, in new and existing degree verticals for the world’s best universities. If we continue to execute on this strategy, we believe that our domestic graduate business could grow to $3 billion or more in annual steady state revenue at maturity.

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Asynchronous content allows students to enroll in a graduate degree program without the proper support structures, but it’s not only our clients who are evolving. Higher education is also continuing to evolve and is beginning to offer digital degrees and programs. This creates a demand not only for digital education but also for digital education ecosystem. Our use of the word “digital” is intentional. Digital education leverages technology to bring the entire university experience to life, it should be accessible to all qualified students. It is not simply putting courses online, but using technology to bring the entire university experience to life, it’s necessary to invest in the staff and technology to support the needs of all qualified students.

For 2U to succeed in achieving its goals of becoming a truly iconic company and will not be contained, to the best of registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K.

The aggregate market value of the 42,046,218 shares held by non-affiliates as of June 30, 2016 (computed based on the closing price of such date as reported on the NASDAQ Global Select Market) was $1,236,579,271.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T ($252.405 of this charter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

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

Indicate by check mark if the registrant is a smaller reporting company (as defined in Rule 12b-2 of the Act). Yes ☑ No ☐
This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and which are subject to substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Annual Report on Form 10-K, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- trends in the higher education market and the market for online education, and expectations for growth in those markets;
- the acceptance, adoption and growth of online learning by colleges and universities, faculty, students, employers, accreditors and state and federal licensing bodies;
- the potential benefits of our cloud-based SaaS technology and technology-enabled services to clients and students;
- anticipated launch dates of new client programs;
- the predictability, visibility and recurring nature of our business model;
- our ability to acquire new clients and expand programs with existing clients;
- our ability to execute our growth strategy in the international, undergraduate and non-degree alternative markets;
- our ability to continue to acquire prospective students for our clients’ programs;
- our ability to affect or increase student retention in our clients’ programs;
- our growth strategy;
- the scalability of our cloud-based SaaS technology;
- our expected expenses in future periods and their relationship to revenue;
- potential changes in regulations applicable to us or our clients; and
- the amount of time that we expect our cash balances and other available financial resources to be sufficient to fund our operations.

You should refer to the risks described in Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Annual Report on Form 10-K will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.
# 2U, Inc.
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degree or credit as their on-campus counterparts and generally pay equivalent tuition, the option of online education often reduces the burden of moving, leaving behind employment or giving up family and community support networks. This can substantially reduce the total cost of obtaining a degree and lower a student’s total debt burden. It can also allow students for whom relocating is not an option to obtain a higher quality education than they might be able to access in their local communities.

Our compensation from our clients consists primarily of a specified share of the tuition and fees paid to our clients by students in the programs we enable, which we believe aligns our interests with those of our clients. This revenue model, combined with long contractual terms typically between 10 and 15 years, enables us to make the investment in technology, integration, content production, program marketing, student and faculty support and other services necessary to create large, successful programs. In addition, a significant percentage of our annual revenue is related to students returning to our clients’ programs after their first semester. In the twelve months ended December 31, 2016, 62% of our revenue was related to students who had enrolled and completed their first semester prior to the start of the year. We believe this high percentage of revenue attributable to returning students contributes to the predictability and recurring nature of our business.

We have achieved significant growth in a relatively short period of time. For the years ended December 31, 2016, 2015 and 2014, our revenue was $205.9 million, $150.2 million and $110.2 million, respectively. For the years ended December 31, 2016, 2015 and 2014, our net losses were $20.7 million, $26.7 million and $29.0 million, respectively; and our Adjusted EBITDA, a non-GAAP measure, was $4.5 million, a loss of $6.6 million and a loss of $14.8 million, respectively. For a reconciliation of Adjusted EBITDA to net loss, see “Selected Financial Data—Adjusted EBITDA.” From our inception through December 31, 2016, more than 24,000 unique individuals have enrolled as students in our clients’ programs, and 83% of students who have entered these programs have either graduated or remain enrolled. By the time the last of these individuals graduate or leave our clients’ programs, we estimate that they will have generated more than $1.5 billion in total program tuition and fees for our clients.

Our Approach

Our approach to providing our solutions to leading nonprofit colleges and universities is as follows:

• **Data-Driven Approach to Program Selection.** Through our experience launching and operating programs with leading nonprofit colleges and universities, we have developed a proprietary program-selection algorithm to drive the process for identifying new programs and clients. Our algorithm draws on a wide variety of data including the operating history of our existing programs, and is based on key market variables including the existing market size of a degree, potential student demographics and client characteristics. We believe our approach to identifying potential programs enables us to systematically identify degrees at colleges and universities in specific geographic regions that we believe have the highest probability of success. Not only does it enable us to deploy capital with greater confidence, it also provides our clients with greater assurance of, and visibility into, program success.

• **Long-Term Relationships.** Our client relationships are characterized by close, ongoing collaboration with faculty and administration, as well as a deep integration between our clients’ academic missions and operations and our solutions. Our compensation from our clients consists primarily of a specified share of the tuition and fees paid to our clients by students in the programs we enable, which we believe aligns our interests with those of our clients. This revenue model, combined with long contractual terms, enables us to make the investment in technology, integration, content production, program marketing, student and faculty support and other services necessary to create large, successful programs.

• **Bundled Technology and Services with a Focus on Quality.** We believe that our solutions offer extensive features, high-quality customer support, and the ability to support synchronous and asynchronous learning at scale. Our technology-enabled services are tightly integrated with our SaaS technology and together they provide a broad set of capabilities that would otherwise require the purchase of multiple, disparate point solutions, and the employment of significant human resources and expertise.

• **Driving High Quality Student Outcomes.** We are committed to delivering the technology and services required to ensure that every student and faculty member is fully supported throughout the life of each program. This model is designed to enable our clients to deliver academic programs that align with their brands and produce positive student outcomes, not only in educational achievement but also in terms of the following key measures of success.

  • **Net Promoter Score.** We regularly conduct Net Promoter Score® surveys with the students in each of our client programs. Net Promoter Score is a commonly used measure of customer loyalty and satisfaction. We believe that the favorable scores typically received demonstrate that we deliver our solutions in an effective and user-friendly manner.

  • **Retention.** Our model is designed to support student satisfaction with, and retention in, our clients’ programs. Through December 31, 2016, 83% of students who have ever entered our clients’ programs have either graduated or remain enrolled.

• **First Attempt Board Pass Rates.** In client programs that lead to licensure, we track and measure first attempt board pass rates to ensure that students in our client programs are achieving their desired goals. In 2015, the first attempt board pass rate in Georgetown University’s family nurse practitioner program was 97%.

• **Attractive Financial Model with Significant Predictability and Visibility.** We believe our financial model delivers significant operating leverage and visibility. Given the long-term nature of our contracts and the ongoing revenue we receive from our program selection algorithm, we are able to benefit from increasing enrollments in clients’ programs as those programs mature, leading to both revenue growth and expanding operating margins. In addition, we believe the significant portion of our revenue that is typically attributable to returning students contributes to the predictability and recurring nature of our business.

• **Data-Driven Approach to Marketing.** We believe that our shared marketing funnel of prospective students across our client programs in the same or similar degree verticals delivers marketing leverage that allows us to acquire additional students for the same cost. The revenue generated by those additional students allows us to deploy additional marketing spend for programs in that degree vertical to acquire even more students for those programs. In addition, we use data analytics and machine learning to ensure that our marketing efforts are focused on finding prospective students for the right programs at times when conversion is more likely.

Our Growth Strategy

We intend to continue our industry leadership as a provider of cloud-based SaaS technology and technology-enabled services that enable leading nonprofit colleges and universities to deliver education online. Our approach to growth is disciplined and focused on long-term success. The principal elements of our strategy are to:

• **Add Programs in New Graduate Degree Verticals.** Add graduate-level programs with new and current clients in new degree verticals within our core market of selective colleges and universities.
• Add Programs in Current Graduate Degree Verticals. Add graduate-level programs with new and current clients in degree verticals in which we have existing programs. We believe this approach, which we refer to as our Multiple Program Vertical strategy, will enable us to leverage our program marketing investments across multiple client programs within specific academic disciplines, expanding the number of students who can access high-quality educations and significantly decreasing student acquisition costs within those disciplines.

• Increase Enrollment at Existing Clients’ Programs. Increase student enrollments within the existing programs we enable for our clients. We will seek to accomplish this by acquiring an increasing number of students for our clients’ existing degree programs and by diversifying and innovating our degree offerings within a program.

• Grow International, Undergraduate and Non-Degree Presence. We believe that there is significant international demand for our solutions as colleges and universities worldwide seek to extend their brands by accessing the growing global market for higher education. We also believe that there may be significant opportunities in the future to offer additional high-quality digital education experiences to undergraduate students, and students seeking non-degree alternatives, such as certificates. As we evaluate these growth strategies, we periodically consider, and are currently considering, acquisitions or investment opportunities in complementary businesses, joint ventures, services and technologies and intellectual property rights in an effort to expand our product offerings outside of our core business, extend our technological leadership or expand the markets in which we operate. We expect to continue to evaluate, and may enter into, acquisitions and investments in the future as opportunities are presented.

Our Solutions

Our solutions consist of our cloud-based SaaS technology fused with technology-enabled services, which we optimize with data analysis and machine learning techniques. This suite of technology and services allows our clients’ programs to expand and operate at scale, and provides the comprehensive infrastructure colleges and universities need to attract, enroll, educate, support and graduate their students.

Proprietary, Cloud-Based SaaS Technology

Online Campus

Our innovative online learning environment, Online Campus, enables our clients to offer high-quality educational content together with instructor-led classes in a live, intimate and engaging setting, averaging 12 students per session, all accessible through proprietary web-based and mobile applications. Online Campus allows our clients to provide a personalized learning environment for faculty and students as well as a robust online educational community.

Online Campus powers the following:

• Virtual, Live Classes and Groups. Online Campus enables a variety of live, small-group class sessions that are accessed online. Through Online Campus, instructors can simultaneously lead video group discussions, customize the virtual classroom to their individual styles and display a variety of documents, images, charts, notes and videos. Additionally, Online Campus is available for students to collaborate in planned or ad hoc study or work groups, regardless of day or time.

• Delivery of High-Quality, Engaging Content. Through Online Campus, we and our clients collaboratively create, publish and deliver video and other asynchronous content, interactive course lectures, individual and group assignments and assessments. We have developed technology solutions to augment our content delivery capabilities, including our Bi-Directional Learning Tool, a technology we initially created to facilitate the Socratic method of teaching law.

This technology enhances interaction between a faculty member and students, both individually and as a group, by blending asynchronous content and real-time student responses in the online environment.

Integrated Back-End Applications

Our integrated back-end applications launch, operate and support our clients’ programs, and seamlessly communicate between their existing university information technology systems and our information technology systems. In addition, these applications provide clients with real-time data and deep analytical insight related to student performance and engagement, student satisfaction, and enrollment.

Our back-end applications include the following:

• New Program Launch and Operations. We use an application we call Central Park, which unifies our suite of applications and better automates the standup of technology infrastructure for new client programs, so that we can launch new client programs more quickly and efficiently. In addition, Central Park has a graphic interface that allows non-technology oriented employees to create a program website, initiate online applications for students and build Online Campus for a program. We also use an application we call Uber-Conf, which translates program-specific code to simplify program-specific complexity. We believe that this application simplifies not only the effort we are required to expend in launching new programs, but also enables non-technology oriented employees to support the data analytics and operational needs across our business.

• University Systems Integration. We use an application we call Port Authority, which integrates our technology with our clients’ information technology systems. This application automates the student enrollment process, which allows us to more efficiently and quickly enroll students, thereby increasing our student-to-support staff ratios, while reducing the potential for human error.

• Content Management System. Our content management system enables us and our clients to author, review and deploy the asynchronous content for their online programs through Online Campus. The content management system includes a set of project management and collaboration tools that allow our clients’ faculty to seamlessly integrate their work with that of our course production and content development staff.

• Admissions Application Processing Portal. Our proprietary admissions application system, known as the Online Application and Recommendation System, or OARS, automates the online admission application process for prospective students of our clients’ programs. OARS is integrated with the primary marketing site for each program, directly funneling prospective students into each client’s existing admissions application process and providing automated workflow for that process. Additionally, our system automates faculty review and student notification to improve the efficiency of these processes.

• Customer Relationship Management. We have developed customer relationship management deployments configured for each client’s specific program characteristics. Each deployment serves as the data hub for scheduling, student acquisition, student application, faculty admissions review, enrollment and student support for each program. Our clients and our staff, as appropriate, can review, maintain and track this information to ensure that functions driven both by the client and by us are properly coordinated.
Technology-Enabled Services

We offer a comprehensive suite of technology-enabled services, many of which are optimized with data analytics and machine learning techniques, that support the complete lifecycle of a higher education program. These services include the following:

• **Content Development.** Leveraging our content management system, our content development staff works closely with our clients’ faculty in a collaborative process to produce high-quality, engaging online coursework and content. We produce scripted and casual videos in studio and on location, transform static content into interactive materials and ultimately assemble customized online course materials for delivery through our Online Campus. While our clients retain control of and responsibility for the curricula, we work closely with them to present the content in a highly engaging manner.

• **Student Acquisition.** Leveraging data analytics and machine learning techniques, we provide dedicated program marketing services to drive applications for each client program. Our marketing teams develop creative assets, such as websites related to the fields of study of our clients’ programs, and execute campaigns aimed at acquiring students cost-effectively. Our search engine optimization team supports our prospective student generation efforts across all of our clients’ programs. Our campaigns are focused on finding the right prospective student at the right time in his or her search.

• **Admissions Application Advising.** Leveraging our customer relationship management deployments and other technology, our program-dedicated teams work with prospective students as they consider and apply to a client program. Once a student has submitted a completed admissions application package through the OARS portal, it is routed to and reviewed by the university admissions office, which renders the final admission decision.

• **Student and Faculty Support.** We augment each student’s academic experience by assigning a dedicated advisor to provide ongoing individualized non-academic support. We also provide a dedicated support team that supports and trains university administration and faculty on how to use our solutions to facilitate outstanding live instruction.

• **In-Program Student Field Placements.** Our field placement team is dedicated to securing in-program field placement opportunities for students enrolled in our clients’ programs. Leveraging a geo-location database, we work closely with faculty to identify and approve sites that meet curriculum requirements. Through December 31, 2016, our placement team has facilitated nearly 32,000 individual in-program field placements in approximately 25,000 organizations around the world.

• **Accessibility.** For students with disabilities, we are able to facilitate accessibility across our solutions. These include providing screen-reading technology, captioning, subtitling and voice-over descriptions for asynchronous content, and sign language interpretation and real time captioning for live classes.

• **State Authorization Services.** Each online program we enable for a client must comply with state authorization requirements in each state where the students enrolled in the program reside. We work with most of our clients to identify and satisfy state authorization requirements.

• **Immersion Support.** Many of our client programs require students to attend immersions and intensive residencies where students travel to a client’s physical campus and other locations, where they can engage in collaborative learning experiences with their classmates and professors, and develop invaluable personal and professional relationships. We provide the resources and technology to support our clients in facilitating these experiences.

• **Faculty Recruiting.** With our solutions our clients can identify and employ highly qualified teaching faculty without geographic constraint. We effectively act as a search firm for our clients, attracting, cultivating and vetting a pool of faculty candidates for our clients. Our clients make all faculty hiring decisions, but we support them in creating a broader pool of potential faculty than they could on their own.

**Benefits of Using Our Solutions**

Using our solutions, our clients can:

• **Extend Institutional Mission and Reach.** Extend their brands and fulfill their missions by delivering high-quality education programs online to students anywhere in the world while maintaining their academic rigor and admissions standards. Our clients are able to reach students who otherwise may not have been able to enroll in their programs, thereby furthering their marketplace recognition and extending their institutional presence beyond geographic limitations.

• **Increase Revenue.** Increase their overall enrollments significantly, thereby growing their tuition revenue. Students who enroll in the programs we enable generally pay the same tuition as on-campus students.

• **Increase Scalability.** Extend beyond their physical boundaries and capacity constraints to scale programs without the investment typically required to acquire, educate and service incremental on-campus students. Our clients can focus on providing high quality, rigorous education at scale without needing to address the increased operational complexity related to delivering online education to students anywhere in the world.

• **Deliver a Differenitiated, Engaging Learning Environment.** Leverage advanced software technology to enable highly interactive learning experiences through Online Campus. Instructors are able to lead live, intimate discussions in seminar-style classes with an average of 12 students per session. Students are able to access Online Campus using proprietary web-based and mobile applications and engage with rich, multimedia-based educational content. We believe that this dynamic, interactive learning environment is more engaging and impactful than traditional educational environments or other approaches to online education, encouraging students to remain in our clients’ programs through graduation.

• **Utilize Ongoing Data and Analytical Insight.** Track the engagement and learning outcomes of their online students to a significantly greater degree than for their on-campus students. Through our analytics and reporting functions, clients can follow key data related to asynchronous student participation, class attendance, homework submission and overall engagement, and can provide timely intervention or support services as appropriate. This helps clients improve learning outcomes for their students.

• **Increase Speed to Market.** Implement and scale an online degree program faster than they could on their own. We work closely with our clients’ faculty to develop engaging asynchronous multimedia course content, and apply our sophisticated digital marketing expertise to attract potential students for our clients’ programs. Our clients do not need to spend time installing servers, networking equipment or other infrastructure to ensure a scalable, reliable program offering.

**Technology**

Our cloud-based SaaS technology is designed to deliver an exceptional end-user experience in a secure environment. To increase the speed at which we develop and enhance our solutions, we use...
open-source technology and custom development of our own instructional design tools and learning components.

Our technology stack resides completely in the cloud, with a high level of security and horizontal scalability. We work with Amazon Web Services, our cloud hosting provider, to ensure high levels of redundancy and general preparedness. We have the ability to manage hundreds of server instances in Amazon Web Services and elsewhere through our automated deployment technologies.

Our application programming interface, or API, is at the core of all of our SaaS technology providing a standardized way to provision, manage, engage and deliver content to students, faculty and administrators. The API supports advanced analytics that allow us to search and analyze student usage data to evaluate course content, inform continuous technology development and improve user experiences. The API manages authentication and access for our entire technology stack and is designed to manage and interface with new technologies as they are introduced.

Our development process follows best practices in web security, including formal design reviews by security consultants, threat modeling and risk assessments. All deployed software undergoes recurring penetration testing performed by certified industry experts. Our security risk assessment reviews begin during the design phase and continue through ongoing operations.

All of the applications and application components within our SaaS technology are designed from the ground up to produce significant, readable and interpretable data to centralized systems in the form of monitors and logs that allow us to proactively identify and mitigate potential capacity, performance and security issues. We design our SaaS technology to industry security standards as well as requirements set out in current applicable regulations and standards.

New Program Pipeline

We dedicate the bulk of our program marketing and sales efforts to acquiring students for our clients’ programs, and have developed highly sophisticated internet-based program marketing and student acquisition capabilities. However, we do maintain a small sales team targeted at new client or program acquisition. Our new clients and programs are largely generated through a direct approach to selected colleges and universities and we use a proprietary program selection algorithm to develop our pipeline of target programs based on a combination of degree vertical, college or university and geographic region. This data-centric model uses internally generated, publicly available and purchased data on degree vertical size, selectivity, student demographics, competition and other factors to identify opportunities we believe will have the best prospects of long-term success.

Clients

Our clients are leading nonprofit colleges and universities who primarily use our solution to offer full graduate degree programs online. We have grown our client and program base significantly since our inception from one client with one program in 2008 to 17 clients with 38 programs today. A full listing of all 38 announced programs can be found at investor.2u.com. Through our uncompromising focus on quality and deep understanding of the higher education environment, we believe we have become not only a valued provider of the technology and services our clients use to implement and manage their critical online education operations, but also a trusted steward of their brands. We currently have announced long-term client contracts with 17 universities and colleges to operate a total of 38 programs. At the end of 2016, we had launched 24 programs in 17 different degree verticals. In 2017, we plan to launch the following ten programs:

<table>
<thead>
<tr>
<th>University/School</th>
<th>Program Name</th>
<th>Expected Program Launch Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>The George Washington University—Milken Institute School of Public Health</td>
<td>HealthInformatics@GW</td>
<td>January 2017</td>
</tr>
<tr>
<td>Syracuse University—Maxwell School of Citizenship and Public Affairs</td>
<td>ExecutiveMBA@Syracuse</td>
<td>July 2017</td>
</tr>
<tr>
<td>University of Southern California—Jimmy Irvine and Andre Young Academy for Arts, Technology and the Business of Innovation</td>
<td>Design@USC</td>
<td>August 2017</td>
</tr>
<tr>
<td>Vanderbilt University—Peabody College of Education and Human Development</td>
<td>Peabody Online</td>
<td>September 2017</td>
</tr>
<tr>
<td>Pepperdine University—School of Law</td>
<td>Law@Pepperdine</td>
<td>September 2017</td>
</tr>
<tr>
<td>New York University—Steinhardt School of Culture, Education, and Human Development</td>
<td>OT@NYU</td>
<td>September 2017</td>
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<tr>
<td>New York University—Steinhardt School of Culture, Education, and Human Development</td>
<td>Counseling for Mental Health and Wellness</td>
<td>September 2017</td>
</tr>
<tr>
<td>Syracuse University</td>
<td>DataScience@Syracuse</td>
<td>October 2017</td>
</tr>
<tr>
<td>University of Dayton—School of Business Administration</td>
<td>MBA@Dayton</td>
<td>October 2017</td>
</tr>
<tr>
<td>Pepperdine University—Graduate School of Education and Psychology</td>
<td>Psychology@Pepperdine</td>
<td>October 2017</td>
</tr>
</tbody>
</table>

Our long-term client contracts do not include termination rights for convenience. Most contracts impose liquidated damages for a client’s non-renewal, unless the client otherwise terminates due to our uncured breach. Each of our clients owns all of the academic content that we help them develop, although we are generally not obligated to develop content that will be functional anywhere but within Online Campus.

Our contracts also set forth the parties’ respective rights to offer competitive programs. For example, some contracts permit us to offer competitive programs with other schools whose potential students are not academically qualified or otherwise interested in the program we offer with our client. Other contracts prohibit us from offering competitive programs with a specific list of schools, whether a certain number as listed on U.S. News & World Report’s “best” schools list or a specifically enumerated list of schools negotiated with our client. In addition, any limitation on our ability to offer competitive programs becomes inapplicable if a client either refuses to scale the program to accommodate all students qualifying for admission into the program, or raises the program admissions standards above those at the time of contract execution. In addition, our contracts generally prohibit our clients from offering any online competitive program. Most of our more recent contracts either do not restrict our ability to offer competitive programs or provide for only limited restrictions.

Our two longest running programs, launched in 2009 and 2010, are with the University of Southern California, or USC. For the years ended December 31, 2016 and 2015, 54% and 43%, respectively, of our revenue was derived from these two programs. We expect that these programs will continue to account for a large portion of our revenue until our other client programs become more mature and achieve significantly higher enrollment levels.

We have a contract with the USC Rossier School of Education, or Rossier, to enable various education programs, including a Master of Arts in Teaching program, or MAT program, a Doctor of
Education program and a Master of Education in School Counseling program. We also have contracts with the USC Suzanne Dworak-Peck School of Social Work to enable both a Master of Social Work (MSW) program and a Master of Nursing program. We amended our contract with Rossier in April 2016 and our contract with the School of Social Work for the MSW program in November 2015. Under the terms of each amended contract, the initial terms expire on June 30, 2030, we are entitled to a specified percentage of the net program proceeds, which is reduced over time, and we agreed to provide fixed and contingent cash payments over time.

Both contracts provide for automatic renewal for successive three-year terms unless either party gives one-year notice of non-renewal, and liquidated damages if Rossier or the School of Social Work, as the case may be, fails to renew its respective contract after any term.

Our programs with Simmons College accounted for 18% and 16% of our revenue for the years ended December 31, 2016 and 2015, respectively. Our programs with the University of North Carolina accounted for 11% and 12% of our revenue for the years ended December 31, 2016 and 2015, respectively.

Competition

The overall market for technology solutions that enable higher education providers to deliver education online is highly fragmented, rapidly evolving and subject to changing technology, shifting needs of students and educators and frequent introductions of new methods of delivering education online. Several competitors provide solutions that compete with some of the capabilities of our solutions. Two such competitors, EmbanetCompass and Deltak, were acquired in 2012 by Pearson and John Wiley & Sons, respectively, both of which are large education and publishing companies. There are also several private companies, including HotChalk and Everspring Partners, providing some or all of the services we provide, and these companies may choose to pursue some of the institutions we target. In addition, nonprofit colleges and universities may elect to continue using or develop their own online learning solutions in-house.

We expect that the competitive landscape will expand as the market for online programs at nonprofit institutions matures. We believe the principal competitive factors in our market include the following:

• brand awareness and reputation;
• ability of online programs to deliver desired student outcomes;
• robustness and evolution of technology offering;
• breadth and depth of service offering;
• ability to invest in launching and operating programs;
• expertise in program marketing, student acquisition and student retention;
• quality of user experience;
• ease of deployment and use of solutions;
• level of customization, configurability, integration, security, scalability and reliability of solutions; and
• quality of client base and track record of performance.

We believe our competitors favorably on the basis of these factors. Our ability to remain competitive will depend, to a great extent, upon our ability to consistently deliver high-quality technology solutions, meet client needs for content development, and acquire, support and retain students who achieve high-quality outcomes.

Intellectual Property

We protect our intellectual property by relying on a combination of copyrights, trademarks, trade secrets, patent applications and contractual agreements. For example, we rely on trademark protection in the United States and various foreign jurisdictions to protect our rights to various marks, including 2U, NO BACK ROW, and other distinctive logos associated with our brand. We also have two patent applications pending in the United States, which are directed to computer-implemented processes that facilitate asynchronous student responses to teacher questions.

We ensure that we own intellectual property created for us by signing agreements with employees, independent contractors, consultants, companies, and any other third party that creates intellectual property for us that assign any intellectual property rights to us.

Portions of our solutions rely upon third-party licensed intellectual property.

We have also established business procedures designed to maintain the confidentiality of our proprietary information, including the use of confidentiality agreements with employees, independent contractors, consultants and companies with which we conduct business.

We continue to evaluate developing and expanding our intellectual property rights in patents, trademarks and copyrights, as available through registration in the United States and internationally.

For important additional information related to our intellectual property position, please review the information set forth in "Risk Factors—Risks Related to Intellectual Property."

Education Laws and Regulations

The higher education industry is heavily regulated. Institutions of higher education that award degrees and certificates to signify the successful completion of an academic program are subject to regulation from three primary entities: the U.S. Department of Education, or DOE, accrediting agencies and state licensing authorities. Each of these entities promulgates and enforces its own laws, regulations and standards, which we refer to collectively as education laws.

We contract with postsecondary institutions that are subject to education laws. In addition, we ourselves are required to comply with certain education laws as a result of our role as a service provider to institutions of higher education, either directly or indirectly through our contractual arrangements with clients. Our failure, or that of our clients, to comply with education laws could adversely impact our operations. As a result, we work closely with our clients to maintain compliance with education laws.

Federal Laws and Regulations

Under the Higher Education Act of 1965, as amended, or the HEA, institutions offering postsecondary education must comply with certain laws and related regulations promulgated by the DOE in order to participate in the Title IV federal student financial assistance programs. All of our clients participate in the Title IV programs.

The HEA and the regulations promulgated thereunder are frequently revised, repealed or expanded. Congress historically has reauthorized and amended the HEA in regular intervals, approximately every five to seven years. The re-authorization process is currently under way.

The re-authorization of the HEA could alter the regulatory landscape of the higher education industry, and thereby impact the manner in which we conduct business and serve our clients. In
addition, the DOE is independently conducting an ongoing series of rulemakings intended to assure the integrity of the Title IV programs. The DOE also frequently issues formal and informal guidance instructing institutions of higher education and other covered entities how to comply with various federal laws and regulations. DOE guidance is subject to frequent change and may impact our business model.

Although we are not considered an institution of higher education and we do not directly participate in Title IV programs, we are required to comply with certain regulations promulgated by the DOE as a result of our role as a service provider to institutions that do participate in Title IV programs. These include, for example, regulations governing student privacy under Family Educational Rights and Privacy Act, or FERPA. The most material obligations stem from new rules and revisions to existing regulations promulgated by the DOE in 2010 as part of the so-called “program integrity” rules.

While the program integrity rules were targeted at for-profit institutions of higher education, most apply equally to traditional colleges and universities such as our clients, and they apply in particular to institutions contracting with outside vendors to provide services, particularly in connection with distance education. These rules include principally the incentive compensation rule, the misrepresentation rule, the written arrangements rules and state authorization requirements. The more significant program integrity rules applicable to us or our clients are discussed in further detail below.

Incentive Compensation Rule

The HEA provides that any institution that participates in the Title IV federal student financial assistance programs must agree with the DOE that the institution will not provide any commission, bonus or other incentive payment to any person or entity engaged in any student recruiting or admission activities.

As part of the program integrity rules, the DOE issued revised regulations regarding incentive compensation effective July 1, 2011. Under the revised regulations, each higher education institution agrees that it will not “provide any commission, bonus, or other incentive payment based in any part, directly or indirectly, upon success in securing enrollments or the award of financial aid, to any person or entity who is engaged in any student recruitment or admission activity, or in making decisions regarding the award of title IV, HEA program funds.” Pursuant to this rule, we are prohibited from offering our covered employees, which are those involved with or responsible for recruiting or admissions activities, any bonus or incentive-based compensation based on the successful recruitment, admission or enrollment of students into a postsecondary institution.

In addition, the revised rule initially raised a question as to whether our company itself, as an entity, is prohibited from entering into tuition revenue-sharing arrangements with clients. On March 17, 2011, the DOE issued official agency guidance, known as a “Dear Colleague Letter,” or the DCL, providing guidance on this point. The DCL states that “[t]he Department generally views payment based on the amount of tuition generated as an indirect payment of incentive compensation based on success in recruitment and therefore a prohibited basis upon which to measure the value of the services provided” and that “[i]t is true regardless of the manner in which the entity compensates its employees.” The DCL also provides an important exception to the ban on tuition revenue-sharing arrangements between institutions and third parties. According to the DCL, the DOE does not consider payment based on the amount of tuition generated by an institution to violate the incentive compensation ban if the payment compensates an “unaffiliated third party” that provides a set of “bundled services” that includes recruitment services, such as those we provide. Example 2-B in the DCL is described as a “possible business model” developed “with the statutory mandate in mind.”

Example 2-B describes the following as a possible business model:

“A third party that is not affiliated with the institution it serves and is not affiliated with any other institution that provides educational services, provides bundled services to the institution including marketing, enrollment application assistance, recruitment services, course support for online delivery of courses, the provision of technical, placement services for internships, and student career counseling. The institution may pay the entity an amount based on tuition generated for the institution by the entity’s activities for all the bundled services that are offered and provided collectively, as long as the entity does not make prohibited compensation payments to its employees, and the institution does not pay the entity separately for student recruitment services provided by the entity.”

The DCL guidance indicates that an arrangement that complies with Example 2-B will be deemed to be in compliance with the incentive compensation provisions of the HEA and the DOE’s regulations. Our business model and contractual arrangements with client institutions closely follow Example 2-B in the DCL. In addition, we assure that none of our “covered employees” is paid any bonus or other incentive compensation in violation of the rule.

Because the bundled services rule was promulgated in the form of agency guidance issued by the DOE in the form of a DCL and is not codified by statute or regulation, the rule could be altered or removed without prior notice, public comment period or other administrative procedural requirements that accompany formal agency rulemaking. Similarly, a court could invalidate the rule in an action involving our company or one of our clients, or in action that does not involve our company or clients. The revision or invalidation of the bundled services rule by Congress, the DOE or a court could require us to change our business model.

Misrepresentation Rule

The HEA prohibits an institution that participates in the Title IV programs from engaging in any “substantial misrepresentation” regarding three broad subject areas: (1) the nature of the school’s education programs, (2) the school’s financial charges and (3) the employability of the school’s graduates. In 2010, as part of the program integrity rules, the DOE revised its regulations in order to significantly expand the scope of the misrepresentation rule. Although some of the DOE’s most expansive amendments to the misrepresentation rule were overturned by the courts in 2012, most of the 2010 amendments survived and remain in effect.

Under the new rule, “misrepresentation” is defined as any false, erroneous or misleading statement, written, visual or oral. This includes even statements that “have the likelihood or tendency to deceive.” Therefore, a statement need not be intentionally deceitful to qualify as a misrepresentation. “Substantial misrepresentation” is defined loosely as a misrepresentation on which the person to whom it was made could reasonably be expected to rely, or has reasonably relied, to that person’s detriment.

The new regulation also expands the scope of the rule to cover statements made by any representative of an institution, including agents, employees and subcontractors, and statements made directly or indirectly to any third party, including state agencies, government officials or the public, and not just to students or prospective students. Violations of the misrepresentation rule are subject to various sanctions by the DOE and violations may be used as a basis for legal action by third parties. Similar rules apply under state laws or are incorporated in institutional accreditation standards and the Federal Trade Commission (FTC) applies similar rules prohibiting any unfair or deceptive marketing practices to the education sector. As a result, we and our employees and subcontractors, as agents of our clients, must use a high degree of care to comply with such rules and are prohibited by contract from making any false, erroneous or misleading statements about our clients. To avoid an issue under the misrepresentation rule and similar rules, we assure that all marketing materials are approved in advance by our clients before they are used by our employees and we carefully monitor our subcontractors.
Accreditation Rules and Standards

Accrediting agencies primarily examine the academic quality of the instructional programs of an educational institution, and a grant of accreditation is typically viewed as confirmation that an institution or an institution’s programs meet generally accepted academic standards. Accrediting agencies also review the administrative and financial operations of the institutions they accredit to ensure that each institution has the resources to perform its educational mission. The DOE also relies on accrediting agencies to determine whether institutions’ educational programs qualify the institutions to participate in Title IV programs.

In addition to institutional accreditation, colleges and universities may require specialized programmatic accreditation for particular educational programs. Many states and professional associations require professional programs to be accredited, and require individuals to have graduated from accredited programs in order to sit for professional license exams. Programmatic accreditation, while not a sufficient basis for institutional Title IV Program certification by the DOE, assists graduates to practice or otherwise secure appropriate employment in their chosen field. Common fields of study subject to programmatic accreditation include teaching and nursing.

Although we are not an accredited institution and are not required to maintain accreditation, accrediting agencies are responsible for reviewing an accredited institution’s third-party contracts with service providers like us and may require an institution to obtain approval from or to notify the accreditor in connection with such arrangements. One purpose of the notification and approval requirements is to verify that the accredited institution remains responsible for providing academic instruction leading to a credential and provides oversight of other activities undertaken by third parties like us that are within the scope of its accreditation. We work closely with our clients to assure that the standards of their respective accrediting agencies are met and are not adversely impacted by us.

Accrediting agencies are also responsible for assuring that any “written arrangements” to outsource academic instruction meet accrediting standards and related regulations of the DOE. Our operations are generally not subject to such “written arrangements” rules because academic instruction is provided by our client institutions and not by us.

State Laws and Regulations

Each state has at least one licensing agency responsible for the oversight of educational institutions operating within its jurisdiction. Continued approval by such agencies is necessary for an institution to operate and grant degrees, diplomas or certificates in those states. Moreover, under the HEA, approval by such agencies is necessary to maintain eligibility to participate in Title IV programs. State attorneys general are also active in enforcing education laws, and the level of regulatory oversight varies substantially from state to state.

We and our clients may be subject to regulation in each state in which we or they own facilities, provide distance education or recruit students. State laws establish standards for, among other things, student instruction, qualifications of faculty, location and nature of facilities, recruiting practices and financial policies. The need to comply with applicable state laws and regulations may limit or delay our ability to market programs or offer new degree programs of our clients.

State regulatory requirements for online education are inconsistent between states, change frequently and, in some instances, are outdated. In addition, the interpretation of state authorization regulations is subject to substantial discretion by the state agency responsible for enforcing the regulations. Some states have enacted legislation or issued regulations that specifically address online educational programs, some of which may affect our operations.

As part of the program integrity rules, the DOE required, among other things, that an institution offering distance learning or online programs secure the approval of those states which require such approval and provide evidence of such approval to the DOE upon request. This regulation dramatically increased the importance of state authorization because failure to obtain it could result in an obligation to return federal funds received by an institution. The U.S. Court of Appeals for the District of Columbia struck down the regulations requiring proof of state approval for online education programs in 2012 on procedural grounds; however, the DOE promulgated similar replacement regulations in December 2016, with an effective date of July 1, 2018. However, it is the policy of DOE to require proof of all necessary state approvals when an institution seeks to renew its authorization to participate in the Title IV programs.

We monitor state law developments closely and work closely with our clients to assist them with obtaining any required approvals.

Other Laws

Our activities on behalf of institutions are also subject to other federal and state laws. These regulations include, but are not limited to, consumer marketing and unfair trade practices laws and regulations, including those promulgated and enforced by the FTC, as well as federal and state data protection and privacy requirements.

Employees

As of December 31, 2016, we had 1,119 full-time employees and 90 part-time employees. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We consider our relations with our employees to be good.

Facilities

Our headquarters are located in Lanham, Maryland where we occupy approximately 153,000 square feet under a lease that expires in 2028. We also currently lease approximately 94,000 square feet in Landover, Maryland, in connection with our former corporate headquarters, which expires in July, 2018.

In February 2017, we signed a lease for new office space in Brooklyn, New York, which we expect to occupy in 2018 after we vacate our current offices in New York City. The lease covers three floors totaling approximately 80,000 square feet and will expire approximately eleven years and nine months after the lease commencement date. We expect that the new space will allow us to accommodate our growth in the local area.

We also currently lease an aggregate of approximately 113,000 square feet of space in New York, California, Colorado, North Carolina, Virginia and Hong Kong. We believe that our current facilities are suitable and adequate to meet our ongoing needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Legal Proceedings

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any material legal proceedings, nor are we a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows.
Our business depends heavily on the adoption by colleges and universities of online delivery of their programs. If we fail to attract new colleges and universities as clients, our revenue growth and profitability may suffer.

The success of our business depends in large part on our ability to enter into agreements with additional nonprofit colleges and universities for their offering of degree programs online. In particular, to engage new clients, we need to convince nonprofit colleges and universities, many of which have been educating students in generally the same types of on-campus programs for hundreds of years, to invest significant time and resources to adjust the manner in which they teach students for an online degree program. The delivery of degree-granting programs online at leading nonprofit colleges and universities is nascent, and many administrators and faculty members have expressed concern regarding the perceived loss of control over the education process that might result from offering content online, as well as skepticism regarding the ability of colleges and universities to provide high-quality education online that maintains the standards they set for their on-campus programs. It may be difficult to overcome this resistance, and there can be no assurance that online programs of the kind we develop with our clients will ever achieve significant market acceptance.

Our financial performance depends heavily on our ability to acquire qualified potential students for our clients’ programs, and our ability to do so may be affected by circumstances beyond our control. Building awareness of our clients’ programs is critical to our ability to acquire prospective students for our clients’ programs and generate revenue. A substantial portion of our expenses is attributable to program marketing and sales efforts dedicated to attracting potential students to our clients’ programs. Because we generate revenue based on a portion of the tuition and fees that our clients bill to the students enrolled in their programs, it is critical to our success that we identify prospective students who meet our clients’ admissions criteria in a cost-effective manner, and that enrolled students remain active in our clients’ programs.

The following factors, many of which are largely outside of our control, may prevent us from successfully driving and maintaining student enrollment in our clients’ programs in a cost-effective manner or at all:

• Negative perceptions about online learning programs. As a non-traditional form of education delivery, prospective students will subject our clients’ online degree programs to increased scrutiny. Online learning programs that we or our competitors offer may not be successful or operate efficiently, and new entrants to the field of online learning also may not perform well. Such underperformance could create the perception that online programs in general are not an effective way to educate students, whether or not our clients’ programs achieve satisfactory performance, which could make it difficult for us to successfully attract prospective students for our clients’ programs. Students may be reluctant to enroll in online programs for fear that the learning experience may be substandard, that employees may be adverse to hiring students who received their education online, or that organizations granting professional licenses or certifications may be reluctant to grant them based on degrees earned through online education.

• Ineffective program marketing efforts. We invest substantial resources in developing and implementing data-driven program marketing strategies that focus on identifying the right potential students to target. Our program marketing efforts make substantial use of search engine optimization, paid search and custom website development and deployment to implement data-driven program marketing strategies that focus on identifying the right potential students to target. Our program marketing efforts make substantial use of search engine optimization, paid search and custom website development and deployment to implement data-driven program marketing strategies that focus on identifying the right potential students to target. Our program marketing efforts make substantial use of search engine optimization, paid search and custom website development and deployment to implement data-driven program marketing strategies that focus on identifying the right potential students to target. 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• Damage to client reputation. Because we market a specific client degree program to potential students, the reputations of our clients are critical to our ability to enroll students. Many factors affecting our clients’ reputations are beyond our control and can change over time, including
their academic performance and ranking among nonprofit educational institutions offering a particular degree program.

- Lack of interest in the degree offered by the program. We may encounter difficulties attracting qualified students for degree programs that are not highly desired or that are relatively new within their fields. Macroeconomic conditions beyond our control may diminish interest in employment in a field, and that could contribute to lack of interest in degrees in the disciplines offered by our clients.

- Our lack of control over our clients’ admissions decisions. Even if we are able to identify prospective students for a program, there is no guarantee that students will be admitted to that program. Our clients retain complete discretion in their admissions decisions, and any changes to admissions standards, or inconsistent application of admissions standards, could affect student enrollment and our ability to generate revenue.

- Inability of students to secure funding. Like traditional college and university students, many of the students in our clients’ programs rely heavily on the availability of third-party financing to pay for the costs of their educations, including tuition. This tuition assistance may include federal or private student loans, scholarships and grants, or benefits or reimbursement provided by the students’ employers. Any developments that reduce the availability of financial aid for higher education generally, or for our clients’ programs in particular, could impair students’ abilities to meet their financial obligations, which in turn could result in reduced enrollment and harm our ability to generate revenue.

- General economic conditions. Student enrollment in our clients’ programs may be affected by changes in the U.S. economy and, to a lesser extent, by global economic conditions. An improvement in economic conditions in the United States and, in particular, an improvement in the U.S. unemployment rate, may reduce demand among potential students for higher educational services, as they may find adequate employment without additional education. Conversely, a worsening of economic and employment conditions may reduce the willingness of employers to sponsor higher educational opportunities for their employees or discourage existing or potential students from pursuing higher education due to a perception that there are insufficient job opportunities, increased economic uncertainty or other factors, any of which could adversely impact our ability to attract qualified students to our clients’ programs. If one or more of these factors reduces student demand for our clients’ programs, enrollment could be negatively affected, our costs associated with student acquisition and retention could increase, or both, any of which could materially compromise our ability to grow our revenue or achieve profitability. These developments could also harm our reputation and make it more difficult for us to engage additional clients for new programs, which would negatively impact our ability to expand our business.

Disruption to or failures of our SaaS technology could reduce client and student satisfaction with our clients’ programs and could harm our reputation.

The performance and reliability of our SaaS technology is critical to our operations, reputation and ability to attract new clients, as well as our student acquisition and retention efforts. Our clients rely on this technology to offer their programs online, and students access this technology on a frequent basis as an important part of their educational experience. Accordingly, any errors, defects, disruptions or failures performance problems with our SaaS technology could damage our or our clients’ reputations, decrease student satisfaction and retention and impact our ability to attract new students and clients. If any of these problems occur, our clients may, following notice and our failure to cure, terminate their agreements with us, or make indemnification or other claims against us. In addition, sustained or recurring disruptions in our SaaS technology could adversely affect our and our clients’ compliance with applicable regulations and accrediting body standards.

Our market may be limited based on the types of nonprofit colleges and universities we target for online degree programs.

We primarily market our integrated solution to selective nonprofit colleges and universities, a market that is necessarily limited. Some of the contracts we enter into with our clients contain limitations on our ability to contract with other institutions to offer the same degree program, and maintaining good relations with our clients may mean that we may be less likely to approach certain institutions that they regard as their direct competitors to offer similar programs, even if we are allowed to do so under our contracts. Moreover, because of the long-term nature of our client contracts, and because of the relationships of trust we strive to build with our current clients, we generally will not be able or willing to terminate our existing client relationships to pursue a competitive program with another college or university, even if it may prove to be more profitable to us. Instead, we may continue with a program that does not generate expected levels of revenue to us, or one from which we may not be able to fully recover the program marketing and sales expenses we incur in attracting students to enroll in the program, if, for example, the client limits enrollment in the program. As a result, the nature of our contracts and our relationships with our clients could restrict the overall revenue potential of our business.

We have agreed to incur and we may incur in the future, costs to terminate some or all of the exclusivity obligations in certain of our client contracts.

Certain of our client contracts limit our ability to enable competitive programs with other schools. We have determined that enabling some of these contractually prohibited competitive programs may be part of our business strategy. To eliminate some or all of the exclusivity obligations in certain clients’ contracts with us, we have agreed with certain clients to do some or all of the following: make fixed and contingent cash payments over time, reduce our revenue share over time, and/or make minimum investments in marketing under certain conditions.

We may determine in the future that enabling additional contractually prohibited competitive programs is desirable, and we may therefore agree with additional clients to incur costs similar to those above to reduce or eliminate the exclusivity obligations contained in their contracts with us.

If the competitive programs we ultimately enable fail to reach scale or cannot be scaled at a reasonable cost, or if we need to incur contingent costs in connection with our offering of competitive programs, our ability to grow our business and achieve profitability would be impaired.

Our clients may disagree with our decision to offer competitive programs under the contracts we have with them.

Our contracts with our clients include terms addressing the parties’ respective rights to offer competitive programs. For example, some of our contracts permit us to offer competitive programs with other schools whose potential students are not academically qualified or otherwise interested in the program we offer with that client. Some of our other contracts prohibit us from offering competitive programs with specific schools. In addition, any contract limitations on our ability to offer competitive programs are inapplicable if our client either refuses to scale the program to accommodate all students qualifying for admission into the program, or raises the program admissions standards above those described in the contract at the time it was executed. If we elect to offer competitive programs in reliance on these contractual provisions, our clients may disagree with our interpretation of those provisions or with our interpretation of the facts surrounding our decision to offer a competitive program. Any disagreement with our clients over our decision to offer competitive programs could result in claims for breach of contract and equitable relief, and could cause damage to our reputation and impair our ability to grow our business and achieve profitability.
Attracting new clients for the launch of new programs is complex and time-consuming. If we pursue unsuccessful opportunities, we may forego more profitable opportunities and our operating results and growth would be harmed.

The process of identifying specific degree programs at the selective nonprofit colleges and universities, and then negotiating contracts with potential clients, is complex and time-consuming. Because of the initial reluctance on the part of some nonprofit colleges and universities to embrace a new method of delivering their education services and the complicated approval process within universities, our sales process to attract and engage a new client can be lengthy. Depending on the particular college or university, we may face resistance from university administrators or faculty members during the process.

The sales cycle for a new degree program often spans one year or longer. In addition, our sales cycle can vary substantially from program to program because of a number of factors, including the client’s approval processes or disagreements over the terms of our offerings. We spend substantial effort and management resources on our new program sales efforts without any assurance that our efforts will result in the launch of a new program. If we invest substantial resources pursuing unsuccessful program opportunities, we may forego other more profitable client relationships, which would harm our operating results and growth.

To launch a new program, we must incur significant expense in technology and content development, as well as program marketing and sales, to identify and attract prospective students, and it may be several years, if ever, before we generate revenue from a new program sufficient to recover our costs.

To launch a new program, we must integrate components of our solutions with the various student information and other operating systems our clients use to manage functions within their institutions. In addition, our content development staff must work closely with that client’s faculty members to produce engaging online coursework and content, and we must commence student acquisition activities. This process of launching a new program is time-consuming and costly and, under our agreements with our clients, we are primarily responsible for the significant costs of this effort, even before we generate any revenue.

Additionally, during the lifetime of our client agreements, we are responsible for the costs associated with continued program marketing, maintaining our SaaS technology and providing non-academic and other support for students enrolled in the program. We invest significant resources in these new programs from the beginning of our relationship with a client, and there is no guarantee that we will ever recoup these costs.

Because our client agreements provide that we receive a fixed percentage of the tuition that the clients receive from the students enrolled in their programs, we only begin to recover these costs once students are enrolled and our clients begin billing students for tuition and fees. The time that it takes for us to recover our investment in a new program depends on a variety of factors, primarily the level of our student acquisition costs and the rate of growth in student enrollment in the program. We estimate that, on average, it takes approximately four to five years after engagement with a client to fully recover our investment in that client’s new program. Because of the lengthy period required to recoup our investment in a program, unexpected developments beyond our control could occur that result in the client ceasing or significantly curtailing a program before we are able to fully recoup our investment. As a result, we may ultimately be unable to recover the full investment that we make in a new program or achieve our expected level of profitability for the program.

If new programs do not scale efficiently and in the time frames we expect, our reputation and our revenue will suffer.

Our continued growth and profitability depends on our and our clients’ ability to successfully scale newly launched programs. As we continue aggressively growing our business, we plan to continue to hire new employees at a rapid pace, particularly in our program marketing and sales team and our technology and content development teams. If we cannot adequately train these new employees, we may not be successful in acquiring potential students for our clients’ programs, which would adversely impact our ability to generate revenue, and our clients and the students in their programs could lose confidence in the knowledge and capability of our employees. If we cannot quickly and efficiently scale our technology to handle growing student enrollment and new client programs, our clients’ and their students’ experiences may suffer, which could damage our reputation among colleges and universities and their faculty and students.

In addition, if our clients cannot quickly develop the infrastructure and hire sufficient faculty and administrators to handle growing student enrollments, our clients’ and their students’ experiences with our solutions may suffer, which could damage our reputation among colleges and universities and their faculty and students.

Our ability to effectively manage any significant growth of new programs and increasing student enrollment will depend on a number of factors, including our ability to:

- satisfy existing students in, and attract and enroll new students for, our clients’ programs;
- assist our clients in recruiting qualified faculty to support their expanding enrollments;
- assist our clients in developing and producing an increased volume of course content;
- successfully introduce new features and enhancements and maintain a high level of functionality in our SaaS technology; and
- deliver high-quality support to our clients and their faculty and students.

Establishing new client programs or expanding existing programs will require us to make investments in management and key staff, increase capital expenditures, incur additional marketing expenses and reallocate other resources. If student enrollment in our clients’ programs does not increase, if we are unable to launch new programs in a cost-effective manner or if we are otherwise unable to manage new client programs effectively, our ability to grow our business and achieve profitability would be impaired, and the quality of our solutions and the satisfaction of our clients and their students could suffer.

Our financial performance depends heavily on student retention within our clients’ programs, and factors influencing student retention may be out of our control.

Once a student is enrolled in a program, we and our client must retain the student over the life of the degree program to generate ongoing revenue. Our strategy involves offering high-quality support to students enrolled in our clients’ programs to support their retention. If we do not help students quickly resolve any educational, technological or logistical issues they encounter, otherwise provide effective ongoing support to students or deliver the type of high-quality, engaging educational content that students expect, students may withdraw from the program, which would negatively impact our revenue.

In addition, student retention could be compromised by the following factors, many of which are largely outside of our control:

- Reduced support from our clients. Because revenue from a particular program is directly attributable to the level of student enrollment in the program, our ability to grow our revenue from a client relationship depends on the client continuing to offer its online program to students, as well as the growth of enrollment in that program. Although our contracts with clients generally require that the client expand enrollment in their programs to include all qualified applicants, our only recourse if they choose not to do so is termination of the exclusivity limitations on developing programs with other colleges or universities that are included in our agreements with our clients. Despite the agreements we have in place with our clients, our clients could limit enrollment in their programs, cease providing the programs...
altogether or significantly curtail or inhibit our ability to promote their programs, any of which would negatively impact our revenue.

- **Lack of support from client faculty members.** It takes a significant time commitment and dedication from our clients' faculty members to work with us to develop course content designed for an online learning environment. Our clients' faculty may be unfamiliar with the development and production process, may not understand the time commitment involved to develop the course content, or may otherwise be resistant to changing the ways in which they present the same content in an on-campus class. Our ability to maintain high student retention will depend in part on our ability to convince our clients' faculty of the value in the time and effort they will spend developing the course program. Lack of support from faculty could cause the quality of our clients' programs to decline, which could contribute to decreased student satisfaction and retention.

- **Student dissatisfaction.** Enrolled students may drop out of our clients' programs based on their individual perceptions of the value they are getting from the program. For example, we may face retention challenges as a result of students' dissatisfaction with the quality of course content and presentation, dissatisfaction with our clients' faculty, changing views of the value of our clients' programs and degrees offered and perceptions of employment prospects following completion of the program. Factors outside our control related to student satisfaction with, and overall perception of, a program may contribute to decreased student retention rates for that program.

- **Personal factors.** Factors impacting a student's willingness and ability to stay enrolled in a program include personal factors, such as ability to continue to pay tuition, ability to meet the rigorous demands of the program, and lack of time to continue classes, all of which are generally beyond our control.

Any of these factors could significantly reduce the revenue that we generate from a program, which would negatively impact our return on investment for the particular program, and could compromise our ability to grow our business and achieve profitability.

We currently have, and for the foreseeable future expect to continue to have, a small number of programs that contribute a meaningful portion of our revenue and generate positive earnings and cash flow. Therefore we expect that the loss, or material underperformance, of any one of these programs could hurt our future financial performance.

Of the programs we operate, only a small number contribute a significant portion of our revenue and generate positive earnings and cash flow. As a result, the material underperformance of any one of these programs could have a disproportionate effect on our business.

A significant portion of our revenue is currently attributable to programs with the University of Southern California. The loss of, or a decline in enrollment in, either of these programs could significantly reduce our revenue.

Our two longest running programs, launched in 2009 and 2010, are with the University of Southern California, or USC. For the years ended December 31, 2016 and 2015, 34% and 43%, respectively, of our revenue was derived from these two programs. We expect that these programs will continue to account for a large portion of our revenue until our other client programs become more mature and achieve significantly higher enrollment levels. Any decline in USC’s reputation, any increase in USC’s tuition, or any changes in USC’s policies could adversely affect the number of students that enroll in these two programs. Further, the faculty or administrators of these two schools could become resistant to offering their online programs through our solutions, making it more difficult for us to attract and retain students. These graduate schools are not required to expand student enrollment in their online programs and, upon the expiration of their contracts, they are not required to continue using us as the provider of their online programs. If either of these programs were to materially underperform for any reason or to terminate or not renew their relationships with us, it would significantly reduce our revenue.

**The loss, or material underperformance, of any one of our programs could harm our reputation, which could in turn affect our profitability.**

We rely on our reputation for delivering high-quality online programs and recommendations from existing clients to attract potential new clients. Therefore, the loss of any single client program, or the failure of any client to renew its agreement with us upon expiration, could harm our reputation and impair our ability to pursue our growth strategy and ultimately to become profitable.

If our security measures are breached or fail and result in unauthorized disclosure of data, we could lose clients, fail to attract new clients and be exposed to protracted and costly litigation.

Maintaining security of our SaaS technology is of critical importance for our clients because it stores and transmits proprietary and confidential university and student information, which may include sensitive personally identifiable information that is subject to stringent legal and regulatory obligations. As a technology company, we face an increasing number of threats to our SaaS technology, including unauthorized activity and access, system viruses, worms, malicious code and organized cyberattacks, any of which could breach our security and disrupt our solutions and our clients’ programs. If our security measures are breached or fail as a result of third-party action, employee error, malfeasance or otherwise, we could be subject to liability or our business could be interrupted, potentially over an extended period of time. Any or all of these issues could harm our reputation, adversely affect our ability to attract new clients and students, cause existing clients to scale back their programs or elect not to renew their agreements, cause prospective students not to enroll or students to stay enrolled in our clients’ programs, or subject us to third-party lawsuits, regulatory fines or other action or liability.

Further, any reputational damage resulting from breach of our security measures could create distrust of our company by prospective clients or students. In addition, our insurance coverage may not be adequate to cover losses associated with such events, and in any case, such insurance may not cover all of the types of costs, expenses and losses we could incur to respond to and remediate a security breach. As a result, we may be required to expend significant additional resources to protect against the threat of these disruptions and security breaches or to alleviate problems caused by such disruptions or breaches.

We have grown rapidly and expect to continue to invest in our growth for the foreseeable future. If we fail to manage this growth effectively, the success of our business model will be compromised.

We have experienced rapid growth in a relatively short period of time, which has placed, and will continue to place, a significant strain on our administrative and operational infrastructure, facilities and other resources. Our ability to manage our operations and growth will require us to continue to expand our program marketing and sales personnel, technology team, finance and administration teams, as well as our facilities and infrastructure. We will also be required to refine our operational, financial and management controls and reporting systems and procedures. If we fail to manage this expansion of our business efficiently, our costs and expenses may increase more than we plan and we may not successfully expand our client base, enhance our solutions, develop new programs with new and existing clients, attract a sufficient number of qualified students in a cost-effective manner, satisfy the requirements of our existing clients, respond to competitive challenges or otherwise execute our business plan. Although our business has experienced significant growth in the past, we cannot provide any assurance that our revenue will continue to grow at the same rate in the future.
Our ability to manage any significant growth of our business effectively will depend on a number of factors, including our ability to:

- effectively recruit, integrate, train and motivate a large number of new employees, including our program marketing and technology teams, while retaining existing employees;
- maintain the beneficial aspects of our corporate culture and effectively execute our business plan;
- continue to improve our operational, financial and management controls;
- protect and further develop our strategic assets, including our intellectual property rights; and
- make sound business decisions in light of the scrutiny associated with operating as a public company.

These activities will require significant capital expenditures and allocation of valuable management and employee resources, and our growth will continue to place significant demands on our management and our operational and financial infrastructure.

There are no guarantees that we will be able to effectively manage any future growth in an efficient, cost-effective or timely manner, or at all. In particular, any failure to implement systems enhancements successfully will likely negatively impact our ability to manage our expected growth, ensure uninterrupted operation of key business systems and comply with the rules and regulations that are applicable to public reporting companies. Moreover, if we do not manage the growth of our business and operations effectively, the quality of our solutions could suffer, which could negatively affect our reputation, results of operations and overall business.

We may expand by acquiring or investing in other companies, which may divert our management's attention, result in dilution to our shareholders and consume resources that are necessary to sustain our business.

We may in the future acquire complementary products, services, technologies or businesses. We also may enter into relationships with other businesses to expand our ability to provide our solutions in the United States and in international markets. Negotiating these transactions can be time-consuming, difficult and expensive, and our ability to complete these transactions may often be subject to conditions or approvals that are beyond our control. Consequently, these transactions, even if undertaken and announced, may not close.

An acquisition, investment, or new business relationship may result in unforeseen operating difficulties and expenditures. In particular, we may encounter difficulties assimilating or integrating the businesses, technologies, products, personnel, or operations of acquired companies, particularly if the key personnel of the acquired company choose not to work for us, the acquired company's technology is not compatible with ours, or we have difficulty retaining the customers of any acquired business due to changes in management or otherwise. Additionally, we may encounter difficulties integrating the acquired companies with our standardized accounting systems as necessary to provide us with the accounting controls needed to comply with our continued financial reporting requirements as a public company. Acquisitions may also disrupt our business, divert our resources, and require significant management attention that would otherwise be available for the development of our business. Any problems or delays associated with the integration or the failure to complete the integrations on a timely basis could adversely affect our ability to report financial information, including the filing of our quarterly or annual reports with the SEC on a timely and accurate basis. Moreover, the anticipated benefits of any acquisition, investment, or business relationship may not be realized or we may be exposed to unknown liabilities, including litigation against the companies we may acquire. For one or more of those transactions, we may:

- issue additional equity securities that would dilute our shareholders;
- use cash that we may need in the future to operate our business;
- incur debt on terms unfavorable to us or that we are unable to repay or that may place burdensome restrictions on our operations;
- incur large charges or substantial liabilities; or
- become subject to adverse tax consequences.

Any of these outcomes could harm our business and operating results.

We face competition from established and emerging companies, which could divert clients to our competitors, result in pricing pressure and significantly reduce our revenue.

We expect existing competitors and new entrants to the online learning market to revise and improve their business models constantly in response to challenges from competing businesses, including ours. If these or other market participants introduce new or improved delivery of online education and technology-enabled services that we cannot match or exceed in a timely or cost-effective manner, our ability to grow our revenue and achieve profitability could be compromised.

Our primary competitors include EmbanetCompass and Deltak, which were acquired in 2012 by Pearson and John Wiley & Sons, respectively, both of which are large education and publishing companies. There are also several private companies, including HotChalk and Everspring, providing some or all of the services we provide, and these companies may choose to pursue some of the institutions we target. In addition, colleges and universities may choose to continue using or to develop their own online learning solutions in-house, rather than pay for our solutions.

Some of our competitors and potential competitors have significantly greater resources than we do. Increased competition may result in pricing pressure for us in terms of the percentage of tuition and fees we are able to negotiate to receive from a client. The competitive landscape may also result in longer and more complex sales cycles with a prospective client or a decrease in our market share among selective nonprofit colleges and universities seeking to offer online degree programs, any of which could negatively affect our revenue and future operating results and our ability to grow our business.

A number of competitive factors could cause us to lose potential client opportunities or force us to offer our solutions on less favorable economic terms, including

- competitors may develop service offerings that our potential clients find to be more compelling than ours;
- competitors may adopt more aggressive pricing policies and offer more attractive sales terms, adapt more quickly to new technologies and changes in client and student requirements, and devote greater resources to the acquisition of qualified students than we can; and
- current and potential competitors may establish cooperative relationships among themselves or with third parties to enhance their products and expand their markets, and our industry is likely to see an increasing number of new entrants and increased consolidation. Accordingly, new competitors or alliances among competitors may emerge and rapidly acquire significant market share.

We may not be able to compete successfully against current and future competitors. In addition, competition may intensify as our competitors raise additional capital and as established companies in other market segments or geographic markets expand into our market segments or geographic markets. If we cannot compete successfully against our competitors, our ability to grow our business and achieve profitability could be impaired.
If for-profit postsecondary institutions, which offer online education alternatives different from ours, perform with a level of success or tarnish the reputation of online education as a whole, which could impair our ability to grow our business.

For-profit postsecondary institutions, many of which provide course offerings predominantly online, are under intense regulatory and other scrutiny, which has led to media attention that has sometimes portrayed that sector in an unflattering light. Some for-profit online school operators have been subject to governmental investigations alleging the misuse of public funds, financial irregularities, and failure to achieve positive outcomes for students, including the inability to obtain employment in their fields. These allegations have attracted significant adverse media coverage and have prompted legislative hearings and regulatory responses. These investigations have focused on specific companies and individuals, and even entire industries in the case of recruiting practices by for-profit higher education companies. Even though we do not market our solutions to these institutions, this negative media attention may nevertheless add to skepticism about online higher education generally, including our solutions.

The precise impact of these negative public perceptions on our current and future business is difficult to discern. If these few situations, or any additional misconduct, cause all online learning programs to be viewed by the public or policymakers unfavorably, we may find it difficult to enter into or renew contracts with selective colleges and universities or attract additional students for our clients’ programs. In addition, this perception could serve as the impetus for more restrictive legislation, which could limit our future business opportunities. Moreover, allegations of abuse of federal financial aid funds and other statutory violations against for-profit higher education companies could negatively impact our opportunity to succeed due to increased regulation and decreased demand. Any of these factors could negatively impact our ability to increase our client base and grow our clients’ programs, which would make it difficult to continue to grow our business.

If we do not retain our senior management team and key employees, we may not be able to sustain our growth or achieve our business objectives.

Our future success is substantially dependent on the continued service of our senior management team. Because of our small number of clients and the significant nature of each new client relationship, our senior management team is heavily involved in the client identification and sales process, and their expertise is critical in navigating the complex approval processes of large nonprofit colleges and universities. We do not maintain key-person insurance on any of our employees, including our senior management team. The loss of the services of any individual on our senior management team, or failure to find a suitable successor, could make it more difficult to successfully operate our business and achieve our business goals.

Our future success also depends heavily on the retention of our program marketing and sales, technology and content development and support teams to continue to attract and retain qualified students in our clients’ programs, thereby generating revenue for us. In particular, our highly-skilled technology and content development employees provide the technical expertise underlying our bundled technology-enabled services that support our clients’ programs and the students enrolled in these programs. Competition for these employees is intense. As a result, we may be unable to attract or retain these key personnel that are critical to our success, resulting in harm to our relationships with clients, loss of expertise or know-how and unanticipated recruitment and training costs.

If certain awards under our stock plans are deemed to have not expired in accordance with their terms, we could be liable to certain award holders for substantial amounts.

Each of our 2008 Stock Incentive Plan and 2014 Equity Incentive Plan provide that vested stock option awards issued under those plans expire upon the occurrence of certain events. For example, each plan provides, among other things, that stock options expire and are no longer exercisable upon the earlier to occur of 90 days after a separation of service, or, depending on the specific circumstances of the grantee, 5 or 10 years after the grant date. Award recipients under these plans have failed and may fail in the future to exercise their stock options within the prescribed time frame or may otherwise fail to comply with terms and conditions of the plans or the corresponding award agreements resulting in the expiration of those option awards. Award recipients with expired option awards have disagreed and may disagree in the future with our or our Compensation Committee’s interpretation of the provisions in the plans or the award agreements. Any disagreement between us and holders of expired option awards regarding the expiration of those awards under the terms of the plan or award agreements could result in claims for breach of contract and other claims that could subject us to costly litigation that could require management time and involvement, regardless of whether such claims have merit.

We may need additional capital in the future to pursue our business objectives. Additional capital may not be available on favorable terms, or at all, which could compromise our ability to grow our business.

We believe that our existing cash balances and the available borrowing capacity under our revolving line of credit, will be sufficient to meet our minimum anticipated cash requirements for at least the next twelve months. We may, however, need to raise additional funds to respond to business challenges or opportunities, accelerate our growth, develop new programs or enhance our solutions. If we are unable to raise additional capital, it may not be available on favorable terms or may not be available at all. In addition, if we have borrowings outstanding under our credit facility, we may be restricted from using the net proceeds of financing transactions for our operating objectives. Lack of sufficient capital resources could significantly limit our ability to manage our business and to take advantage of business and strategic opportunities. Any additional capital raised through the sale of equity or debt securities with an equity component would dilute our stock ownership. If adequate additional funds are not available if and when needed, we may be required to delay, reduce the scope of, or eliminate material parts of our business strategy.

Our employees located outside of the United States and the international residents applying to and enrolling in our clients’ programs expose us to international risks.

Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic and political risks that are different from those in the United States. We have a branch office in Hong Kong for program marketing and student support. Because we have employees in Hong Kong, we are subject to Hong Kong’s compensation and benefits regulations, which differ from compensation and benefits regulations in the United States. Further, acquiring international applicants and enrollments for our clients requires us to comply with international data privacy regulations of the countries from which our clients’ programs draw applicants and enrollments. Failure to comply with international regulations or to adequately adapt to international markets could harm our ability to successfully operate our business and pursue our business goals.

Future programs or other offerings with colleges and universities outside the United States could expose us to risks inherent in international operations.

One element of our growth strategy is to expand our international operations and establish a worldwide client base. We cannot assure you that our expansion efforts into international markets will be successful. Our experience with attracting clients in the United States may not be relevant to our ability to attract clients in other emerging markets. In addition, we would face risks in doing business internationally that could constrain our operations and compromise our growth prospects, including:

• the need to localize and adapt online degree programs or other offerings for specific countries, including translation into foreign languages and ensuring that these programs enable our clients to comply with local education laws and regulations;
We might not be able to utilize a portion of our net operating loss carryforwards, which could adversely affect our profitability.

As of December 31, 2016, we had federal net operating loss carryforwards due to prior period losses, which, if not utilized, will begin to expire in 2029. Our gross state net operating loss carryforwards are equal to or less than the federal net operating loss carryforwards and expire over various periods based on individual state tax laws. These net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our profitability. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Similar rules may apply under state tax laws. We have completed an analysis of the stock ownership changes through December 31, 2016, and determined that a greater than 50% ownership change of one or more of its 5-percent shareholders occurred. Absent a subsequent ownership change, all of our net operating losses subject to the ownership change should be available. Therefore, despite the fact that an ownership change occurred, such change is not expected to limit our ability to utilize carryforward net operating losses before expiration. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership. If a future ownership change occurs and limits our ability to use our historical net operating loss carryforwards, it would harm our future financial statement results by increasing our future tax obligations.
including accreditation matters, student debt, student recruiting, cost of tuition, distance learning, competency-based learning, student success and outcomes and other matters.

The increased scrutiny and results-based accountability initiatives in the education sector, as well as ongoing policy differences in Congress regarding spending levels, could lead to significant changes in connection with the reauthorization of the HEA or otherwise. These changes may place additional regulatory burdens on postsecondary schools generally, and specific initiatives may be targeted at or have an impact upon companies like us that serve higher education. The adoption of any laws or regulations that limit our ability to provide our bundled services to our clients could compromise our ability to drive revenue through their programs or make our solutions less attractive to them. Congress could also enact laws or regulations that require us to modify our practices in ways that could increase our costs.

In addition, regulatory activities and initiatives of the DOE may have similar consequences for our business even in the absence of Congressional action.

Our business model, which depends on our ability to receive a share of tuition revenue as payment from our clients, has been validated by a DOE “dear colleague” letter, but such validation is not codified by statute or regulation and may be subject to change.

Each institution that participates in Title IV programs agrees it will not “provide any commission, bonus, or other incentive payment based in any part, directly or indirectly, upon success in securing enrollments or the award of financial aid, to any person or entity who is engaged in any student recruitment or admission activity, or in making decisions regarding the award of title IV, HEA program funds.” All of our clients participate in Title IV Programs.

Although this rule, referred to as the incentive compensation rule, generally prohibits entities or individuals from receiving incentive-based compensation payments for the successful recruitment, admission or enrollment of students, the DOE provided guidance in 2011 permitting tuition revenue-sharing arrangements known as the “bundled services rule.” Our current business model relies heavily on the bundled services rule to enter into tuition revenue-sharing agreements with client colleges and universities.

Because the bundled services rule was promulgated in the form of agency guidance issued by the DOE in the form of a “dear colleague” letter, or DCL, and is not codified by statute or regulation, there is risk that the rule could be altered or removed without prior notice, public comment period or other administrative procedural requirements that accompany formal agency rulemaking. Although the DCL represents the current policy of the DOE, the bundled services rule could be reviewed, altered or vacated in the future. In addition, the legal weight the DCL would carry in litigation over the propriety of any specific compensation arrangements under the HEA or the incentive compensation rule is uncertain. We can offer no assurances as to how the DCL would be interpreted by a court. The revision, removal or invalidation of the bundled services rule by Congress, the DOE or a court, whether in an action involving our company or our clients, or in action that does not involve us, could require us to change our business model and renegotiate the terms of our client contracts and could compromise our ability to generate revenue.

If we or our subcontractors or agents violate the incentive compensation rule, we could be liable to our clients for substantial fines, sanctions or other liabilities.

Even though the DCL clarifies that tuition revenue-sharing arrangements with our clients are permissible, we are still subject to other provisions of the incentive compensation rule that prohibit us from offering to our employees who are involved with or responsible for recruiting or admissions activities any bonus or incentive-based compensation based on the successful identification, admission or enrollment of students into any institution. If we or our subcontractors or agents violate the incentive compensation rule, we could be liable to our clients for substantial fines, sanctions or other liabilities, including liabilities related to “whistleblower” claims under the federal False Claims Act. Any such claims, even if without merit, could require us to incur significant costs to defend the claim, distract management’s attention and damage our reputation.

If we or our subcontractors or agents violate the misrepresentation rule, or similar federal and state regulatory requirements, we could face fines, sanctions and other liabilities.

We are required to comply with other regulations promulgated by the DOE that affect our student acquisition activities, including the misrepresentation rule. The misrepresentation rule is broad in scope and applies to statements our employees, subcontractors or agents may make about the nature of a client’s program, a client’s financial charges or the employability of a client’s program graduates. A violation of this rule, FTC rules or other federal or state regulations applicable to our marketing activities by an employee, subcontractor or agent performing services for clients could hurt our reputation, result in the termination of client contracts, require us to pay fines or other monetary penalties or require us to pay the costs associated with indemnifying a client from private claims or government investigations.

If our clients fail to maintain their state authorizations, or we or our clients violate other state laws and regulations, in their states in such programs could be adversely affected and we could lose our ability to operate in that state and provide services to our clients.

Our clients must be authorized in certain states to offer online programs, engage in recruiting and operate externships, internships, clinical training or other forms of field experience, depending on state law. The loss of or failure to obtain state authorization would, among other things, limit a client’s ability to enroll students in that state, render the client and its students ineligible to participate in Title IV programs in that state, diminish the attractiveness of the client’s program and ultimately compromise our ability to generate revenue and become profitable.

In addition, if we or any of our clients fail to comply with any state agency’s rules, regulations or standards beyond authorizations, the state agency or state attorney general could limit the ability of the client to offer programs in that state or limit our ability to perform our contractual obligations to our client in that state.

If our clients fail to maintain institutional or programmatic accreditation for their programs, our revenue could be materially affected.

The loss or suspension of a client’s accreditation or other adverse action by the client’s institutional or programmatic accreditor would render the institution or its program ineligible to participate in Title IV programs, could prevent the client from offering certain educational programs and could make it impossible for the graduates of the client’s program to practice the profession for which they trained. If any of these results occurs, it could hurt our ability to generate revenue from that program.

Our future growth could be impaired if our clients fail to obtain timely approval from applicable regulatory agencies to offer new programs, make substantive changes to existing programs or expand their programs into or within certain states.

Our clients are required to obtain the appropriate approvals from the DOE and applicable state and accrediting regulatory agencies for new programs or locations, which may be conditioned, delayed or denied in a manner that could impair our strategic plans and future growth. Education regulatory agencies are generally experiencing significant increases in the volume of requests for approvals as a result of new distance learning programs and adjustments to the significant volume of new regulations...
over the last several years. Regulatory capacity constraints have resulted in delays to various approvals our client institutions are requesting, and such delays could in turn delay the timing of our ability to generate revenue from our clients’ programs.

If more state agencies require specialized approval of our clients’ programs, our operating costs could rise significantly, approval times could lag or we could be prohibited from operating in certain states.

In addition to state licensing agencies, our clients may be required to obtain approval from professional licensing boards in certain states to offer specialized programs in specific fields of study. Currently, relatively few states require institutions to obtain professional board approval for their professional programs when offered online. However, more states could pass laws requiring professional programs offered by our clients, such as graduate programs in teaching or nursing, to obtain approval from state professional boards. If a significant number of states pass additional laws requiring schools to obtain professional board approval, the cost of obtaining all necessary state approvals could dramatically increase, which could make our solutions less attractive to clients, and our clients could be barred from operating in some states entirely.

If the personally identifiable information we collect from students is unlawfully acquired, accessed or obtained, we could be required to pay substantial fines and bear the cost of investigating the data breach and providing notice to individuals whose personally identifiable information was unlawfully accessed.

In providing services to our clients, we collect personally identifiable information from students and prospective students, such as names, social security numbers and birth dates. In the event that the personally identifiable information is unlawfully accessed or acquired, the majority of states have laws that require institutions to investigate and immediately disclose the data breach to students, usually in writing. Under the terms of our contracts with our clients, we would be responsible for the costs of investigating and disclosing these data breaches to the clients’ students. In addition to costs associated with investigating and fully disclosing a data breach in such instances, we could be subject to substantial monetary fines or private claims by affected parties and our reputation would likely be harmed.

We are required to comply with The Family Educational Rights and Privacy Act, or FERPA, and failure to do so could harm our reputation and negatively affect our business.

FERPA generally prohibits an institution of higher education from disclosing personally identifiable information from a student’s education records without the student’s consent. Our clients and their students disclose to us certain information that originates from or comprises a student education record and we may not transfer or otherwise disclose any personally identifiable information from a student record to another party other than in a manner permitted under the statute. If we violate FERPA, it could result in a material breach of contract with one or more of our clients and could harm our reputation. Further, in the event that we disclose student information in violation of FERPA, the DOE could require a client to suspend our access to their student information for at least five years.

Risks Related to Intellectual Property

We operate in an industry with extensive intellectual property litigation. Claims of infringement against us may hurt our business.

Our success depends, in part, upon our ability to avoid infringing intellectual property rights owned by others and being able to resolve claims of intellectual property infringement without major financial expenditures or adverse consequences. The technology and software fields generally are characterized by extensive intellectual property litigation and many companies that own, or claim to own, intellectual property have aggressively asserted their rights. From time to time, we may be subject to legal proceedings and claims relating to the intellectual property rights of others, and we expect that third parties will assert intellectual property claims against us, particularly as we expand the complexity and scope of our business. In addition, our client agreements require us to indemnify our clients against claims that our solutions infringe the intellectual property rights of third parties.

Future litigation may be necessary to defend ourselves or our clients from intellectual property infringement claims or to establish our proprietary rights. Some of our competitors have substantially greater resources than we do and would be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us. Regardless of whether claims that we are infringing patents or other intellectual property rights have any merit, these claims are time-consuming and costly to evaluate and defend and could:

• hurt our reputation;
• adversely affect our relationships with our current or future clients;
• cause delays or stoppages in providing our solutions;
• divert management’s attention and resources;
• require technology changes to our software that could cause us to incur substantial cost;
• subject us to significant liabilities; and
• require us to cease some or all of our activities.

In addition to liability for monetary damages against us, which may include attorneys’ fees, treble damages in the event of a finding of willful infringement, or, in some circumstances, damages against our clients, we may be prohibited from developing, commercializing or continuing to provide some or all of our bundled technology-enabled solutions unless we obtain licenses from, and pay royalties to, the holders of the patents or other intellectual property rights, which may not be available on commercially favorable terms, or at all.

We may incur liability for the unauthorized duplication, distribution or other use of materials posted online.

In some instances, university personnel or students, or our employees or independent contractors, may post to Online Campus various articles or other third-party content for use in class discussions or within asynchronous lessons. The laws governing the fair use of these third-party materials are imprecise and adjudicated on a case-by-case basis, which makes it challenging to adopt and implement appropriately balanced institutional policies governing these practices. As a result, we could incur liability to third parties for the unauthorized duplication, distribution or other use of this material. Any such claims could subject us to costly litigation and impose a significant strain on our financial resources and management personnel regardless of whether the claims have merit. Our various liability insurance coverages may not cover potential claims of this type adequately or at all, and we may be required to alter or cease our uses of such material, which may include changing or removing content from courses or altering the functionality of Online Campus, or to pay monetary damages.

Our failure to protect our intellectual property rights could diminish the value of our solutions, weaken our competitive position and reduce our revenue.

We regard the protection of our intellectual property, which includes trade secrets, copyrights, trademarks, domain names and patent applications, as critical to our success. We protect our proprietary information from unauthorized use and disclosure by entering into confidentiality agreements with any party who may come in contact with such information. We also seek to ensure that we own intellectual property created for us by signing agreements with employees, independent
the foregoing conditions, which could disrupt our ability to offer the affected solutions. We could also
offering of our solutions that contained the open source software and being required to comply with
that we make available source code for modifications or derivative works we create based upon,
is generally freely accessible, usable and modifiable. Certain open source licenses may, in certain
software, and we may incorporate additional open source software in the future. Open source software
possible litigation.
not be able to stop our competitors from infringing upon our intellectual property rights.
changes to accommodate such new applications are made, and the other steps we have taken to protect our intellectual property may not prevent the misappropriation of our proprietary information or deter independent development of similar technologies by others.
We have also begun seeking patent protection for our processes, including two patent applications pending in the United States. These pending applications are directed to computer-implemented processes that facilitate synchronous student responses to teacher questions. We cannot predict whether these pending patent applications will result in issued patents that will effectively protect our intellectual property. Even if a patent issues, the patent may be circumvented or its validity may be challenged in proceedings before the U.S. Patent and Trademark Office. In addition, we cannot assure you that every significant feature of our products and services will be protected by any patent or patent application.
We also pursue the registration of our domain names, trademarks and service marks in the United States and in jurisdictions outside the United States. However, third parties may knowingly or unknowingly infringe on our trademark or service mark rights, third parties may challenge our trademark or service mark rights, and pending or future trademark or service mark applications may not be approved. In addition, effective trademark protection may not be available in every country in which we operate or intend to operate. In any or all cases, we may be required to expend significant time and expense to prevent infringement or enforce our rights.
Monitoring unauthorized use of our intellectual property is difficult and costly. Our efforts to protect our proprietary rights may not be adequate to prevent misappropriation of our intellectual property. Further, we may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. Our competitors may also independently develop similar technologies. In addition, the laws of many countries may not protect our proprietary rights to as great an extent as do the laws of the United States. Further, the laws in the United States and elsewhere change rapidly, and any future changes could adversely affect us and our intellectual property rights. Our failure to meaningfully protect our intellectual property could result in competitors offering services that incorporate our most technologically advanced features, which could seriously reduce demand for our solutions. In addition, we may in the future need to initiate litigation such as infringement or administrative proceedings, to protect our intellectual property rights. Litigation, whether we are a plaintiff or a defendant, can be expensive, time-consuming and may divert the efforts of our technical staff and managerial personnel, whether or not such litigation results in a determination that is unfavorable to us. In addition, litigation is inherently uncertain, and thus we may not be able to stop our competitors from infringing upon our intellectual property rights.
Our use of “open source” software could negatively affect our ability to offer our solutions and subject us to possible litigation.
A substantial portion of our cloud-based SaaS technology incorporates so-called “open source” software, and we may incorporate additional open source software in the future. Open source software is generally freely accessible, usable and modifiable. Certain open source licenses may, in certain circumstances, require us to offer our solutions that incorporate the open source software for no cost, that we make available source code for modifications or derivative works we create based upon, incorporating or using the open source software and that we license such modifications or derivative works under the terms of the particular open source license. If an author or other third party that distributes open source software we use were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, including being enjoined from the offering of our solutions that contained the open source software and being required to comply with the foregoing conditions, which could disrupt our ability to offer the affected solutions. We could also
be subject to suits by parties claiming ownership of what we believe to be open source software. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition and require us to devote additional research and development resources to change our products.
Individuals that appear in content hosted on Online Campus may claim violation of their rights.
Faculty and students that appear in video segments hosted on Online Campus may claim that proper assignments, licenses, consents and releases were not obtained for use of their likenesses, images or other contributed content. Our clients are contractually required to ensure that proper assignments, licenses, consents and releases are obtained for their course material, but we cannot know with certainty that they have obtained all necessary rights. Moreover, the laws governing rights of publicity and privacy, and the laws governing faculty ownership of course content, are imprecise and adjudicated on a case-by-case basis, such that the enforcement of agreements to transfer the necessary rights is unclear. As a result, we could incur liability to third parties for the unauthorized duplication, display, distribution or other use of this material. Any such claims could subject us to costly litigation and impose a significant strain on our financial resources and management personnel regardless of whether the claims have merit. Our various liability insurance coverages may not cover potential claims of this type adequately or at all, and we may be required to alter or cease our use of such material, which may include changing or removing content from courses, or to pay monetary damages. Moreover, claims by faculty and students could damage our reputation, regardless of whether such claims have merit.
Risks Related to Ownership of Our Common Stock and Our Status as a Public Company
Our quarterly operating results have fluctuated in the past and may do so in the future, which could cause our stock price to decline.
Our quarterly operating results have historically fluctuated due to seasonality and changes in our business, and our future operating results may vary significantly from quarter to quarter due to a variety of factors, many of which are beyond our control. You should not rely on period-to-period comparisons of our operating results as an indication of our future performance. Factors that may cause fluctuations in our quarterly operating results include, but are not limited to, the following:
• the timing of our costs incurred in connection with the launch of new programs and the delay in receiving revenue from these new programs, which delay may last for several years;
• seasonal variation driven by the semester schedules for our clients’ programs, which may vary from year to year;
• changes in the student enrollment and retention levels in our clients’ programs from one term to the next;
• changes in our key metrics or the methods used to calculate our key metrics;
• changes in our clients’ tuition rates;
• the timing and amount of our program marketing and sales expenses;
• costs necessary to improve and maintain our SaaS technology; and
• changes in the prospects of the economy generally, which could alter current or prospective clients’ or students’ spending priorities, or could increase the time it takes us to launch new client programs.
Our operating results may fall below the expectations of market analysts and investors in some future periods, which could cause the market price of our common stock to decline substantially.
The trading price of the shares of our common stock may be volatile, and purchasers of our common stock could incur substantial losses.

Our stock price may be volatile. The stock market in general and the market for technology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- actual or anticipated variations in our operating results;
- changes in financial estimates by us or by any securities analysts who might cover our stock;
- conditions or trends in our industry, the stock market or the economy;
- stock market price and volume fluctuations of comparable companies and, in particular, those that operate in the software and information technology industries;
- announcements by us or our competitors of new product or service offerings, significant acquisitions, strategic partnerships or divestitures;
- announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;
- capital commitments;
- investors’ general perception of our company and our business;
- recruitment or departure of key personnel; and
- sales of our common stock, including sales by our directors and officers or specific stockholders.

In addition, in the past, stockholders have initiated class action lawsuits against technology companies following periods of volatility in the market prices of these companies’ stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management’s attention and resources from our business.

If equity research analysts do not continue to publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that equity research analysts publish about us and our business. Equity research analysts may elect not to initiate or to continue to provide research coverage of our common stock, and such lack of research coverage may adversely affect the market price of our common stock. Even if we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Provisions in our corporate charter documents and under Delaware law may prevent or frustrate attempts by our stockholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common stock may be lower as a result.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control is considered favorable by you and other stockholders. For example, our board of directors has the authority to issue up to 5,000,000 shares of preferred stock. The board of directors can fix the price, rights, preferences, privileges, and restrictions of the preferred stock without any further vote or action by our stockholders. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders, which could delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected.

Our charter documents also contain other provisions that could have an anti-takeover effect, including:

- only one of our three classes of directors will be elected each year;
- stockholders are not entitled to remove directors other than by a 66 2/3% vote and only for cause;
- stockholders are not permitted to take actions by written consent;
- stockholders are not permitted to call a special meeting of stockholders; and
- stockholders are required to give us advance notice of their intention to nominate directors or submit proposals for consideration at stockholder meetings.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which regulates corporate acquisitions by prohibiting Delaware corporations from engaging in specified business combinations with particular stockholders of those companies. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Concentration of ownership of our common stock among our existing executive officers, directors and large stockholders may prevent smaller stockholders from influencing significant corporate decisions.

Our executive officers, directors and current beneficial owners of 5% or more of our common stock and their respective affiliates, in the aggregate, beneficially own a substantial percentage of our outstanding common stock. These persons, acting together, are able to significantly influence all matters requiring stockholder approval, including the election and removal of directors, any merger, consolidation, sale of all or substantially all of our assets, or other significant corporate transactions. The interests of this group of stockholders may not coincide with our interests or the interests of other stockholders.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, the Sarbanes-Oxley Act and the rules and regulations of the NASDAQ Global Select Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are required to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting in our Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. This may require us to incur substantial additional professional fees and internal costs to further expand our accounting and finance functions and expend significant management efforts.

We may in the future discover material weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. In addition, our internal control over financial reporting will not prevent or detect all errors...
and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to errors or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of our stock could decline and we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the Securities and Exchange Commission, or SEC, or other regulatory authorities.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain and you may never receive a return on your investment.

You should not rely on an investment in our common stock to provide dividend income. We have not declared or paid cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of our existing credit facility preclude, and the terms of any future debt agreements is likely to similarly preclude, us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Investors seeking cash dividends should not purchase our common stock.

We incur increased costs and demands upon management as a result of being a public company.

As a public company listed in the United States, we incur significant additional legal, accounting and other costs. These additional costs could negatively affect our financial results. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including regulations implemented by the SEC and the NASDAQ Global Select Market, may increase legal and financial compliance costs and make some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts to comply with new laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain some types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on committees of our board of directors or as members of senior management.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters are located in Lanham, Maryland where we occupy approximately 153,000 square feet under a lease that expires in 2028. We also currently lease approximately 94,000 square feet in Landover, Maryland, in connection with our former corporate headquarters, which expires in July, 2018.

In February 2017, we signed a lease for new office space in Brooklyn, New York, which we expect to occupy in 2018 after we vacate our current offices in New York City. The lease covers three floors totaling approximately 80,000 square feet and will expire approximately eleven years and nine months after the lease commencement date. We expect that the new space will allow us to accommodate our growth in the local area.

We also currently lease an aggregate of approximately 114,000 square feet of space in New York, California, Colorado, North Carolina, Virginia and Hong Kong. We believe that our current facilities are suitable and adequate to meet our ongoing needs and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings

The Company is not presently involved in any legal proceeding or other contingency that, if determined adversely to it, would individually or in the aggregate have a material adverse effect on our business, operating results, financial condition or cash flows. Accordingly, the Company does not believe that there is a reasonable possibility that a material loss exceeding amounts already recognized may have been incurred as of the date of the balance sheets presented herein.

Item 4. Mine Safety Disclosures

None.
PART II
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock has been listed on the NASDAQ Global Select Market since March 28, 2014, under the symbol “TWOU”. Prior to our initial public offering, there was no public market for our common stock.

The following table set forth for the indicated periods the high and low sales prices of our common stock as reported on the NASDAQ Global Select Market.

<table>
<thead>
<tr>
<th></th>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>$27.50</td>
<td>$29.87</td>
<td>$38.91</td>
<td>$38.49</td>
</tr>
<tr>
<td>Low</td>
<td>14.94</td>
<td>21.76</td>
<td>28.78</td>
<td>29.34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>First Quarter*</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>$25.77</td>
<td>$33.01</td>
<td>$39.69</td>
<td>$35.72</td>
</tr>
<tr>
<td>Low</td>
<td>16.69</td>
<td>24.20</td>
<td>29.18</td>
<td>18.81</td>
</tr>
</tbody>
</table>

* Beginning on March 28, 2014

As of February 17, 2017, there were 46 registered stockholders of record for our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Stock Performance Graph

The graph set forth below compares the cumulative total stockholder return on an initial investment of $100 in our common stock between March 28, 2014 (the date of our initial public offering) and December 31, 2016, with the comparative cumulative total return of such amount over the same period on (i) the NASDAQ Composite Index, (ii) the S&P North American Technology Software Index and (iii) the Russell 3000 Index. We have not paid any cash dividends and, therefore, the cumulative total return calculation for us is based solely upon our stock price appreciation or depreciation and does not include any reinvestment of cash dividends. The graph assumes our closing sales price on March 28, 2014 of $13.98 per share as the initial value of our common stock. The comparisons shown in the graph below are based upon historical data, and are not necessarily indicative of, nor intended to forecast, the potential future stock performance of our common stock.

Dividend Policy

We have never declared or paid any dividends on our common stock. We anticipate that we will retain all of our future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future. Additionally, our ability to pay dividends on our common stock is limited by restrictions under the terms of the agreements governing our credit facility, and the terms of any future loan agreement into which we may enter or any additional debt securities we may issue are likely to contain similar restrictions on the payment of dividends.

Use of Proceeds from Offering of Common Stock

September 2015 Public Offering

On September 30, 2015, we sold 3,625,000 shares of our common stock to the public, including 525,000 shares sold pursuant to the underwriters’ over-allotment option. We received net proceeds of $117.1 million, which we intend to use for general corporate purposes.

Item 6. Selected Financial Data

See the information for the years 2012 through 2016 contained in the table titled “Selected Financial Data,” which is included in this Annual Report on Form 10-K and listed in the Index to Consolidated Financial Information on page 50 hereof (with only the information for such years to be deemed filed as part of this Annual Report on Form 10-K).
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

See the information contained under the heading “Management’s Discussion and Analysis of Results of Operations and Financial Condition,” which is included in this Annual Report on Form 10-K and listed in the Index to Consolidated Financial Information on page 50 hereof.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the risk of loss to future earnings, values or future cash flows that may result from changes in the price of a financial instrument. The value of a financial instrument may change as a result of changes in interest rates, exchange rates, commodity prices, equity prices and other market changes. Our exposure to market risk related to changes in foreign currency exchange rates is deemed low as further described below. In addition, we do not use derivative financial instruments for speculative, hedging or trading purposes, although in the future we may enter into exchange rate hedging arrangements to manage the risks described in the succeeding paragraphs.

Interest Rate Risk

We are subject to interest rate risk in connection with potential borrowings available under our bank line of credit which was procured in December 2013 and amended in January 2017. Borrowings under the revolving line of credit bear interest at variable rates. Increases in LIBOR or our lender’s prime rate would increase the amount of interest payable on any borrowings outstanding under this line of credit. On January 21, 2014, we borrowed $5.0 million under this line of credit and repaid this borrowing in full on February 18, 2014. There have been no subsequent borrowings under this line of credit, and therefore, no amounts were outstanding as of December 31, 2016.

Foreign Currency Exchange Risk

All of our current client contracts are denominated in U.S. dollars. Therefore, we have minimal, if any, foreign currency exchange risk with respect to our revenue.

We have a branch office in Hong Kong for program marketing and student support and incur expenses related to its operations. The functional currency of this office is Hong Kong dollars, which exposes us to changes in foreign currency exchange rates. Hong Kong dollar currency rates have historically been tied to the U.S. dollar, however. In addition, because of the small size of our Hong Kong office and the relatively nominal amount of our expenses denominated in Hong Kong dollars, we do not expect any material effect on our financial position or results of operations from fluctuations in exchange rates. However, our exposure to foreign currency exchange risk may change over time as business practices evolve or we expand internationally, and if our exposure increases, adverse movement in foreign currency exchange rates could have a material adverse impact on our financial results.

Inflation

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. Through our pricing model, we benefit from price increases implemented by our clients, and we continue to monitor inflation-driven cost increases in order to minimize their effects through productivity improvements and cost containment efforts. If our costs were to become subject to significant inflationary pressures, the price increases implemented by our clients and our own pricing strategies might not fully offset the higher costs. Our inability or failure to do so could harm our business, financial condition and results of operations.

Item 8. Financial Statements and Supplementary Data

See the Company's consolidated financial statements at December 31, 2016, and for the periods then ended, together with the report of KPMG LLP thereon and the information included in Note 14 in said consolidated financial statements titled “Quarterly Financial Information (Unaudited),” which are included in this Annual Report on Form 10-K and listed in the Index to Consolidated Financial Information on page 50 hereof.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

An evaluation was performed by our management, with the participation of our Chief Executive Officer (our Principal Executive Officer) and our Chief Financial Officer (our Principal Financial Officer), of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), as of December 31, 2016. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures, as designed and implemented, are effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms and is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, in a manner that allows timely decisions regarding required disclosure.

Management’s Report on Internal Control Over Financial Reporting

Management’s report set forth on page 70 is incorporated herein by reference.

Changes in Internal Control Over Financial Reporting

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

Item 9B. Other Information

Not applicable.
We will file a definitive Proxy Statement for our 2017 Annual Meeting of Stockholders or our 2017 Proxy Statement with the SEC, pursuant to Regulation 14A, not later than 120 days after the end of our fiscal year. Accordingly, certain information required by Part III has been omitted under General Instruction G(3) to Form 10-K. Only those sections of the 2017 Proxy Statement that specifically address the items set forth herein are incorporated by reference.

**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by Item 10 is hereby incorporated by reference to the sections of our 2017 Proxy Statement under the captions “Board of Directors and Committees,” “Election of Directors,” “Management” and “Section 16(a) Beneficial Ownership Reporting Compliance.”

**Item 11. Executive Compensation**

The information required by Item 11 is hereby incorporated by reference to the sections of our 2017 Proxy Statement under the captions “Executive Compensation” and “Director Compensation.”

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

The information required by Item 12 is hereby incorporated by reference to the sections of our 2017 Proxy Statement under the captions “Security Ownership of Certain Beneficial Owners and Management” and “Securities Authorized for Issuance under Equity Compensation Plans.”

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

The information required by Item 13 is hereby incorporated by reference to the sections of our 2017 Proxy Statement under the captions “Transactions with Related Parties” and “Director Independence.”

**Item 14. Principal Accounting Fees and Services**

The information required by Item 14 is hereby incorporated by reference to the section of our 2017 Proxy Statement under the caption “Independent Registered Public Accounting Firm Fees.”

**Item 15. Exhibits, Financial Statement Schedules**

(a) Exhibits

See the Exhibit Index immediately following the Selected Financial Data of this Annual Report on Form 10-K.

(b) Financial Statements

See the Index to Consolidated Financial Information on page 50 hereof.
Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

2U, Inc.
February 24, 2017

By: /s/ CHRISTOPHER J. PAUCEK

Name: Christopher J. Paucek
Title: Chief Executive Officer and Director

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

<table>
<thead>
<tr>
<th>Signature</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ CHRISTOPHER J. PAUCEK</td>
<td>Chief Executive Officer and Director (Principal Executive Officer)</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ CATHERINE A. GRAHAM</td>
<td>Chief Financial Officer (Principal Financial Officer)</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ ANDREA PAPACONSTANTOPOULOS</td>
<td>Chief Accounting Officer (Principal Accounting Officer)</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ PAUL A. MAEDER</td>
<td>Director and Chairman of the Board</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ MARK J. CHERNIS</td>
<td>Director</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ TIMOTHY M. HALEY</td>
<td>Director</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>/s/ JOHN M. LARSON</td>
<td>Director</td>
<td>February 24, 2017</td>
</tr>
</tbody>
</table>
Management’s Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should read Item 1A “Risk Factors” and “Special Note Regarding Forward-Looking Statements” in this report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are leading provider of cloud-based software-as-a-service, or SaaS, technology and technology-enabled services that enable leading nonprofit colleges and universities to deliver their degree programs at scale to students anywhere. Our SaaS technology consists of an innovative online learning environment, where our clients deliver their high-quality educational content to students in a live, intimate and engaging setting. We also provide a comprehensive suite of integrated applications, including a content management system and customer relationship management, that serve as the back-end infrastructure of the programs we enable. This technology is fused with technology-enabled services, including student acquisition services, content development services, student and faculty support, clinical placement services, and admissions applications advising services, each of which we optimize with data analysis and machine learning techniques. This suite of technology and services allows our clients’ programs to expand and operate at scale, providing the comprehensive infrastructure colleges and universities need to attract, enroll, educate, support and graduate their students.

We have achieved significant growth in a relatively short period of time. Full course equivalent enrollments in our clients’ programs grew from 41,034 during the twelve months ended December 31, 2014 to 77,344 during the twelve months ended December 31, 2016, representing a compound annual growth rate of 37%. From our inception through December 31, 2016, more than 24,000 unique individuals have enrolled as students in our clients’ programs. For the years ended December 31, 2016, 2015 and 2014, our revenue was $205.9 million, $150.2 million and $110.2 million, respectively. However, because we must incur significant technology, content development, program marketing and sales expenses well in advance of generating revenue under a new client program, we have a history of losses despite our revenue growth. In order to become profitable, our revenue from existing client programs will need to increase at a rate faster than the expenses we will incur in connection with the launch of new client programs.

We believe our business strategy will continue to offer significant opportunities for growth, but it also presents a number of risks and challenges. In particular, to remain competitive, we will need to continue to innovate in a rapidly changing landscape for the application of technology like ours to the delivery of higher education. As described above, we have added, and we intend to continue to add, programs with new and existing clients in a number of new and existing degree verticals each year. We also have increased and intend to continue to increase new student enrollments at existing client programs. To do so, we will need to convince new clients as to the quality and value of our solutions, cost-effectively identify qualified students for our clients’ programs and help our clients retain those students once enrolled. We must also be able to successfully execute our business strategy while navigating constantly changing higher education laws and regulations applicable to our clients and, in some cases to ourselves, particularly the incentive compensation rule that generally prohibits making incentive payments related to student acquisition. We seek to ensure that addressing all of these risks and challenges does not divert our management’s attention from continuing to build on the strengths that we believe have driven the growth of our business over the last several years. We believe our focus...
on delivering our bundle of technology and services, maintaining the integrity of our clients' educational brands and enabling strong student outcomes will contribute to the success of our business. However, we may not be successful in addressing and managing the many challenges and risks that we face.

Our Business Model
The key elements of our business model are described below.

Revenue Drivers and Predictability
Substantially all of our revenue is derived from revenue-share arrangements with our clients, under which we receive a contractually specified percentage of the amounts students pay them in tuition and other fees. Accordingly, the primary driver of our revenue growth is the increase in the number of student course enrollments in our clients' programs. This in turn is influenced primarily by three factors:

- our ability to increase the number of programs offered by our clients, either by adding new clients or by expanding the number of client programs;
- our ability to identify and acquire prospective students for our clients' programs; and
- our ability, and that of our clients, to retain the students who enroll in their programs.

In the near term, we expect the primary drivers of our financial results to continue to be our first two programs with the University of Southern California, which are our longest running programs, which we launched in 2009 and 2010, and our programs with Simmons College, which launched between 2013 and 2016. For the years ended December 31, 2016, 2015 and 2014, 34%, 43% and 55%, respectively, of our revenue was derived from the two University of Southern California programs. For the years ended December 31, 2016, 2015 and 2014, 18%, 16% and 8%, respectively, of our revenue was derived from the Simmons College programs. We expect that the two programs with the University of Southern California and our programs with Simmons College will continue to account for a large portion of our revenue even though that portion should decline as other client programs become more mature and achieve higher enrollment levels.

Program Marketing and Sales Expense
Our most significant expense in each fiscal period has been program marketing and sales expense, which relates primarily to student acquisition activities. We have primary responsibility for identifying qualified students for our clients' programs, generating potential student interest in the programs and driving applications to the programs. While our clients make all admissions decisions, the number of students who enroll in our clients' programs in any given period is significantly dependent on the amount we have spent on these student acquisition activities in prior periods. Accordingly, although most of our clients' programs span multiple academic terms and, therefore, generate continued revenue beyond the term in which initial enrollments occur, we expect that we will need to continue to incur significant program marketing and sales expense for existing programs going forward to generate a continuous pipeline of new enrollments. For new programs, we begin incurring program marketing and sales costs as early as nine months prior to the start of a new client program.

We typically identify prospective students for our clients' programs between three months and two or more years before they ultimately enroll. For the students currently enrolled in our clients' programs and those who have graduated, the average time from our initial prospective student acquisition to initial enrollment was approximately seven months. For the students who have graduated from these programs, the average time from initial enrollment to graduation was 22 months. Based on the student retention rates and patterns we have observed in our clients' programs, we estimate that, for our current programs, the average time from a student's initial enrollment to graduation will be approximately two years.

Accordingly, our program marketing and sales expense in any period is an investment we make to generate revenue in future periods. Likewise, revenue generated in any period is largely attributable to the investment made in student acquisition activities in earlier periods. Because program marketing and sales expense in any period is almost entirely unrelated to revenue generated in that period, we do not believe it is meaningful to directly compare the two. We believe that the total revenue we will generate over time related to students who enroll in our clients' programs as a result of current period program marketing and sales expense, will be significantly greater as a multiple of that current period expense than is implied by the multiple of current period revenue to current period program marketing and sales expense as expressed in our financial statements. Further, we believe that our program marketing and sales expense in future periods will generally decline as a percentage of the revenue reported in those same periods as our revenue base from returning students in existing programs increases.

We continually manage our program marketing and sales expense to ensure that across our portfolio of client programs, our cost to acquire students for these programs is appropriate for our business model. We use a ratio of attrition adjusted lifetime revenue of a student, or LTR, to the total cost to acquire that student, or TCA, as the measure of our marketing efficiency and to determine how much we are willing to spend to acquire an additional student for any program. The calculations included in this ratio include certain assumptions. For any period, we know what we spent on program sales and marketing and therefore, can accurately calculate the ratio's denominator. However, given the time lag between when we incur our program marketing and sales expense and when we receive revenue related to students enrolled based on that expense, we have to incorporate forecasts of student enrollments and retention into our calculation of the ratio's numerator, which is our estimate of future revenue related to that period's expense. We use the significant amount of data we have on the effectiveness of various marketing channels, student attrition and other factors to inform our forecasts and are continually testing the assumptions underlying these forecasts against actual results to give us confidence that our forecasts are reasonable. The LTR to TCA ratio may vary from program to program depending on the degree being offered, where that program is in its lifecycle and whether we enable the same or similar degrees at other universities.

Period-to-Period Fluctuations
Our revenue, cash position, accounts receivable and deferred revenue can fluctuate significantly from quarter to quarter due to variations driven by the academic schedules of our clients' programs. These programs generally start classes for new and returning students an average of four times per year. Class starts are not necessarily evenly spaced throughout the year, do not necessarily correspond to the traditional academic calendar and may vary from year to year. As a result, the number of classes our client programs have in session, and therefore the number of students enrolled, will vary from month to month and quarter to quarter, leading to variability in our revenue.

Our clients' programs often have academic terms that straddle two fiscal quarters. Our clients generally pay us when they have billed tuition and specified fees to their students, which is typically early in the academic term, and once the drop/add period has passed. We recognize the related revenue ratably over the course of the academic term, beginning on the first day of classes through the last day because we generally receive payments from our clients prior to our ability to recognize revenue related to those same periods as our revenue base from returning students in existing programs increases. Because program marketing and sales expense in any period is almost entirely unrelated to revenue generated in that period, we do not believe it is meaningful to directly compare the two. We believe that the total revenue we will generate over time related to students who enroll in our clients' programs as a result of current period program marketing and sales expense, will be significantly greater as a multiple of that current period expense than is implied by the multiple of current period revenue to current period program marketing and sales expense as expressed in our financial statements. Further, we believe that our program marketing and sales expense in future periods will generally decline as a percentage of the revenue reported in those same periods as our revenue base from returning students in existing programs increases.

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Our expense levels also fluctuate from quarter to quarter, driven primarily by our program marketing and sales activity. We typically reduce our paid search and other program marketing and sales efforts during late November and December because these efforts are less productive during the holiday season. This generally results in lower total program marketing and sales expense during the fourth quarter. In addition, because we begin spending on program marketing and sales, and, to a lesser extent, services and support, as much as nine months prior to the start of classes for a new client program, these costs as a percentage of revenue fluctuate, sometimes significantly, depending on the timing of new client programs and anticipated program launch dates.

Components of Operating Results and Results of Operations

**Full-Year 2016 Highlights**

- Revenue was $205.9 million, an increase of 37.1% from $150.2 million for the year ended December 31, 2015.
- Net loss was $(20.7) million, or $(0.44) per share, compared to $(26.7) million, or $(0.63) per share for the year ended December 31, 2015.
- Adjusted EBITDA was $4.5 million, compared to an adjusted EBITDA loss of $(6.6) million for the year ended December 31, 2015.

**Revenue**

Substantially all of our revenue consists of a contractually specified percentage of the amounts our clients bill to their students for tuition and fees, less credit card fees and other specified charges we have agreed to exclude in certain of our client contracts, which we refer to as net program proceeds. Most of our contracts have 10 to 15 year initial terms. We recognize revenue ratably over the service period, which we define as the first through the last day of classes for each academic term in a client’s program.

We establish a refund allowance for our share of tuition and fees ultimately uncollected by our clients.

We also offered rebates to a limited group of students who enrolled in a specific client program between 2009 and 2011, which we will be required to pay to such students if they complete their degrees and pre-specified, post-graduation work requirements within a defined period of time after graduation. For students in this group who are still enrolled in the program, we accrue the rebate liability as they continue through the program towards graduation. In addition, all students in this group are required to certify to us each September as to their continuing eligibility for these rebates. For those students who do not make such certification and are therefore no longer eligible for the rebate, because, for example, they have failed to meet their post-graduation work requirements, we reduce the allowance accordingly at that time. As of December 31, 2016 and 2015, 61 and 81 students, respectively, remained eligible to receive these rebates. These rebates and refunds offset the net program proceeds that we recognize as revenue.

In addition to providing access to our SaaS technology, we provide technology-enabled services that support the complete lifecycle of a higher education program, including attracting students, advising prospective students through the admissions application process, providing technical, success coaching and other support, facilitating accessibility to individuals with disabilities and facilitating in-program field placements. We have determined that no individual deliverable has standalone value upon delivery and, therefore, the multiple deliverables within our arrangements do not qualify for treatment as separate units of accounting. Accordingly, we consider all deliverables to be a single unit of accounting and we recognize revenue from the entire arrangement over the term of the service period.

We generally receive payments from our clients early in each academic term, prior to completion of the service period. We record those payments as deferred revenue until the services are delivered or until our obligations are otherwise met, at which time we recognize the revenue. As of each balance sheet date, deferred revenue is a current liability and represents the excess amounts we have billed or received over the amounts we have recognized as revenue in the consolidated statements of operations as of that date.

Revenue for the year ended December 31, 2016 was $205.9 million, an increase of $55.7 million, or 37.1%, from $150.2 million for the year ended December 31, 2015. The increase was primarily attributable to a 35.6% increase in period-over-period full course equivalent enrollments in our client programs, from 57,019 for the year ended December 31, 2015 to 77,344 for the year ended December 31, 2016. Of the increase in full course equivalent enrollments, 476, or 2.3% of the total increase, were attributable to client programs launched during the 12 months ended December 31, 2016.

Revenue for the year ended December 31, 2015 was $150.2 million, an increase of $40.0 million, or 36.2%, from $110.2 million for the year ended December 31, 2014. The increase was primarily attributable to a 39.0% increase in period-over-period full course equivalent enrollments in our client programs, from 41,034 for the year ended December 31, 2014 to 57,019 for the year ended December 31, 2015. Of the increase in full course equivalent enrollments, 3,354, or 21.0% of the total increase, were attributable to client programs launched during the 12 months ended December 31, 2015.

**Costs and Expenses**

Costs and expenses consist of servicing and support costs, technology and content development costs, program marketing and sales expenses and general and administrative expenses. To support our anticipated growth, we expect to continue to hire new employees (which will increase both our cash and stock-based compensation costs), increase our program promotion and student acquisition efforts, expand our technology infrastructure and increase our other program support capabilities. As a result, we expect our costs and expenses to increase in absolute dollars, but to decrease as a percentage of revenue over time as we achieve economies of scale through the expansion of our business.

Non-cash stock-based compensation expense is a component of compensation cost within each of the cost and expense categories described above. In early 2014, the Compensation Committee of our Board of Directors approved a framework for granting equity awards under our 2014 Equity Incentive Plan. Under this framework, the majority of our equity awards are made on or around April 1 of each year and typically have four-year vesting periods. As such, non-cash stock-based compensation expense is expected to continue to increase year-over-year until four years after the initial early-2014 grants.

**Servicing and support.** Servicing and support expenses consist primarily of cash and non-cash stock-based compensation costs related to program management and operations, as well as costs for technical support for our SaaS technology and faculty and student support. It includes costs to facilitate in-program field placements, student immersions and other student enrichment experiences and costs to assist our clients with their state compliance requirements. It also includes software licensing, telecommunications and other costs to provide access to our SaaS technology for our clients and their students.

Servicing and support costs for the year ended December 31, 2016 were $41.0 million, an increase of $9.0 million, or 27.9%, from $32.0 million for the year ended December 31, 2015. This increase was due primarily to a $5.4 million increase in cash compensation costs, a $1.0 million increase in non-cash stock-based compensation costs and a $0.5 million increase in travel and related expenses as we increased our headcount in this area by 26% to serve a growing number of students and faculty in

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existing and new client programs and a $0.9 million increase in costs associated with student immersion 
costs. Additionally, software licensing costs increased by $0.7 million, while other servicing and support 
costs decreased by $0.5 million. As a percentage of revenue, servicing and support costs decreased from 21.4% for the year ended December 31, 2015 to 19.9% for the same period of 2016, as client programs continued to mature and greater operational efficiencies were 
achieved.

Servicing and support costs for the year ended December 31, 2015 were $32.0 million, an increase of $5.2 million, or 19.3%, from $26.8 million for the year ended December 31, 2014. This increase was 
due primarily to a $3.9 million increase in compensation costs, and a $0.2 million increase in travel and 
related expenses as we increased our headcount in this area by 25% to serve a growing number of 
students and faculty in existing and new client programs. Additionally, costs for student support services 
increased by $0.6 million, software licensing costs increased by $0.3 million and costs for facilitating 
in-program field placements increased by $0.2 million. As a percentage of revenue, servicing and support 
costs decreased from 24.4% for the year ended December 31, 2014 to 21.4% for the same period of 2015, as client programs continued to mature and greater operational efficiencies were achieved.

Technology and content development. Technology and content development expense consists 
primarily of cash and non-cash stock-based compensation and outsourced services costs related to the 
ongoing improvement and maintenance of our SaaS technology, and the developed content for our 
client programs. It also includes the costs to support our internal infrastructure, including our cloud-
based server usage. Additionally, it includes the associated amortization expense related to capitalized 
technology and content development costs, as well as hosting and other costs associated with 
maintaining our SaaS technology in a cloud environment.

Technology and content development costs for the year ended December 31, 2016 were 
$33.3 million, an increase of $6.1 million, or 22.3%, from $27.2 million for the year ended 
December 31, 2015. This increase was due primarily to a $0.8 million increase in cash compensation 
costs (net of amounts capitalized for technology and content development), a $0.8 million increase 
in non-cash stock-based compensation costs, a $0.5 million increase in employee technological equipment 
 expenditures and a $0.3 million increase in travel and related expenses, as we increased our headcount 
in this area by 31% to support the launch of new client programs and scaling of existing programs. 
Additionally, the increase in the number of courses that have been developed for our client programs 
resulted in $1.8 million of higher amortization expense associated with our capitalized technology and 
content development costs and higher cloud-based hosting services of $0.7 million. Finally, technology 
consulting expense increased by $0.1 million, while other technology and content development expense 
increased by $1.1 million. As a percentage of revenue, technology and content development costs 
decreased from 18.1% for the year ended December 31, 2015 to 16.2% for the same period of 2016, as 
we have continued to scale.

Technology and content development costs for the year ended December 31, 2015 were 
$27.2 million, an increase of $4.6 million, or 22.3%, from $22.6 million for the year ended 
December 31, 2014. This was due primarily to a $2.8 million increase in compensation costs (net of 
capitalized amounts for software and content development) as we increased our headcount in this area 
by 25% to support additional client program launches and scaling of existing client programs. Further, 
an increase of $1.4 million resulted from higher depreciation expense associated with our cloud-based 
internal use software and content development costs, primarily as a result of an increase in the number 
of courses that have been developed for our client programs. Additionally, costs related to our cloud-
based server usage increased by $0.4 million to support a greater number of our clients’ programs. As a 
percentage of revenue, technology and content development costs decreased from 20.5% for the year 
ended December 31, 2014 to 18.1% for the same period of 2015, as we have continued to achieve 
scale.

Program marketing and sales. Program marketing and sales expense consists primarily of costs 
related to student acquisition. Licensing costs increased by $0.7 million. This includes the cost of online advertising and print content 
generation, as well as cash and non-cash stock-based compensation costs for our program marketing, 
search engine optimization, marketing analytics and admissions application counseling personnel. We 
expense all costs related to program marketing and sales as they are incurred.

Program marketing and sales for the year ended December 31, 2016 was $106.6 million, an 
increase of $23.7 million, or 28.6%, from $82.9 million for the year ended December 31, 2015. This 
increase was due primarily to a $11.6 million increase in direct internet marketing costs to acquire 
students for our clients’ programs. Additionally, cash compensation costs increased by $8.0 million, 
non-cash stock-based compensation costs increased by $0.3 million, rent expense increased by 
$1.0 million and travel and related expenses increased by $0.6 million as we increased our headcount 
in this area by 21% to acquire students for, and drive revenue growth in, new client programs. Finally, 
marketing expenses increased by $0.7 million, depreciation and amortization of fixed assets increased 
by $0.4 million, and other program marketing and sales expenses increased by $1.1 million to support 
our program marketing efforts. As a percentage of revenue, program marketing and sales expense 
decreased from 55.2% for year ended December 31, 2015 to 51.8% for the same period of 2016, 
reflecting a higher year-over-year percentage increase in revenue than the increase in expense.

Program marketing and sales for the year ended December 31, 2015 was $82.9 million, an 
increase of $17.7 million, or 21.1%, from $65.2 million for the year ended December 31, 2014. This 
increase was due primarily to an $8.4 million increase in direct internet marketing costs to acquire 
students for our clients’ programs. Additionally, compensation costs increased by $8.0 million as we 
increased our headcount in this area by 29% to acquire students for, and drive revenue growth in, 
client programs, while advertising expenses increased by $0.2 million and other program marketing 
and sales expenses increased by $1.1 million to support our program marketing efforts. As a percentage of 
revenue, program marketing and sales expense decreased from 59.2% for year ended December 31, 
2014 to 55.2% for the same period of 2015, reflecting a higher year-over-year percentage increase in 
revenue than the increase in expense.

General and administrative. General and administrative expense consists primarily of cash and 
non-cash stock-based compensation costs for employees in our executive, administrative, finance and 
accounting, legal, communications and human resources departments. Additional expenses include 
outsource fees related to services such as insurance and travel that are not related to another function.

General and administrative expense for the year ended December 31, 2016 was $46.0 million, an 
increase of $11.9 million, or 34.9%, from $34.1 million for the year ended December 31, 2015. This 
increase was due primarily to a $4.3 million increase in cash compensation costs and a $2.0 million 
increase in non-cash stock-based compensation costs as we increased in our headcount in this area by 
35% to support our growing business. Further, software expenses primarily related to the 
implementation of our enterprise resource planning system integration increased by $2.5 million, 
education and training expenses increased by $2.5 million, and general and administrative expenses 
increased by $1.1 million. As a percentage of revenue, general and administrative expense 
decreased slightly from 22.7% for the year ended December 31, 2015 to 22.4% for the same period of 
2016.

General and administrative expense for the year ended December 31, 2015 was $34.1 million, an 
increase of $10.7 million, or 45.7%, from $23.4 million for the year ended December 31, 2014. This 
was due primarily to a $6.7 million increase in compensation costs and $1.0 million increase in travel 
and related expenses, as we increased our headcount in this area by 22% to support our growth.
Additionally, we recorded a $0.4 million charge related to the execution of a new lease for our Maryland headquarters, costs for higher education benefits we provide to our employees increased by $0.5 million, while legal and other professional fees increased by $0.7 million. Further, insurance costs increased by $0.1 million and other general and administrative costs increased by $0.9 million. As a percentage of revenue, general and administrative expense increased from 21.2% for the year ended December 31, 2014 to 22.7% for the same period of 2015.

Other Income (Expense)

Other income (expense) consists of interest income, interest expense and other expenses. Interest income is derived from interest received on our cash and cash equivalents. Interest expense consists primarily of the amortization of deferred financing costs associated with our line of credit and convertible notes prior to their conversion and changes in our preferred stock warrant liability as a result of changes in the fair value of such warrants (through April 2, 2014).

The fair value of our preferred stock warrant liability was reassessed at the end of each reporting period and any increase in fair value was recognized in other income, while any decrease in fair value was recognized in other income. Upon completion of our initial public offering, or IPO, the preferred stock warrants automatically became warrants to purchase common stock. At that time, we reclassified the preferred stock warrant liability to additional paid-in capital and no further changes in fair value were recognized in other income or expense.

For the year ended December 31, 2015, other expense consisted of a loss on an investment we made in an early stage entity to test international marketing channels.

Total other income (expense) for the year ended December 31, 2016 was $0.3 million, an increase of $0.9 million, or 154.8%, from an other loss of $0.6 million for the same period of 2015. This increase was primarily driven by lower interest expense of $0.5 million and higher interest income of $0.2 million. Also contributing to the year-over-year increase in other income (expense) was a $0.3 million write-down on an investment which occurred during 2015.

Total other income (expense) for the year ended December 31, 2015 was a net expense of $0.6 million, a decrease of $0.5 million, or 43.3%, from $1.1 million for the same period of 2014. This decrease was primarily driven by lower interest expense of $0.7 million and higher interest income of $0.1 million. Also, during 2015 we invested in an early stage entity which is establishing an international marketing channel. Due to the risk of recoverability of this investment, we estimated the fair value of the investment to be zero, recorded a write-down on the investment to fair value and recognized a $0.3 million charge in other expense, which partially offset the decrease to other income (expense).

Income tax expense consists of U.S. federal, state and foreign income taxes. To date, we have not been required to pay U.S. federal income taxes because of our current and accumulated net operating losses. We incurred immaterial state and foreign income tax liabilities for the years ended December 31, 2016, 2015 and 2014.

Consolidated Statements of Operations as a Percentage of Revenue

The following table sets forth selected consolidated statements of operations data as a percentage of revenue for each of the periods indicated.

<table>
<thead>
<tr>
<th>Year Ended December 31</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue .................</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Costs and expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>19.9%</td>
<td>21.4%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Technology and content</td>
<td>16.2%</td>
<td>18.1%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Program marketing and</td>
<td>51.8%</td>
<td>55.2%</td>
<td>59.2%</td>
</tr>
<tr>
<td>sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and administrative</td>
<td>22.4%</td>
<td>22.7%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Total costs and</td>
<td>110.3%</td>
<td>117.4%</td>
<td>125.3%</td>
</tr>
<tr>
<td>expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(10.3%)</td>
<td>(17.4%)</td>
<td>(25.3%)</td>
</tr>
<tr>
<td>Other income (expense):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>0.0%</td>
<td>(0.4%)</td>
<td>(1.1%)</td>
</tr>
<tr>
<td>Interest income</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
<td>(0.1%)</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total other income (expense)</td>
<td>0.2%</td>
<td>(0.4%)</td>
<td>(1.0%)</td>
</tr>
<tr>
<td>Net loss</td>
<td>(10.1%)</td>
<td>(17.8%)</td>
<td>(26.3%)</td>
</tr>
</tbody>
</table>

Critical Accounting Policies and Significant Judgments and Estimates

This management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reported period. In accordance with U.S. GAAP, we base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances. Actual results may differ from these estimates if conditions differ from our assumptions.

While our significant accounting policies are more fully described in Note 2 in the “Notes to Consolidated Financial Statements” included in Part II, Item 8 of this Annual Report on Form 10-K, we believe the following accounting policies are critical to the process of making significant judgments and estimates in preparation of our consolidated financial statements.

Revenue Recognition and Deferred Revenue

We recognize revenue when all of the following conditions are met: (i) persuasive evidence of an arrangement exists, (ii) rendering of services is complete, (iii) fees are fixed or determinable and (iv) collection of fees is reasonably assured.

We primarily derive our revenue from long-term contracts that typically range from 10 to 15 years in length. Under these contracts, we enable access to our cloud-based technology and provide technology-enabled marketing, content development and supporting services to our clients and their faculty and students. We are entitled to a contractually specified percentage of net program proceeds from our clients. These net program proceeds represent gross proceeds billed by our clients to students, less credit card fees and other specified charges we have agreed to exclude in certain of our client contracts. A refund allowance is established for our share of tuition and fees ultimately uncollected by
our clients. We also offered rebates to a group of students who enrolled in a specific client program between January 1, 2010 and December 31, 2013, which we will pay to the student if he or she completes the degree and certain post-graduation work requirements within a specified period of time. These rebates and refunds offset the net program proceeds recognized as revenue. Revenue is recognized ratably over the service period, which we define as the first through the last day of classes for each academic term in a client’s program. We invoice our clients based on enrollment reports that are generated by our clients. In instances, these enrollment reports are received prior to the conclusion of the drop/add period. In such cases, we establish a reserve against revenue, if necessary, based on our estimate of changes in enrollments expected prior to the end of the drop/add period.

We generate substantially all of our revenue from multiple-deliverable contractual arrangements with our clients. Under each of these arrangements, we provide (i) cloud-based technology that serves as a learning platform for our client’s faculty and students and which also enables a comprehensive curriculum refresh rate. This refresh rate is consistent with expected curriculum refresh rates as cited in comparable publicly traded companies, discounted free cash flows, and an analysis of our enterprise value in estimating the fair value of our common stock. For awards subject to service-based vesting conditions, we recognize compensation expense on a straight-line basis over the requisite service period of the award, adjusted for estimated forfeitures. Stock options subject to service-based vesting generally vest at various times from the date of the grant, with most stock options vesting in tranches, generally over a period of four years. Restricted stock units subject to service-based vesting generally vest 25% on each anniversary of the grant date over four years.

Internally-Developed Software Costs

We work with each of our clients’ faculty members to develop and maintain educational content that is delivered to their students through our cloud-based technology. The online content developed jointly by us and our clients consists of subjects chosen and taught by client’s faculty members and incorporates references and examples designed to remain relevant over extended periods of time. Online delivery of the content, combined with live, face-to-face instruction, provides us with rapid user feedback, which we use to make ongoing corrections, modifications and improvements to the course content. Our clients retain all intellectual property rights to the developed content, although we retain the rights to the content packaging and delivery mechanisms. Much of our new content development uses proven delivery platforms and is therefore primarily subject-specific in nature. As a result, a significant portion of content development costs qualify for capitalization due to the focus of our development efforts on the unique subject matter of the content. Similar to on-campus programs offered by our clients, the online degree programs that we enable offer numerous courses for each degree. We therefore capitalize our development costs on a course-by-course basis.

We develop content on a course-by-course basis in conjunction with the faculty for each client program. The clients and their faculty generally provide course outlines in the form of the curriculum, required textbooks, case studies and other reading materials, as well as presentations that are typically used in the on-campus setting. We are then responsible for, and incur all of the expenses related to, the conversion of the materials provided by each client into a format suitable for delivery through our cloud-based technology.

The content development costs that qualify for capitalization are third-party direct costs, such as video production and editing and other content services associated with creating digital content. Additionally, we capitalize internal payroll and payroll-related costs incurred to create and produce videos and other digital content utilized in the clients’ programs for delivery through our solutions. Capitalization ends when content has been fully developed by both us and the client, at which time amortization of the capitalized content development costs begin. The capitalized costs are expensed on a course-by-course basis and included in capitalized content costs on the consolidated balance sheets. These costs are amortized using the straight-line method over the estimated useful life of the respective capitalized content program, which is generally five years. The estimated useful life corresponds with the planned curriculum refresh rate. This refresh rate is consistent with expected curriculum refresh rates as cited in comparable publicly traded companies, discounted free cash flows, and an analysis of our enterprise value in estimating the fair value of our common stock. For awards subject to service-based vesting conditions, we recognize compensation expense on a straight-line basis over the requisite service period of the award, adjusted for estimated forfeitures. Stock options subject to service-based vesting generally vest at various times from the date of the grant, with most stock options vesting in tranches, generally over a period of four years. Restricted stock units subject to service-based vesting generally vest 25% on each anniversary of the grant date over four years.

Stock-Based Compensation

We have issued three types of stock-based awards under our stock plans: stock options, restricted stock units and stock awards. Stock option awards granted to employees, directors and independent contractors are measured at fair value at each grant date. We consider what we believe to be comparable publicly traded companies, discounted free cash flows, and an analysis of our enterprise value in estimating the fair value of our common stock. For awards subject to service-based vesting conditions, we recognize compensation expense on a straight-line basis over the requisite service period of the award, adjusted for estimated forfeitures. Stock options subject to service-based vesting generally vest at various times from the date of the grant, with most stock options vesting in tranches, generally over a period of four years. Restricted stock units subject to service-based vesting generally vest 25% on each anniversary of the grant date over four years.

Internally-Developed Software Costs

We capitalize certain costs associated with internally-developed software, primarily consisting of direct labor associated with creating the software. Software development projects generally include three stages: the preliminary project stage (all costs are expensed as incurred), the application development stage (costs are capitalized and certain costs are expensed as incurred) and the post-implementation/operation stage (all costs are expensed as incurred). Costs capitalized in the application development stage include costs of designing the application, coding, integrating our and the university’s networks and systems, and the testing of the software. Capitalization of costs requires judgment in determining when a project has reached the application development stage and the period over which we expect to benefit from the use of that software. Once the software is placed in service, these costs are depreciated on a straight-line method over the estimated useful life of the software, which is generally three years.

Stock-Based Compensation

We have issued three types of stock-based awards under our stock plans: stock options, restricted stock units and stock awards. Stock option awards granted to employees, directors and independent contractors are measured at fair value at each grant date. We consider what we believe to be comparable publicly traded companies, discounted free cash flows, and an analysis of our enterprise value in estimating the fair value of our common stock. For awards subject to service-based vesting conditions, we recognize compensation expense on a straight-line basis over the requisite service period of the award, adjusted for estimated forfeitures. Stock options subject to service-based vesting generally vest at various times from the date of the grant, with most stock options vesting in tranches, generally over a period of four years. Restricted stock units subject to service-based vesting generally vest 25% on each anniversary of the grant date over four years.

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For the years ended December 31, 2016, 2015 and 2014, we recorded stock-based compensation expense of $15.8 million, $12.5 million and $7.5 million, respectively. Information about the assumptions used in the calculation of stock-based compensation expense is set forth in Note 9 in the “Notes to Consolidated Financial Statements” included in Part II, Item 8 of this Annual Report on Form 10-K.

As of December 31, 2016, unrecognized compensation expense related to unvested options totaled $11.6 million and will be recognized over a weighted-average period of approximately 2.1 years.

As of December 31, 2016, unrecognized compensation expense related to unvested restricted stock units was $19.2 million and will be recognized over a weighted-average period of approximately 2.4 years.

Income Tax (Expense) Benefit

Income taxes are accounted for under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that are included in the financial statements. Under this method, the deferred tax assets and liabilities are determined based on the differences between the financial statement and tax bases of the assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on the deferred tax assets and liabilities is recognized in earnings in the period when the new rate is enacted. Deferred tax assets are subject to periodic recoverability assessments. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount that more likely than not will be realized. We consider all positive and negative evidence relating to the realization of the deferred tax assets in assessing the need for a valuation allowance. We currently maintain a full valuation allowance against our deferred tax assets.

We record a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. We account for uncertainty in income taxes using a two-step approach for evaluating tax positions. Step one, recognition, occurs when we conclude that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination. Step two, measurement, determines the amount of benefit that is more likely than not to be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. De-recognition of a tax position that was previously recognized would occur if we subsequently determine that a tax position no longer meets the more likely than not threshold of being sustained. We recognize interest and penalties, if any, related to unrecognized tax benefits as income tax expense in our consolidated statements of operations.

Key Business and Financial Performance Metrics

We use a number of key metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. In addition to adjusted EBITDA, which we discuss below, we discuss revenue and the components of loss from operations in the section above entitled “—Components of Operating Results and Results of Operations.” Additionally, we utilize other key metrics to evaluate the success of our growth strategy, including measures we refer to as platform revenue retention rate and full course equivalent enrollments in our clients’ programs.

Platform Revenue Retention Rate

We measure our platform revenue retention rate for a particular period by first identifying the group of programs that our clients launched with our solutions before the beginning of the prior year comparative period. We then calculate our platform revenue retention rate by comparing the revenue we recognized for this group of programs in the reporting period to the revenue we recognized for the same group of programs in the prior year comparative period, expressed as a percentage of the revenue we recognized for the group in the prior year comparative period.

The following table sets forth our platform revenue retention rate for the periods presented, as well as the number of programs included in the platform revenue retention rate calculation. For all of these periods, our platform revenue retention rate was greater than 100% because we had no programs terminate and full course equivalent enrollments in the aggregate increased year-over-year. There is no direct correlation between the platform revenue retention rate and the number of programs included in the calculation of that rate. However, there may be a correlation between the platform revenue retention rate and the average maturity of the programs included in the calculation of that rate because newer programs tend to have higher percentage growth rates.

<table>
<thead>
<tr>
<th>Year Ended December 31</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform revenue retention rate</td>
<td>123.0%</td>
<td>120.2%</td>
<td>112.4%</td>
</tr>
<tr>
<td>Number of programs included in comparison (1)</td>
<td>12</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

(1) Reflects the number of programs operating both in the reported period and in the prior year comparative period.

Full Course Equivalent Enrollments in Our Clients’ Programs

We measure full course equivalent enrollments in our clients’ programs by determining, for each of the courses offered during a particular period, the number of students enrolled in that course multiplied by the percentage of the course completed during that period. We use this metric to account for the fact that many courses offered by our clients straddle two or more fiscal quarters. For example, if a course had 25 enrolled students and 40% of the course was completed during a particular period, we would count the course as having 10 full course equivalent enrollments for that period. Any individual student may be enrolled in more than one course during a period.

Average revenue per full course equivalent enrollment represents our weighted-average revenue per course across the mix of courses being offered in our client programs during a period. This number is derived by dividing our total revenue for a period by the number of full course equivalent enrollments during that same period. This amount may vary from period to period depending on the academic calendars of our clients, the relative growth rates of programs with varying tuition levels, the launch of new programs with higher or lower than average net tuition costs and annual tuition increases instituted by our clients. As a part of our growth strategy, we are actively targeting new graduate-level clients in academic disciplines for which we have existing programs. Over time, this strategy is likely to reduce our average revenue per full course equivalent. However, we believe this approach will enable us to leverage our program marketing investments across multiple client programs within specific academic disciplines, significantly decreasing student acquisition costs within those disciplines and more than offsetting any decline in average revenue per full course equivalent enrollment.

The following table sets forth the full course equivalent enrollments and average revenue per full course equivalent enrollment in our clients’ programs for the periods presented.

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full course equivalent enrollments in our clients’ programs</td>
<td>77,344</td>
<td>57,019</td>
<td>41,034</td>
</tr>
<tr>
<td>Average revenue per full course equivalent enrollment in our clients’ programs</td>
<td>$ 2,662</td>
<td>$ 2,634</td>
<td>$ 2,687</td>
</tr>
</tbody>
</table>
Adjusted EBITDA

Adjusted EBITDA represents our earnings before net interest (income) expense, income taxes, depreciation and amortization, adjusted to eliminate stock-based compensation expense, which is a non-cash item. Adjusted EBITDA is a key measure used by our management and board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short- and long-term operational plans. In particular, the exclusion of certain expenses in calculating adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

Adjusted EBITDA is not a measure calculated in accordance with U.S. GAAP and should not be considered as an alternative to any measure of financial performance calculated and presented in accordance with U.S. GAAP. In addition, adjusted EBITDA may not be comparable to similarly titled measures of other companies because other companies may not calculate adjusted EBITDA in the same manner as we do. We prepare adjusted EBITDA to eliminate the impact of non-cash compensation expense, which we do not consider indicative of our core operating performance.

Our use of adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation;
- adjusted EBITDA does not reflect interest or tax payments that may represent a reduction in cash available to us; and
- other companies, including companies in our industry, may calculate adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider adjusted EBITDA alongside other U.S. GAAP-based financial performance measures, including various cash flow metrics, net income (loss) and our other U.S. GAAP results. The following table presents a reconciliation of net loss to adjusted EBITDA for each of the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loss</td>
<td>$(20,684)</td>
<td>$(26,733)</td>
<td>$(28,999)</td>
</tr>
<tr>
<td>Adjustments:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>35</td>
<td>552</td>
<td>1,213</td>
</tr>
<tr>
<td>Interest income</td>
<td>(383)</td>
<td>(167)</td>
<td>(92)</td>
</tr>
<tr>
<td>Depreciation and amortization expense</td>
<td>9,750</td>
<td>7,220</td>
<td>5,572</td>
</tr>
<tr>
<td>Stock-based compensation expense</td>
<td>15,823</td>
<td>12,499</td>
<td>7,527</td>
</tr>
<tr>
<td>Total adjustments</td>
<td>25,229</td>
<td>20,104</td>
<td>14,220</td>
</tr>
<tr>
<td>Adjusted EBITDA (loss)</td>
<td>$4,541</td>
<td>$(6,629)</td>
<td>$(14,779)</td>
</tr>
</tbody>
</table>

Liquidity and Capital Resources

Sources of Liquidity

On December 31, 2013, we entered into a credit agreement with Comerica Bank for a revolving line of credit with an aggregate commitment not to exceed $37.0 million. On January 21, 2014, we borrowed $5.0 million under this line of credit and repaid this borrowing in full on February 18, 2014.

On December 31, 2015, we amended our credit agreement with Comerica Bank to reduce the aggregate amount we may borrow to $25.0 million and extend the maturity date through April 29, 2016, and on January 30, 2017, we amended our credit agreement to extend the maturity date through March 1, 2017. No amounts were outstanding under this credit agreement as of December 31, 2016. We intend to extend this agreement under comparable terms, prior to expiration.

Certain of our operating lease agreements entered into prior to December 31, 2016 require security deposits in the form of cash or an unconditional, irrevocable letter of credit. As of December 31, 2016, we have entered into standby letters of credit totaling $7.1 million, as security deposits for the applicable leased facilities. These letters of credit reduced the aggregate amount we may borrow under our revolving line of credit to $17.9 million. In addition, on February 13, 2017, we entered into a standby letter of credit totaling $4.4 million, as a security deposit for our leased facility in Brooklyn, New York. This letter of credit reduced the aggregate amount we may borrow under its revolving line of credit to $13.5 million.

Under this revolving line of credit, we have the option of borrowing funds subject to (i) a base rate, which is equal to 1.5% plus the greater of Comerica Bank’s prime rate, the federal funds rate plus 1% or the 30 day LIBOR plus 1%, or (ii) LIBOR plus 2.5%. For amounts borrowed under the base rate, we may make interest-only payments quarterly, and may prepay such amounts with no penalty. For amounts borrowed under LIBOR, we may make interest-only payments in periods of one, two and three months and will be subject to a prepayment penalty if we repay such borrowed amounts before the end of the interest period.

Borrowings under the line of credit are collateralized by substantially all of our assets. The availability of borrowings under this credit line is subject to our compliance with reporting and financial covenants, including, among other things, that we achieve specified minimum three-month trailing revenue levels during the term of the agreement and specified minimum six-month trailing profitability levels for some of our client programs, measured quarterly. In addition, we are required to maintain a minimum adjusted quick ratio, which measures our short-term liquidity, of at least 1.10 to 1.00. As of December 31, 2016 and 2015, our adjusted quick ratios were 5.43 and 7.90, respectively.
The covenants under the line of credit also place limitations on our ability to incur additional indebtedness or to prepay permitted indebtedness, grant liens on or security interests in our assets, carry out mergers and acquisitions, dispose of assets, declare, make or pay dividends, make capital expenditures in excess of specified amounts, make investments, loans or advances, enter into transactions with our affiliates, amend or modify the terms of our material contracts, or change our fiscal year. If we are not in compliance with the covenants under the line of credit, after any opportunity to cure such non-compliance, or we otherwise experience an event of default under the line of credit, the lenders may require repayment in full of all principal and interest outstanding. If we fail to repay such amounts, the lenders could foreclose on the assets we have pledged as collateral under the line of credit. We are currently in compliance with all such covenants.

**Public Offering of Common Stock**

On April 2, 2014, we closed our IPO in which we issued and sold 8,626,377 shares of common stock resulting in net proceeds of $100.3 million. On September 30, 2015, we sold 3,625,000 shares of our common stock to the public, including 255,000 shares sold pursuant to the underwriters’ over-allotment option, resulting in net proceeds of $117.1 million. Refer to Note 1 in the “Notes to Consolidated Financial Statements” included in Part II, Item 8 of this Annual Report on Form 10-K for additional details.

**Working Capital**

The following table summarizes our cash and cash equivalents, accounts receivable and working capital for the periods presented:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016 (in thousands)</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$168,730</td>
<td>$183,729</td>
<td>$86,929</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>7,860</td>
<td>975</td>
<td>350</td>
</tr>
<tr>
<td>Working capital</td>
<td>143,629</td>
<td>160,310</td>
<td>66,220</td>
</tr>
</tbody>
</table>

Our cash at December 31, 2016 was held for working capital purposes. We do not enter into investments for trading or speculative purposes. We invest any cash in excess of our immediate requirements in investments designed to preserve the principal balance and provide liquidity. Accordingly, our cash is invested primarily in demand deposit accounts that are currently providing only a minimal return.

**Cash Flows**

The following table summarizes our cash flows for the periods presented:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016 (in thousands)</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash provided by (used in):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating activities</td>
<td>$5,210</td>
<td>$(9,267)</td>
<td>$(11,685)</td>
</tr>
<tr>
<td>Investing activities</td>
<td>$(24,518)</td>
<td>$(15,945)</td>
<td>$(10,982)</td>
</tr>
<tr>
<td>Financing activities</td>
<td>4,309</td>
<td>122,012</td>
<td>102,584</td>
</tr>
</tbody>
</table>

**Operating Activities**

For the year ended December 31, 2016, net cash provided by operating activities was $5.2 million, consisting of $25.6 million in non-cash items and a $0.3 million net cash inflow from changes in working capital, partially offset by a net loss of $20.7 million. Non-cash items consisted of non-cash stock compensation charges of $15.8 million and depreciation and amortization expense of $9.8 million.

The increase in cash resulting from changes in working capital consisted of a $3.1 million increase in accrued compensation and related benefits, a $2.2 million increase in payments to certain of our university clients in exchange for contract extensions and various marketing and other rights and a $0.8 million charge related to the execution of a new lease agreement for our Maryland headquarters. The decrease in cash resulting from changes in working capital consisted of a $4.0 million increase in prepaid expenses and other current assets, a $3.7 million increase in payments to certain of our university clients in exchange for contract extensions and various marketing and other rights, partially offset by an increase in accrued compensation and related benefits of $4.3 million and other changes of $0.3 million.

For the year ended December 31, 2015, net cash used in operating activities was $9.3 million, consisting of a net loss of $26.7 million and a $3.1 million net cash outflow from changes in working capital, partially offset by $20.5 million in non-cash items. Non-cash items consisted of non-cash stock compensation charges of $12.5 million, depreciation and amortization expense of $7.2 million and a $0.8 million charge related to the execution of a new lease agreement for our Maryland headquarters. The decrease in cash resulting from changes in working capital consisted of a $4.0 million increase in investment in property and equipment, partially offset by an increase in accrued compensation and related benefits of $4.4 million and other changes of $0.3 million.

For the year ended December 31, 2014, net cash used in operating activities was $11.7 million, consisting of a net loss of $29.0 million, partially offset by $13.1 million in non-cash items and a $4.2 million net cash inflow from changes in working capital. Non-cash items consisted of non-cash stock compensation charges of $7.5 million and depreciation, amortization expense of $5.6 million. The increase in cash resulting from changes in working capital consisted of an increase in accrued compensation and related benefits of $3.1 million and a $3.0 million increase accrued expenses and other current liabilities primarily due to higher accrued program marketing costs and an increase of $0.7 million related to the change in the fair value of the Series D redeemable convertible preferred stock warrants prior to their conversion to additional paid-in capital upon the closing of the initial public offering, partially offset by decreases in accounts payable of $2.6 million.

**Investing Activities**

For the year ended December 31, 2016, net cash used in investing activities was $24.5 million, consisting primarily of $16.7 million in costs related to internal-use software and content developed to support a greater number of launched programs. Additionally, purchases of property and equipment were $7.7 million, primarily related to leasehold improvement expenditures related to our new office operating leases, and other investing activities of $0.1 million.

For the year ended December 31, 2015, net cash used in investing activities was $15.9 million, consisting primarily of $12.4 million in costs related to internal-use software and content developed to support a greater number of launched programs. Additionally, $2.0 million was related to the purchase of amortizable intangible assets associated with our marketing domain names and $0.3 million related to an investment we made in an early stage entity to test international marketing channels, while other purchases of property and equipment were $1.2 million.

For the year ended December 31, 2014, net cash used in investing activities was $11.0 million, consisting primarily of $9.5 million in costs related to internal-use software and content developed to support a greater number of launched programs, and $1.5 million related to purchases of property and equipment.

**Financing Activities**

For the year ended December 31, 2016, net cash provided by financing activities was $4.3 million, consisting primarily of $4.9 million in proceeds received from the exercise of stock options, partially
offset by $0.6 million of cash used for the payment of employee withholding taxes related to the release of restricted stock units.

For the year ended December 31, 2015, net cash provided by financing activities was $122.0 million, consisting primarily of $117.1 million in net proceeds from our public offering of common stock and $5.3 million in proceeds received from the exercise of stock options, partially offset by $0.4 million of cash used for the payment of employee withholding taxes related to the release of restricted stock units.

For the year ended December 31, 2014, net cash provided by financing activities was $102.6 million, consisting primarily of $100.3 million in net proceeds from our initial public offering. In addition, we received net cash of $2.3 million from the exercise of stock options.

Operating and Capital Expenditure Requirements

In 2016, we had new capital asset additions of $30.8 million, which was primarily comprised of $17.0 million in capitalized technology and content development costs and $11.7 million of leasehold improvements and other facilities-related capital costs. Of the $30.8 million increase, our cash capital expenditures were $24.4 million, with the difference consisting of landlord-funded leasehold improvement allowances and other accrued capital expenditures. In 2017, we expect new capital asset additions of approximately $64 to $69 million, of which approximately $11 to $13 million will be funded by landlord leasehold improvement allowances.

Contractual Obligations and Commitments

We have non-cancelable operating leases for our office space, and we are also contractually obligated to make fixed payments to certain of our university clients in exchange for contract extensions and various marketing and other rights.

We have a $25.0 million line of credit from Comerica Bank (with letters of credit reducing the aggregate amount we may borrow to $17.9 million) and no amounts were outstanding as of December 31, 2016. In addition, on February 13, 2017, we entered into a standby letter of credit totaling $4.4 million, as a security deposit for our leased facility in Brooklyn, New York. This letter of credit reduced the aggregate amount that we may borrow under our revolving line of credit to $13.5 million.

The following table summarizes our obligations under non-cancelable operating leases and commitments to certain of our clients in exchange for contract extensions and various marketing and other rights at December 31, 2016. Future events could cause actual payments to differ from these amounts.

<table>
<thead>
<tr>
<th>Contractual Obligations</th>
<th>Less than 1 year</th>
<th>1 - 3 years</th>
<th>3 - 5 years</th>
<th>More than 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating lease obligations</td>
<td>$96,191</td>
<td>$6,924</td>
<td>$16,145</td>
<td>$16,903</td>
</tr>
<tr>
<td>Payments to clients</td>
<td>$16,003</td>
<td>$4,978</td>
<td>$4,750</td>
<td>$1,250</td>
</tr>
<tr>
<td>Total</td>
<td>$112,194</td>
<td>$11,902</td>
<td>$20,895</td>
<td>$18,153</td>
</tr>
</tbody>
</table>

We have entered into a specific program agreement under which we would be obligated to make future minimum program payments to a client in the event that certain program metrics, partially associated with a program not yet launched, are not achieved. Due to the dependency of this calculation on a future program launch, the amount of any associated contingent payments cannot be reasonably estimated at this time. As we cannot reasonably estimate the amount of the contingent payments, and because we believe any contingent payments under this agreement would likely be immaterial, we have excluded such payments from the table above.

See Note 6 in the “Notes to Consolidated Financial Statements” included in Part II, Item 8 and “Legal Proceedings” contained in Part I, Item 3 of this Annual Report on Form 10-K for additional information regarding contingencies.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K, such as the use of unconsolidated subsidiaries, structured finance, special purpose entities or variable interest entities.

Recent Accounting Pronouncements

Refer to Note 2 in the “Notes to Consolidated Financial Statements” included in Part II, Item 8 of this Annual Report on Form 10-K for a discussion of FASB’s recent accounting pronouncements and their effect on us.
Management’s Report on Internal Control Over Financial Reporting

Management of 2U, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)). The Company’s internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

The Company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

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

The Company’s management assessed the effectiveness of internal control over financial reporting as of December 31, 2016. In making this assessment, management used the criteria set forth in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. Management has concluded that, as of December 31, 2016, the Company’s internal control over financial reporting was effective based on these criteria.

The effectiveness of the Company’s internal control over financial reporting as of December 31, 2016, has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included herein.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
2U, Inc.:  

We have audited the accompanying consolidated balance sheets of 2U, Inc. and subsidiaries (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of operations, changes in stockholders’ equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of 2U, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), 2U, Inc.’s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 24, 2017 expressed an unqualified opinion on the effectiveness of the Company’s internal control over financial reporting.

/s/ KPMG LLP

McLean, Virginia
February 24, 2017
Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

2U, Inc.:

We have audited 2U, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). 2U, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

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

In our opinion, 2U, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of 2U, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of operations, changes in stockholders’ equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2016 and our report dated February 24, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

McLean, Virginia
February 24, 2017

2U, Inc.
Consolidated Balance Sheets
(in thousands, except share and per share amounts)

<table>
<thead>
<tr>
<th>December 31</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$168,730</td>
<td>$183,729</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>7,860</td>
<td>975</td>
</tr>
<tr>
<td>Advances to clients</td>
<td>567</td>
<td>1,508</td>
</tr>
<tr>
<td>Prepaid expenses and other assets</td>
<td>7,541</td>
<td>6,695</td>
</tr>
<tr>
<td>Total current assets</td>
<td>184,698</td>
<td>192,907</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td>15,596</td>
<td>3,621</td>
</tr>
<tr>
<td>Capitalized technology and content development costs, net</td>
<td>31,867</td>
<td>22,628</td>
</tr>
<tr>
<td>Advances to clients, non-current</td>
<td>2,100</td>
<td>1,042</td>
</tr>
<tr>
<td>Prepaid expenses, non-current</td>
<td>7,052</td>
<td>7,099</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>3,007</td>
<td>3,744</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$244,320</td>
<td>$231,041</td>
</tr>
</tbody>
</table>

| **Liabilities and stockholders’ equity** |      |      |
| Current liabilities: |      |      |
| Accounts payable | $3,729 | $4,544 |
| Accrued compensation and related benefits | 16,491 | 13,405 |
| Accrued expenses and other liabilities | 17,712 | 12,039 |
| Deferred revenue | 3,137 | 2,609 |
| **Total current liabilities** | 41,069 | 32,597 |
| Non-current liabilities | 8,014 | 2,655 |
| **Total liabilities** | 49,083 | 35,252 |

Stockholders’ equity:

| Preferred stock, $0.001 par value, 5,000,000 shares authorized, 0 shares issued and outstanding as of December 31, 2016 and 2015 |      |      |
| Common stock, $0.001 par value, 200,000,000 shares authorized, 47,151,635 shares issued and outstanding as of December 31, 2016; 45,776,455 shares issued and outstanding as of December 31, 2015 | 47 | 46 |
| Additional paid-in capital | 371,455 | 351,324 |
| Accumulated deficit | (176,265) | (155,581) |
| **Total stockholders’ equity** | 195,237 | 195,789 |
| **Total liabilities and stockholders’ equity** | $244,320 | $231,041 |

See accompanying notes to consolidated financial statements.
2U, Inc.
Consolidated Statements of Operations
(in thousands, except share and per share amounts)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$205,864</td>
<td>$150,194</td>
<td>$110,239</td>
</tr>
<tr>
<td><strong>Costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>40,982</td>
<td>32,047</td>
<td>26,858</td>
</tr>
<tr>
<td>Technology and content development</td>
<td>33,283</td>
<td>27,211</td>
<td>22,621</td>
</tr>
<tr>
<td>Program marketing and sales</td>
<td>106,610</td>
<td>82,911</td>
<td>65,218</td>
</tr>
<tr>
<td>General and administrative</td>
<td>46,021</td>
<td>34,123</td>
<td>23,420</td>
</tr>
<tr>
<td><strong>Total costs and expenses</strong></td>
<td>226,896</td>
<td>176,292</td>
<td>138,117</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>(21,032)</td>
<td>(26,098)</td>
<td>(27,878)</td>
</tr>
<tr>
<td><strong>Other income (expense):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>(35)</td>
<td>(552)</td>
<td>(1,213)</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>348</td>
<td>(635)</td>
<td>(1,121)</td>
</tr>
<tr>
<td><strong>Loss before income taxes</strong></td>
<td>(20,684)</td>
<td>(26,733)</td>
<td>(28,999)</td>
</tr>
<tr>
<td><strong>Income tax expense</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>(20,684)</td>
<td>(26,733)</td>
<td>(28,999)</td>
</tr>
<tr>
<td>Preferred stock accretion</td>
<td>(39)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss attributable to holders of common stock</strong></td>
<td>(20,684)</td>
<td>(26,733)</td>
<td>(29,088)</td>
</tr>
<tr>
<td>Weighted-average shares of common stock outstanding, basic and diluted</td>
<td>46,609,751</td>
<td>42,420,356</td>
<td>32,075,107</td>
</tr>
</tbody>
</table>

See accompanying notes to consolidated financial statements.

2U, Inc.
Consolidated Statements of Changes in Stockholders' Equity (Deficit)
(in thousands, except share amounts)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Stock</strong></td>
<td>7,629,133</td>
<td>40,735,069</td>
<td>47,151,635</td>
</tr>
<tr>
<td><strong>Additional Paid-In Capital</strong></td>
<td>8</td>
<td>$41</td>
<td>$46</td>
</tr>
<tr>
<td><strong>Accumulated Stockholders' Deficit</strong></td>
<td>(99,849)</td>
<td>$216,818</td>
<td>$351,324</td>
</tr>
<tr>
<td><strong>Total Stockholders' Equity (Deficit)</strong></td>
<td>(92,024)</td>
<td>$(128,848)</td>
<td>$(176,265)</td>
</tr>
</tbody>
</table>

See accompanying notes to consolidated financial statements.
See accompanying notes to consolidated financial statements.
2. Significant Accounting Policies (Continued)

Cash and Cash Equivalents

Cash and cash equivalents consist of bank checking accounts, money market accounts, investments in certificates of deposit that mature in less than three months and highly liquid marketable securities with maturities at the time of purchase of three months or less.

Concentration of Credit Risk

Financial instruments that subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. All of the Company’s cash is held at financial institutions that management believes to be of high credit quality. The Company’s bank accounts exceed federally insured limits at times. The Company has not experienced any losses on cash to date. To manage accounts receivable risk, the Company maintains an allowance for doubtful accounts, if needed.

During the year ended December 31, 2016, three clients each accounted for 10% or more of the Company’s revenue, as follows: $71.0 million, $36.7 million and $22.1 million, which equals 35%, 18% and 11% of total revenue, respectively.

During the year ended December 31, 2015, three clients each accounted for 10% or more of the Company’s revenue, as follows: $65.2 million, $23.8 million and $17.6 million, which equals 43%, 16% and 12% of total revenue, respectively.

During the year ended December 31, 2014, three clients each accounted for 10% or more of the Company’s revenue, as follows: $61.1 million, $15.9 million and $14.6 million, which equals 55%, 14% and 13% of total revenue, respectively.

As of December 31, 2016, two clients each accounted for 10% or more of the Company’s accounts receivable balance, as follows: $5.8 million and $1.4 million, which equals 74% and 17% of total accounts receivable, respectively. As of December 31, 2015, one client accounted for more than 10% of the Company’s accounts receivable balance, as follows: $0.2 million, which equals 18% of total accounts receivable.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are stated at net realizable value. The Company extends a minimal amount of uncollateralized credit to its clients. The Company utilizes the allowance method to provide for doubtful accounts based on management’s evaluation of the collectability of the amounts due. The Company’s estimate is based on historical collection experience and a review of the current status of accounts receivable. Historically, actual write-offs for uncollectible accounts have not significantly differed from the Company’s estimates. As of December 31, 2016 and 2015, the Company determined that no significant allowances for doubtful accounts were necessary.

Fair Value Measurements

The carrying amounts of certain assets and liabilities, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses and other current liabilities, approximate their respective fair values due to their short-term nature.
2. Significant Accounting Policies (Continued)

reviewed and adjusted prospectively to reflect the Company's current estimates of the respective assets' expected utility. Repair and maintenance costs are expensed as incurred.

Capitalized Technology and Content Development Costs

The Company capitalizes certain costs related to internal-use software, primarily consisting of direct labor associated with creating the software. Software development projects generally include three stages: the preliminary project stage (all costs are expensed as incurred), the application development stage (certain costs are capitalized and certain costs are expensed as incurred) and the post-implementation/operation stage (all costs are expensed as incurred). Costs capitalized in the application development stage include costs of designing the application, coding, integrating the Company's and the university's networks and systems, and the testing of the software. Capitalization of costs requires judgment in determining when a project has reached the application development stage and the period over which the Company expects to benefit from the use of that software. Once the software is placed in service, these costs are amortized on the straight-line method over the estimated useful life of the software, which is generally three years.

The Company works with each client's faculty members to develop and maintain educational content that is delivered to their students through Online Campus. The online content developed jointly by the Company and its clients consists of subjects chosen and taught by clients' faculty members and incorporates references and examples designed to remain relevant over extended periods of time. Online delivery of the content, combined with live, face-to-face instruction, provides the Company with rapid user feedback that it uses to make ongoing corrections, modifications and improvements to the course content. The Company's clients retain all intellectual property rights to the developed content, although the Company retains the rights to the content packaging and delivery mechanisms. Much of the Company's new content development uses proven delivery platforms and is therefore primarily subject-specific in nature. As a result, a significant portion of content development costs qualify for capitalization due to the focus of the Company's development efforts on the unique subject matter of the content. Similar to on-campus programs offered by the Company's clients, the online degree programs enabled by the Company offer numerous courses for each degree. The Company therefore capitalizes its development costs on a course-by-course basis.

The Company develops content on a course-by-course basis in conjunction with the faculty for each client program. The clients and their faculty generally provide course outlines in the form of the curriculum, required textbooks, case studies and other reading materials, as well as presentations that are typically used in the on-campus setting. The Company is then responsible for, and incurs all of the expenses related to, the conversion of the materials provided by each client into a format suitable for delivery through Online Campus.

The content development costs that qualify for capitalization are third-party direct costs, such as videography, editing and other services associated with creating digital content. Additionally, the Company capitalizes internal payroll and payroll-related costs incurred to create and produce videos and other digital content utilized in the clients' programs for delivery via Online Campus. Capitalization ends when content has been fully developed by both the Company and the client, at which time amortization of the capitalized content development costs begins. The capitalized costs are recorded on a course-by-course basis and included in capitalized content costs on the consolidated balance sheets. These costs are amortized using the straight-line method over the estimated useful life of the respective capitalized content program, which is generally five years. The estimated useful life corresponds with the Company's planned curriculum refresh rate. This refresh rate is consistent with expected curriculum refresh rates as cited by program faculty members for similar on-campus programs. It is reasonably possible that developed content could be refreshed before the estimated useful lives are complete or be expensed immediately in the event that the development of a course is discontinued prior to launch.

Other Non-Current Assets

The Company records amounts paid more than 12 months in advance of being incurred as prepaid expenses, non-current. In addition, the Company has certain other assets that are long-term in nature, which are classified as other non-current assets. These consist primarily of other amortizable intangible assets associated with the Company's marketing websites and related domain names and security deposits on leased office facilities.

Evaluation of Long-Lived Assets

The Company reviews long-lived assets, which consist of property and equipment, capitalized technology costs, capitalized content development costs and acquired finite-lived intangible assets, for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. Recoverability of a long-lived asset is measured by a comparison of the carrying value of an asset or asset group to the future undiscounted net cash flows expected to be generated by that asset or asset group. If such assets are not recoverable, the impairment to be recognized is measured by the amount by which the carrying value of an asset exceeds the estimated fair value (discounted cash flow) of the asset or asset group. In order to assess the recoverability of the capitalized technology and content development costs, the costs are grouped by degree vertical, which is the lowest level of independent cash flows. The Company's impairment analysis is based upon cumulative results and forecasted performance. The actual results could vary from the Company's forecasts, especially in relation to recently launched programs. For the years ended December 31, 2016 and 2015, no impairment of long-lived assets was deemed to have occurred.

Revenue Recognition and Deferred Revenue

The Company recognizes revenue when all of the following conditions are met: (i) persuasive evidence of an arrangement exists, (ii) rendering of services is complete, (iii) fees are fixed or determinable and (iv) collection of fees is reasonably assured.

The Company primarily derives its revenue from long-term contracts that typically range from 10 to 15 years in length. Under these contracts, the Company enables access to its Platform to its clients and their faculty and students. The Company is entitled to a contractually specified percentage of net program proceeds from clients. These net program proceeds represent gross proceeds billed by clients to students, less credit card fees and other specified charges the Company has agreed to exclude in certain of its client contracts.

The Company generates substantially all of its revenue from multiple-deliverable contractual arrangements with its clients. Under each of these arrangements, the Company provides (i) access to Online Campus, which serves as a learning platform for its client's faculty and students and which also enables a comprehensive range of other client functions, (ii) access to operations applications which

Notes to Consolidated Financial Statements (Continued)
2. Significant Accounting Policies (Continued)

provide the content management, admissions application processing, customer relationship management, and other functionality necessary to effectively operate the Company's clients' programs and (ii) technology-enabled services that support the complete lifecycle of a higher education program, including attracting students, advising prospective students through the admissions application process, providing technical, success coaching and other support, facilitating accessibility to individuals with disabilities, and facilitating in-program field placements.

In order to treat deliverables in a multiple-deliverable contractual arrangement as separate units of accounting, deliverables must have standalone value upon delivery. The technology-enabled services within the Platform are provided primarily in support of programs delivered through Online Campus, and for students of the programs delivered through Online Campus. Accordingly, the Company has determined that no individual deliverable has standalone value upon delivery and, therefore, deliverables in the Company's multiple-deliverable arrangements do not qualify for treatment as separate units of accounting. Therefore, the Company considers all deliverables to be a single unit of accounting and recognizes revenue from the entire arrangement over the term of the service period.

Advance payments are recorded as deferred revenue until services are delivered or obligations are met, at which time revenue is recognized. Deferred revenue as of a particular balance sheet date represents the excess of amounts received as compared to amounts recognized in revenue in the consolidated statements of operations as of the end of the reporting period and, such amounts are reflected as a current liability on the Company's consolidated balance sheets.

Program Marketing and Sales Expense

The majority of the marketing and sales costs incurred by the Company are directly related to acquiring students for its clients' programs, with lesser amounts related to the Company's own marketing and advertising efforts. For the years ended December 31, 2016, 2015 and 2014, expenses related to the Company's own marketing and advertising efforts were not material. All such costs are expensed as incurred and reported in program marketing and sales expense in the Company's consolidated statements of operations.

Leases

The Company leases all of its office facilities and enters into various other lease agreements in conducting its business. At the inception of each lease, the Company evaluates the lease agreement to determine whether the lease is an operating or capital lease. Additionally, many of the Company's lease agreements contain renewal options, tenant improvement allowances, rent holidays and/or rent escalation clauses. The Company defers tenant improvement allowances and amortizes such balances as a reduction of rent expense over the term of the lease. When rent holidays or rent escalations are included in a lease agreement, the Company records a deferred rent asset or liability in the consolidated financial statements, and records these items in rent expense evenly over the term of the lease.

The Company is also required to make additional payments under operating lease terms for taxes, insurance and other operating expenses incurred during the operating lease period; such items are expensed as incurred. Rental deposits are included as other assets in the consolidated financial statements for lease agreements the require payments in advance or deposits held for security that are refundable, less any damages, at the end of the respective lease.

2. Significant Accounting Policies (Continued)

Stock-Based Compensation

The Company accounts for stock-based compensation awards based on the fair value of the award as of the grant date. For awards subject to service-based vesting conditions, the Company recognizes stock-based compensation expense on a straight-line basis over the award's requisite service period, adjusted for estimated forfeitures. For awards subject to both performance and service-based vesting conditions, the Company recognizes stock-based compensation expense using an accelerated recognition method when it is probable that the performance condition will be achieved.

Basic and Diluted Loss per Common Share

The Company uses the two-class method to compute net loss per share of common stock because the Company has issued securities, other than common stock, that contractually entitle the holders to participate in dividends and earnings of the Company. The two-class method requires earnings for the period to be allocated between common stock and participating securities based upon their respective rights to receive distributed and undistributed earnings. Holders of each series of the Company's redeemable convertible preferred stock (prior to their conversion to common stock) were entitled to participate in distributions, when and if declared by the board of directors, that are made to holders of common stock, and as a result are considered participating securities.

Under the two-class method, for periods with net income, basic net income per share of common stock is computed by dividing the net income attributable to holders of common stock by the weighted-average number of shares of common stock outstanding during the period. Net income attributable to holders of common stock is computed by subtracting from net income the portion of current year earnings that the participating securities would have been entitled to receive pursuant to their dividend rights had all of the year's earnings been distributed. No such adjustment to earnings is made during periods with a net loss, as the holders of the participating securities have no obligation to fund losses. Diluted net loss per share of common stock is computed under the two-class method by using the weighted-average number of shares of common stock outstanding, plus, for periods with net income attributable to holders of common stock, the potential dilutive effects of stock options and warrants. In addition, the Company analyzes the potential dilutive effect of the outstanding participating securities under the "if-converted" method when calculating diluted earnings per share, in which it is assumed that the outstanding participating securities convert into common stock at the beginning of the period. The Company reports the more dilutive of the approaches (two-class or "if-converted") as its diluted net income per share during the period. Due to net losses for the years ended December 31, 2016, 2015 and 2014, basic and diluted net loss per share were the same, as the effect of potentially dilutive securities would have been anti-dilutive.

Comprehensive Loss

The Company's net loss equals comprehensive loss for all periods presented as the Company has no material components of other comprehensive income. Therefore, no consolidated statements of comprehensive income are included in the consolidated financial statements for any periods presented.

Recent Accounting Pronouncements

2. Significant Accounting Policies (Continued)

Receipts and Cash Payments. The ASU addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice surrounding how certain transactions are classified in the statement of cash flows. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2017. The Company is currently evaluating the effect that this standard will have on its consolidated statements of cash flows and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The ASU simplifies various aspects related to the accounting and presentation of share-based payments. The guidance also allows employers to withhold shares to satisfy minimum statutory withholding requirements up to the employees’ maximum individual tax rate without causing the award to be classified as a liability. Additionally, the guidance stipulates that cash paid by an employer to a taxing authority when directly withholding shares for tax and withholding purposes should be classified as a financing activity on the statement of cash flows, and allows companies to elect an accounting policy to either estimate the share-based award forfeitures (and expense) or account for forfeitures (and expense) as they occur. The amendments in this ASU are effective for fiscal years beginning after December 15, 2016. The Company is adopting this ASU on January 1, 2017, and does not believe that this standard will have a material impact on its consolidated financial position or related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The ASU introduces a model for lessors requiring most leases to be reported on the balance sheet. Lessor accounting remains substantially similar to current U.S. GAAP. The amendments in this ASU are effective for fiscal years beginning after December 15, 2018. The Company is currently evaluating the effect that this ASU will have on its consolidated financial position and related disclosures, and believes that this standard may materially increase its other non-current assets and non-current liabilities on the consolidated balance sheets in order to record right-of-use assets and related liabilities for its existing operating leases.

In November 2015, the FASB issued ASU No. 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes. The ASU eliminates the requirement to classify deferred tax assets and liabilities between current and noncurrent. The ASU requires classification of all deferred tax assets and liability balances as noncurrent. The amendments in this ASU are effective for fiscal years beginning after December 15, 2016, with early adoption permitted. Adoption of the ASU is either retrospective to each prior period presented, or prospective. As of December 31, 2015, the Company early adopted the ASU prospectively. Adoption of this standard did not have a material impact on the Company’s consolidated financial position or related disclosures.

In April 2015, the FASB issued ASU No. 2015-05, Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement. The ASU provides guidance to customers in a cloud computing arrangement to determine whether the arrangement includes a software license. When a cloud computing arrangement includes a software license, the customer is required to account for the license element of the arrangement consistent with the acquisition of other software licenses. The amendments in this ASU are effective for fiscal years beginning after December 15, 2015. The Company adopted this ASU on January 1, 2016. Adoption of this standard did not have a material impact on the Company’s consolidated financial position or related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs. The ASU simplifies the presentation of debt issuance costs by requiring that such costs be presented in the consolidated balance sheets as a direct deduction from the carrying value of the associated debt instrument, consistent with debt discounts. The amendments in this ASU are effective for fiscal years beginning after December 15, 2015. The Company adopted this ASU on January 1, 2016. Adoption of this standard did not have a material impact on the Company’s consolidated financial position or related disclosures.

In January 2015, the FASB issued ASU No. 2015-01, Income Statement—Extraordinary and Unusual Items (Subtopic 225-20): Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items. The ASU simplifies income statement presentation by eliminating the concept of extraordinary items. The amendments classified as an adjustment to net income for each prior period presented, or prospective. As of December 31, 2015, the Company early adopted the ASU on January 1, 2016. Adoption of this standard did not have a material impact on the Company’s consolidated financial position or related disclosures.

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. The ASU requires that an entity’s management evaluate whether there are conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern within one year after the date that the financial statements are issued. The amendments in this ASU are effective for annual reporting periods ending after December 15, 2016. The Company does not expect the new standard to have a significant impact on its reporting process.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. In July 2015, the FASB deferred the mandatory effective date of this ASU by one year from January 1, 2017 to January 1, 2018. Early adoption is allowed, but not before January 1, 2017. Subsequently, the FASB has issued the following standards related to ASU No. 2014-09: ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients; and ASU No. 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers. The Company must adopt ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12 and ASU No. 2016-20 with ASU No. 2014-09 (collectively, the “new revenue standards”). The new revenue standards may be applied retrospectively to each prior period presented or prospectively with the cumulative effect recognized as of the date of adoption. During 2016, the Company has made measurable progress towards completing the evaluation of the potential changes from adopting the new standard on our future financial reporting and disclosures. The Company has engaged an independent third-party expert to assist with the implementation of this standard, has completed the review of the Company’s contracts portfolio and has made significant progress in the review of current accounting policies and practices to identify potential differences that could result from applying the requirements of the new standard to our revenue contracts. The Company will continue to evaluate the impact that the new revenue standards will have, if any, on the Company’s consolidated financial statements and related disclosures and is still
2. Significant Accounting Policies (Continued)

determining the method of adoption that will be elected. The Company will adopt this new standard on January 1, 2018, and plans on giving additional updates on progress made towards adoption and further conclusions in its Form 10-Q’s of 2017.

3. Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable, net consists of the following:

<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>Other receivables</th>
<th>Total Accounts Receivable, Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2016</td>
<td>$7,859</td>
<td>$8,060</td>
</tr>
<tr>
<td>December 31, 2015</td>
<td>$360</td>
<td>$3,910</td>
</tr>
</tbody>
</table>

The changes in allowance for doubtful accounts are as follows:

<table>
<thead>
<tr>
<th>Balance at Beginning of Period</th>
<th>Additions Charged to Expense</th>
<th>Deductions</th>
<th>Balance at End of Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ended December 31, 2016</td>
<td>$—</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>Year ended December 31, 2015</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Year ended December 31, 2014</td>
<td>12</td>
<td>(12)</td>
<td>—</td>
</tr>
</tbody>
</table>

4. Property and Equipment and Other Amortizable Intangible Assets

Property and equipment consisted of the following as of:

<table>
<thead>
<tr>
<th>Property and Equipment</th>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer hardware</td>
<td>$3,955</td>
<td>$2,911</td>
</tr>
<tr>
<td>Furniture and office equipment</td>
<td>2,204</td>
<td>1,666</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>6,689</td>
<td>1,837</td>
</tr>
<tr>
<td>Total</td>
<td>19,692</td>
<td>6,414</td>
</tr>
</tbody>
</table>

Depreciation and amortization expense of property and equipment and other amortizable intangible assets was $2.0 million, $1.2 million and $1.0 million for the years ended December 31, 2016, 2015 and 2014, respectively.

As of December 31, 2016, the estimated future depreciation and amortization expense for property and equipment placed in service and other amortizable intangible assets is as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Future Depreciation and Amortization Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$2,279</td>
</tr>
<tr>
<td>2018</td>
<td>2,035</td>
</tr>
<tr>
<td>2019</td>
<td>1,723</td>
</tr>
<tr>
<td>2020</td>
<td>1,434</td>
</tr>
<tr>
<td>2021</td>
<td>1,187</td>
</tr>
<tr>
<td>Thereafter</td>
<td>2,337</td>
</tr>
<tr>
<td>Total</td>
<td>$10,995</td>
</tr>
</tbody>
</table>

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5. Capitalized Technology and Content Development Costs

Capitalized technology and content development costs consisted of the following as of:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>Gross Carrying Amount</th>
<th>Accumulated Amortization</th>
<th>Carrying Amount</th>
<th>December 31, 2015</th>
<th>Gross Carrying Amount</th>
<th>Accumulated Amortization</th>
<th>Carrying Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalized technology costs</td>
<td>$12,988</td>
<td>$ (7,822)</td>
<td>$ 5,166</td>
<td>$ 8,564</td>
<td>$(5,697)</td>
<td>$ 2,867</td>
<td></td>
</tr>
<tr>
<td>Capitalized technology costs in process</td>
<td>4,112</td>
<td>—</td>
<td>4,112</td>
<td>1,640</td>
<td>—</td>
<td>1,640</td>
<td></td>
</tr>
<tr>
<td>Total capitalized technology costs</td>
<td>17,100</td>
<td>(7,822)</td>
<td>9,278</td>
<td>10,204</td>
<td>(5,697)</td>
<td>4,507</td>
<td></td>
</tr>
<tr>
<td>Capitalized content development costs</td>
<td>33,353</td>
<td>(15,327)</td>
<td>17,986</td>
<td>24,796</td>
<td>(10,931)</td>
<td>13,865</td>
<td></td>
</tr>
<tr>
<td>Capitalized content development costs in process</td>
<td>4,603</td>
<td>—</td>
<td>4,603</td>
<td>4,256</td>
<td>—</td>
<td>4,256</td>
<td></td>
</tr>
<tr>
<td>Total capitalized content development costs</td>
<td>37,956</td>
<td>(15,367)</td>
<td>22,589</td>
<td>29,052</td>
<td>(10,931)</td>
<td>18,121</td>
<td></td>
</tr>
<tr>
<td>Capitalized technology and content development costs, net</td>
<td>$55,056</td>
<td>($23,189)</td>
<td>$31,867</td>
<td>$39,256</td>
<td>$(16,628)</td>
<td>$22,628</td>
<td></td>
</tr>
</tbody>
</table>

Amortization expense related to capitalized technology was $2.1 million, $1.6 million and $1.4 million for the years ended December 31, 2016, 2015 and 2014, respectively. This expense is included in technology and content development costs in the accompanying consolidated statements of operations.

The Company recorded amortization expense related to capitalized content development costs of $5.7 million, $4.5 million and $3.2 million for the years ended December 31, 2016, 2015 and 2014, respectively.

As of December 31, 2016, the estimated future amortization expense for the capitalized technology and content development costs placed in service is as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amortization Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$ 8,082</td>
</tr>
<tr>
<td>2018</td>
<td>6,876</td>
</tr>
<tr>
<td>2019</td>
<td>4,844</td>
</tr>
<tr>
<td>2020</td>
<td>2,614</td>
</tr>
<tr>
<td>2021</td>
<td>736</td>
</tr>
<tr>
<td>Thereafter</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$23,152</td>
</tr>
</tbody>
</table>

6. Non-current Liabilities

Non-current liabilities consisted of the following as of:

<table>
<thead>
<tr>
<th>December 31, 2016</th>
<th>December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Lease-related liabilities</td>
<td>$7,620</td>
</tr>
<tr>
<td>Other</td>
<td>394</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>$8,014</td>
</tr>
</tbody>
</table>

7. Commitments and Contingencies

Line of Credit

On December 31, 2013, the Company entered into a credit agreement for a revolving line of credit with an aggregate commitment not to exceed $37.0 million. On January 21, 2014, the Company borrowed $5.0 million under this line of credit and repaid this borrowing in full on February 18, 2014.

On December 31, 2015, the Company amended this credit agreement to reduce the aggregate amount it may borrow to $25.0 million, and on January 30, 2017, the Company amended this credit agreement to extend the maturity date through March 1, 2017. No amounts were outstanding under this credit agreement as of December 31, 2016. The Company intends to extend this agreement under comparable terms, prior to expiration.

Certain of the Company's operating lease agreements entered into prior to December 31, 2016 require security deposits in the form of cash or an unconditional, irrevocable letter of credit. As of December 31, 2016, the Company has entered into standby letters of credit totaling $7.1 million, as security deposits for the applicable leased facilities. These letters of credit reduced the aggregate amount the Company may borrow under its revolving line of credit to $17.9 million. In addition, on February 13, 2017, the Company entered into a standby letter of credit totaling $4.4 million, as a security deposit for its leased facility in Brooklyn, New York. This letter of credit reduced the aggregate amount the Company may borrow under its revolving line of credit to $13.5 million.

Under this revolving line of credit, the Company has the option of borrowing funds subject to (i) a base rate, which is equal to 1.5% plus the greater of Comerica Bank's prime rate, the federal funds rate plus 1% or the 30 day LIBOR plus 1%, or (ii) LIBOR plus 2.5%. For amounts borrowed under the base rate, the Company may make interest-only payments quarterly, and may prepay such amounts with no penalty. For amounts borrowed under LIBOR, the Company makes interest-only payments in periods of one, two and three months and will be subject to a prepayment penalty if such borrowed amounts are repaid before the end of the interest period.

Borrowings under the line of credit are collateralized by substantially all of the Company's assets. The availability of borrowings under this credit line is subject to compliance with reporting and financial covenants, including, among other things, that the Company achieves specified minimum three-month trailing revenue levels during the term of the agreement and specified minimum six-month trailing profitability levels for some client programs, measured quarterly. In addition, the Company is required to maintain a minimum adjusted quick ratio, which measures short-term liquidity, of at least...
7. Commitments and Contingencies (Continued)

1.10 to 1.00. As of December 31, 2016 and 2015, the Company’s adjusted quick ratio was 5.43 and 7.90, respectively.

The covenants under the line of credit also place limitations on the Company’s ability to incur additional indebtedness or to prepay permitted indebtedness, grant liens on or security interests in its assets, carry out mergers and acquisitions, dispose of assets, declare, make or pay dividends, make capital expenditures in excess of specified amounts, make investments, loans or advances, enter into transactions with affiliates, amend or modify the terms of material contracts, or change its fiscal year. If the Company is not in compliance with the covenants under the line of credit, after any opportunity to cure such non-compliance, or if otherwise experiences an event of default under the line of credit, the lenders may require repayment in full of all principal and interest outstanding. If the Company fails to repay such amounts, the lenders could foreclose on the assets pledged as collateral under the line of credit. The Company is currently in compliance with all such covenants.

Legal Contingencies

From time to time, the Company may become involved in legal proceedings or other contingencies in the ordinary course of its business. The Company is not presently involved in any legal proceeding or other contingency that, if determined adversely to it, would individually or in the aggregate have a material adverse effect on its business, operating results, financial condition or cash flows. Accordingly, the Company does not believe that there is a reasonable possibility that a material loss exceeding amounts already recognized may have been incurred as of the date of the balance sheets presented herein.

Program Marketing and Sales Commitments

Certain of the agreements entered into between the Company and its clients require the Company to commit to meet certain staffing and spending investment thresholds related to program marketing and sales activities. In addition, certain of the agreements require the Company to invest up to agreed upon levels in marketing the programs to achieve specified program performance. The Company believes it is currently in compliance with all such commitments.

Operating Leases

The Company leases office facilities under non-cancelable operating leases in Maryland, New York, California, Colorado, North Carolina, Virginia and Hong Kong. The Company also leases office equipment under non-cancelable leases. As of December 31, 2016, the future minimum lease payments were as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Minimum Lease Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$ 6,924</td>
</tr>
<tr>
<td>2018</td>
<td>7,829</td>
</tr>
<tr>
<td>2019</td>
<td>8,316</td>
</tr>
<tr>
<td>2020</td>
<td>8,083</td>
</tr>
<tr>
<td>2021</td>
<td>8,820</td>
</tr>
<tr>
<td>Thereafter</td>
<td>56,219</td>
</tr>
<tr>
<td>Total</td>
<td>$96,191</td>
</tr>
</tbody>
</table>

7. Commitments and Contingencies (Continued)

The future minimum lease payments due under non-cancelable operating lease arrangements contain fixed rent increases over the term of the lease. Rent expense on these operating leases is recognized over the term of the lease on a straight-line basis. The excess of rent expense over actual lease payments is reported in non-current liabilities in the accompanying consolidated balance sheets. The deferred rent liability related to these leases totaled $2.5 million and $0.6 million as of December 31, 2016 and 2015, respectively. The Company does not have any subleases as of December 31, 2016.

Total rent expense from non-cancelable operating lease agreements (net of sublease income of $0.3 million, $0.3 million and $0.3 million) was $5.8 million, $3.5 million and $2.6 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Fixed Payments to Clients

The Company is contractually obligated to make fixed payments to certain of its clients in exchange for contract extensions and various marketing and other rights. Currently, the future minimum fixed payments to the Company’s clients in exchange for contract extensions and various marketing and other rights were as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Fixed Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$ 4,978</td>
</tr>
<tr>
<td>2018</td>
<td>3,875</td>
</tr>
<tr>
<td>2019</td>
<td>875</td>
</tr>
<tr>
<td>2020</td>
<td>625</td>
</tr>
<tr>
<td>2021</td>
<td>625</td>
</tr>
<tr>
<td>Thereafter</td>
<td>5,025</td>
</tr>
<tr>
<td>Total</td>
<td>$16,003</td>
</tr>
</tbody>
</table>

Contingent Payments to Clients

The Company has entered into specific program agreements under which it would be obligated to make future minimum program payments to a client in the event that certain program metrics, partially associated with programs not yet launched, are not achieved. Due to the dependency of these calculations on future program launches, the amounts of any associated contingent payments cannot be reasonably estimated at this time. As the Company cannot reasonably estimate the amounts of the contingent payments, and because it believes any contingent payments under this agreement would likely be immaterial, the Company has excluded such payments from the table above.
8. Income Taxes

The Company had domestic losses before income taxes of $20.7 million, $26.7 million and $29.0 million for the years ended December 31, 2016, 2015 and 2014, respectively.

A reconciliation between the Company's statutory federal income tax rate and the effective tax rate for the years ended December 31, is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. statutory federal income tax rate</td>
<td>35.0%</td>
<td>35.0%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Increase (decrease) resulting from:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. state income taxes, net of federal benefits</td>
<td>5.5</td>
<td>7.7</td>
<td>5.8</td>
</tr>
<tr>
<td>Non-deductible expenses</td>
<td>(4.4)</td>
<td>(2.0)</td>
<td>(2.8)</td>
</tr>
<tr>
<td>Change in valuation allowance</td>
<td>(36.6)</td>
<td>(39.1)</td>
<td>(32.4)</td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
<td>(1.6)</td>
<td>(5.6)</td>
</tr>
<tr>
<td>Effective tax rate</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

The significant components of the Company's deferred tax assets and liabilities as of December 31 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total deferred tax assets</td>
<td>$15,053</td>
<td>$10,853</td>
</tr>
</tbody>
</table>

Deferred tax assets:

- Accrued expenses and other | $2,757 | $1,899 |
- Accrued compensation and related benefits | 4,317 | 3,306 |
- Rebate reserve | 126 | 167 |
- Deferred rent | 1,028 | 282 |
- Stock-based compensation | 7,127 | 4,971 |
- Net operating loss carryforwards | 61,995 | 54,967 |
- Valuation allowance | (62,297) | (58,739) |

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total deferred tax liabilities</td>
<td>$15,053</td>
</tr>
</tbody>
</table>

Deferred tax liabilities:

- Prepaid expenses | $(1,524) | $(875) |
- Capitalized content development costs | (9,368) | (7,583) |
- Capitalized software development costs | (3,848) | (1,886) |
- Property and equipment | (313) | (509) |

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total deferred tax liabilities</td>
<td>$(15,053)</td>
<td>$(10,853)</td>
</tr>
<tr>
<td>Net deferred tax assets/liabilities</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Income taxes are accounted for under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that are included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement and tax bases of the assets and liabilities using enacted tax rates that are in effect for the year in which the differences are expected to reverse. Deferred tax assets are subject to periodic recoverability assessments. Recognition of deferred tax assets is appropriate only if the likelihood of realization of such assets is more likely than not to occur. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount that more likely than not will be realized.

At December 31, 2016, the Company had a federal net operating loss ("NOL") carryforward of approximately $198.2 million, which expires between 2029 and 2036. The gross amount of the state NOL carryforwards is equal to or less than the federal NOL carryforwards and expires over various periods based on individual state tax laws. A full valuation allowance has been established to offset the net deferred tax assets as the Company has not generated taxable income since inception and does not have sufficient deferred tax liabilities to recover the deferred tax assets. The total increase in the valuation allowance was $7.6 million for the year ended December 31, 2016. The utilization of the NOL carryforwards to reduce future income taxes will depend on the Company's ability to generate sufficient taxable income prior to the expiration of the NOL carryforwards. In addition, a certain portion of the above NOL carryforwards may be subject to Internal Revenue Code section 382 limitations, which may limit their future use.

The Company completed an analysis of its stock ownership changes through December 31, 2016 in accordance with Internal Revenue Code section 382 and the Treasury Regulations promulgated thereunder, and determined that a greater than fifty percent ownership change of one or more of its 5-percent shareholders occurred. Absent a subsequent ownership change, all of the Company's net operating losses subject to the ownership change should be available. Therefore, despite the fact that an ownership change occurred, such change is not expected to limit the ability of the Company to utilize the carryforward net operating losses of approximately $198.2 million prior to expiration.

The Company applies the provisions of ASC 740-10 to uncertain tax positions. ASC 740-10 clarifies accounting for income taxes by prescribing a minimum probability threshold that a tax position must meet before a financial statement benefit is recognized. If the probability for sustaining a tax position is greater than fifty percent, then the tax position is warranted and recognition should be at the highest amount that would be expected to be realized upon settlement. The Company did not identify any tax positions that would be required for inclusion in the financial statements. As of December 31, 2016, the Company had not made any changes to its tax positions since December 31, 2015.
using the 2014 Plan for grants of new equity awards. In January 2014, the Company ceased using the 2008 Plan to grant new equity awards, and began using the 2014 Plan in its entirety.

The Company maintains two share-based compensation plans: the 2014 Equity Incentive Plan (the "2014 Plan") and the 2008 Stock Incentive Plan (the "2008 Plan"). Upon the effective date of the 2014 Plan in January 2014, the Company ceased using the 2008 Plan to grant new equity awards, and began using the 2014 Plan for grants of new equity awards.

8. Income Taxes (Continued)

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2016 and 2015, the Company had no accrued interest or penalties related to uncertain tax positions.

The Company has analyzed its filing positions in all significant federal, state and foreign jurisdictions where it is required to file income tax returns, as well as open tax years in these jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local tax examinations by tax authorities for the years prior to 2012, though the NOL carryforwards can be adjusted upon audit and could impact taxes owed in open tax years. No income tax returns are currently under examination by the taxing authorities.

9. Stockholders' Equity

Immediately upon the closing of the IPO on April 2, 2014, the Company's certificate of incorporation was amended and restated to, among other things, authorize 200,000,000 shares of common stock and 5,000,000 shares of preferred stock.

On September 30, 2015, the Company sold 3,625,000 shares of its common stock to the public, including 525,000 shares sold pursuant to the underwriters' over-allotment option. The Company net proceeds of $117.1 million, which the Company intends to use for general corporate purposes.

As of December 31, 2016, the Company was authorized to issue 205,000,000 total shares of capital stock, consisting of 200,000,000 shares of common stock and 5,000,000 shares of preferred stock. At December 31, 2016, the Company had reserved a total of 9,337,334 of its authorized shares of common stock for future issuance as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding stock options</td>
<td>4,882,237</td>
</tr>
<tr>
<td>Possible future issuance under 2014 Equity Incentive Plan</td>
<td>3,042,163</td>
</tr>
<tr>
<td>Outstanding restricted stock units</td>
<td>1,412,934</td>
</tr>
<tr>
<td>Total shares of common stock reserved for future issuance</td>
<td>9,337,334</td>
</tr>
</tbody>
</table>

As of December 31, 2016, the Company had 1,412,934 outstanding restricted stock units, 3,042,163 outstanding stock options and 4,882,237 reserved for issuance under the 2014 Plan. In addition, shares subject to outstanding stock awards granted under the 2008 Plan and 2014 Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award, return to the 2014 Plan's share reserve and become available for future grant under the 2014 Plan, up to the maximum number of shares of 5,943,348.

As of December 31, 2016, the Company had 3,042,163 shares reserved for issuance under the 2014 Plan. Further, as of December 31, 2016, under the 2014 Plan, options to purchase 2,165,914 shares of the Company's common stock were outstanding at a weighted-average exercise price of $19.21 per share and 1,412,934 restricted stock units were outstanding.

10. Stock-Based Compensation (Continued)

The Company provides equity-based compensation awards to employees, independent contractors and directors as an effective means for attracting, retaining and motivating such individuals. The Company maintains two share-based compensation plans: the 2014 Equity Incentive Plan (the "2014 Plan") and the 2008 Stock Incentive Plan (the "2008 Plan"). Upon the effective date of the 2014 Plan in January 2014, the Company ceased using the 2008 Plan to grant new equity awards, and began using the 2014 Plan for grants of new equity awards.

In February 2014, the Company's stockholders approved the 2014 Plan. The 2014 Plan provides for the grant of incentive stock options to the Company's employees and its parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards and other forms of stock compensation to the Company's employees, consultants and directors. The 2014 Plan also provides for the grant of performance-based cash awards to the Company's employees, consultants and directors.

A total of 2,800,000 shares of the Company's common stock were initially reserved for issuance pursuant to the 2014 Plan. In addition, the shares reserved for issuance under the 2014 Plan include (a) those shares reserved but unissued under the 2008 Plan, and (b) shares returned to the 2008 Plan as the result of expiration or termination of awards (provided that the maximum number of shares that may be added to the 2014 Plan pursuant to (a) and (b) is 5,943,348 shares). The number of shares of the Company's common stock that may be issued under the 2014 Plan will automatically increase on January 1st of each year, for a period of ten years, from January 1, 2015 continuing through January 1, 2024, by 5% of the total number of shares of the Company's common stock outstanding on December 31st of the preceding calendar year, or a lesser number of shares as may be determined by the Company's board of directors. The shares available for issuance increased by 2,357,579 and 2,288,820 on January 1, 2017 and 2016, respectively, pursuant to the automatic share reserve increase provision under the 2014 Plan.

In addition, shares subject to outstanding stock awards granted under the 2008 Plan and 2014 Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award, return to the 2014 Plan's share reserve and become available for future grant under the 2014 Plan, up to the maximum number of shares of 5,943,348.

As of December 31, 2016, the Company had 3,042,163 shares reserved for issuance under the 2014 Plan. Further, as of December 31, 2016, under the 2014 Plan, options to purchase 2,165,914 shares of the Company's common stock were outstanding at a weighted-average exercise price of $19.21 per share and 1,412,934 restricted stock units were outstanding.

2008 Plan

In October 2008, the Company's stockholders approved the Company's 2008 Plan. The 2008 Plan was most recently amended on May 8, 2013. The 2008 Plan provided for the grant of incentive stock options to the Company's employees and the employees of the Company's subsidiaries, and for the grant of nonstatutory stock options, restricted stock awards and deferred stock awards to the Company's employees, directors and consultants. The number of shares of common stock available for grant under the 2008 Plan is automatically increased on January 1 of each year for a period of ten years, from January 1, 2015 continuing through January 1, 2024, by 5% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year, or a lesser number of shares as may be determined by the Company's board of directors. The shares available for issuance increased by 2,357,579 and 2,288,820 on January 1, 2017 and 2016, respectively, pursuant to the automatic share reserve increase provision under the 2008 Plan.

In addition, shares subject to outstanding stock awards granted under the 2008 Plan and 2014 Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award, return to the 2008 Plan's share reserve and become available for future grant under the 2008 Plan, up to the maximum number of shares of 5,943,348.

As of December 31, 2016, the Company had 3,042,163 shares reserved for issuance under the 2014 Plan. Further, as of December 31, 2016, under the 2014 Plan, options to purchase 2,165,914 shares of the Company's common stock were outstanding at a weighted-average exercise price of $19.21 per share and 1,412,934 restricted stock units were outstanding.
10. Stock-Based Compensation (Continued)

As of December 31, 2016, options to purchase 2,716,323 shares of the Company’s common stock were outstanding under the 2008 Plan at a weighted-average exercise price of $3.99 per share.

Stock-Based Compensation Expense

Stock-based compensation expense related to stock-based awards is included in the following line items in the accompanying consolidated statements of operations:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>$3,245</td>
<td>$2,270</td>
<td>$1,468</td>
</tr>
<tr>
<td>Technology and content</td>
<td>2,392</td>
<td>1,548</td>
<td>794</td>
</tr>
<tr>
<td>development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program marketing and</td>
<td>1,317</td>
<td>1,057</td>
<td>676</td>
</tr>
<tr>
<td>sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and administrative</td>
<td>8,869</td>
<td>7,624</td>
<td>4,589</td>
</tr>
<tr>
<td>Total stock-based</td>
<td>$15,823</td>
<td>$12,499</td>
<td>$7,527</td>
</tr>
<tr>
<td>compensation expense</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stock Options

The terms of stock option grants, including the exercise price per share and vesting periods, are determined by the Company’s board of directors or the compensation committee thereof. Stock options are granted at exercise prices of not less than the estimated fair market value of the Company’s common stock at the date of grant. Stock options are generally subject to service-based vesting conditions and vest at various times from the date of the grant, with most options vesting in tranches, generally over a period of four years. Stock options granted under the 2014 Plan and the 2008 Plan are subject to service-based vesting conditions, and generally expire ten years from the grant date.

The Company uses the Black-Scholes-Merton option pricing model, which requires input of subjective assumptions, including the risk-free interest rate, expected life of the option, expected stock price volatility and dividend yield. Additionally, the recognition of expense requires the input of subjective assumptions, including the risk-free interest rate, expected life of the option, expected stock price volatility and dividend yield.

The expected life represents the period of time the stock options are expected to be outstanding and is based on the “simplified method.” The expected life of an option is presumed to be the midpoint between the vesting date and the end of the contractual term. The Company used the “simplified method” due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected life of the stock options. Expected volatility is based on historical volatilities for freely traded stock of comparable companies over the estimated expected life of the stock options. The Company assumed no dividend yield because dividends are not expected to be paid in the near future, which is consistent with the Company’s history of not paying dividends.

The risk-free interest rate assumption is based upon observed interest rates for constant maturity U.S. Treasury securities consistent with the expected term of the Company’s employee stock options. The expected life of the option, expected stock price volatility and dividend yield are based on the “simplified method.” Under the “simplified method,” the expected life of an option is presumed to be the mid-point between the vesting date and the end of the contractual term. The Company used the “simplified method” due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected life of the stock options. Expected volatility is based on historical volatilities for freely traded stock of comparable companies over the estimated expected life of the stock options. The Company assumed no dividend yield because dividends are not expected to be paid in the near future, which is consistent with the Company’s history of not paying dividends.

The total unrecognized compensation cost related to the unvested options as of December 31, 2016 was $11.6 million and will be recognized over a weighted-average period of approximately 2.1 years.

The aggregate intrinsic value of the options exercised during the years ended December 31, 2016, 2015 and 2014 was $24.9 million, $25.8 million and $16.2 million, respectively.

10. Stock-Based Compensation (Continued)

Prior to the IPO, the Company determined for financial reporting purposes the estimated per share fair value of its common stock at various grant dates using contemporaneous valuations performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants Practice Aid, “Valuation of Privately-Held Company Equity Securities Issued as Compensation,” also known as the Practice Aid. In conducting the contemporaneous valuations, the Company used relevant information available and considered all objective and subjective factors that it believed to be relevant for each valuation conducted, including management’s best estimate of the Company’s business condition, prospects and operating performance at each valuation date.

The following table summarizes the assumptions used for estimating the fair value of the stock options granted for the periods presented.

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-free interest rate</td>
<td>1.1% - 1.9%</td>
<td>1.5% - 1.9%</td>
<td>1.7% - 2.1%</td>
</tr>
<tr>
<td>Expected term (years)</td>
<td>5.43 - 6.50</td>
<td>5.56 - 6.08</td>
<td>5.11 - 6.25</td>
</tr>
<tr>
<td>Expected volatility</td>
<td>50%</td>
<td>50%</td>
<td>50% - 55%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The following table summarizes the assumptions used for estimating the fair value of the stock options:

<table>
<thead>
<tr>
<th>Number of Options</th>
<th>Weighted-Average Exercise Price per Share</th>
<th>Weighted-Average Expected Life (in years)</th>
<th>Aggregate Intrinsic Value (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding balance at December 31, 2015</td>
<td>5,298,510</td>
<td>$ 8.07</td>
<td>6.66</td>
</tr>
<tr>
<td>Granted</td>
<td>758,547</td>
<td>23.57</td>
<td>9.00</td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,011,153)</td>
<td>4.82</td>
<td>2.94</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(154,493)</td>
<td>18.22</td>
<td>18.22</td>
</tr>
<tr>
<td>Outstanding balance at December 31, 2016</td>
<td>4,882,237</td>
<td>10.74</td>
<td>6.30</td>
</tr>
<tr>
<td>Exercisable at December 31, 2016</td>
<td>3,394,702</td>
<td>6.54</td>
<td>5.37</td>
</tr>
<tr>
<td>Vested and expected to vest at December 31, 2016</td>
<td>4,772,843</td>
<td>10.47</td>
<td>6.24</td>
</tr>
</tbody>
</table>

The weighted-average grant date fair value of the Company’s stock options granted during the years ended December 31, 2016, 2015 and 2014 was $11.41, $12.54 and $5.71 per share, respectively.

The total unrecognized compensation cost related to the unvested options as of December 31, 2016 was $24.9 million, $11.6 million and $11.41 million, respectively.
10. Stock-Based Compensation (Continued)

Restricted Stock Units

Throughout 2016 and 2015, the Company granted restricted stock units under the 2014 Plan to the Company's directors and certain of the Company's employees. The terms of the restricted stock unit grants under the 2014 Plan, including the vesting periods, are determined by the Company's board of directors or the compensation committee thereof. Restricted stock units are generally subject to service-based vesting conditions and vest at various times from the date of the grant, with most restricted stock units vesting in equal annual tranches, generally over a period of four years.

The following is a summary of restricted stock unit activity:

<table>
<thead>
<tr>
<th>Number of Restricted Stock Units</th>
<th>Weighted-Average Grant Date Fair Value per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding balance at December 31, 2015</td>
<td>1,220,008</td>
</tr>
<tr>
<td>Granted</td>
<td>701,668</td>
</tr>
<tr>
<td>Vested</td>
<td>(366,927)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(139,815)</td>
</tr>
<tr>
<td>Outstanding balance at December 31, 2016</td>
<td>1,412,934</td>
</tr>
</tbody>
</table>

The total compensation cost related to the nonvested restricted stock units not yet recognized as of December 31, 2016 was $19.2 million and will be recognized over a weighted-average period of approximately 2.4 years.

11. Net Loss per Share (Continued)

Basic and diluted net loss per share attributable to holders of common stock is calculated as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator (in thousands):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss attributable to holders of common stock</td>
<td>$ (20,684)</td>
<td>$ (26,733)</td>
<td>$ (29,088)</td>
</tr>
<tr>
<td>Denominator:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted-average shares of common stock outstanding, basic and diluted</td>
<td>46,609,751</td>
<td>42,420,356</td>
<td>32,075,107</td>
</tr>
<tr>
<td>Net loss per share attributable to holders of common stock, basic and diluted</td>
<td>$ (0.44)</td>
<td>$ (0.63)</td>
<td>$ (0.91)</td>
</tr>
</tbody>
</table>

12. Segment and Geographic Information

Operating segments are defined as components of an enterprise for which discrete financial information is available that is evaluated regularly by the chief operating decision maker ("CODM") for purposes of allocating resources and evaluating financial performance. The Company's CODM reviews the financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. As such, the Company's operations constitute a single operating segment and one reportable segment. The Company offers similar services to substantially all of its clients, which primarily represent well-recognized nonprofit colleges and universities in the United States. Substantially all assets were held and all revenue was generated in the United States during all periods presented.

13. Retirement Plan

The Company has established a 401(k) plan for eligible employees to contribute up to 100% of their compensation, limited by the IRS-imposed maximum contribution amount. The Company matches 33% of each employee's contribution up to 6% of the employee's salary deferral. For the years ended December 31, 2016, 2015 and 2014, the Company made employer contributions of $1.1 million, $0.8 million and $0.6 million, respectively.

14. Related Party Transactions

During the years ended December 31, 2016, 2015 and 2014, the Company subleased office space to an entity that was, upon execution of the sublease in 2011, a greater than 5% stockholder. The lease required the subtenant to reimburse the Company for the allocated cost of the office space subleased. For the years ended December 31, 2016, 2015 and 2014, the Company recorded $0.3 million, $0.3 million and $0.3 million, respectively, as rental income from this related entity.

The Company utilized the marketing and event planning services of a company that is partially owned by one of the Company's former executives. The Company recorded $1.4 million, $1.7 million and $1.6 million for the expenses incurred related to the services provided by this related party for the years ended December 31, 2016, 2015 and 2014, respectively. No material amounts were due to the
14. Related Party Transactions (Continued)

related party or recorded in accounts payable on the consolidated balance sheets as of December 31, 2016 and 2015.

15. Quarterly Financial Information (Unaudited)

The following tables set forth certain unaudited quarterly financial data for 2016 and 2015. This unaudited information has been prepared on the same basis as the audited information included elsewhere in this Annual Report and includes all adjustments necessary to present fairly the information set forth therein. The operating results are not necessarily indicative of results for any future period.

### Three Months Ended

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$ 47,444</td>
<td>$ 49,110</td>
<td>$ 51,960</td>
<td>$ 57,350</td>
</tr>
<tr>
<td><strong>Costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>9,512</td>
<td>10,260</td>
<td>10,351</td>
<td>10,859</td>
</tr>
<tr>
<td>Technology and content development</td>
<td>7,275</td>
<td>8,842</td>
<td>8,670</td>
<td>8,496</td>
</tr>
<tr>
<td>Program marketing and sales</td>
<td>23,656</td>
<td>27,483</td>
<td>28,165</td>
<td>27,306</td>
</tr>
<tr>
<td>General and administrative</td>
<td>10,447</td>
<td>10,944</td>
<td>11,569</td>
<td>13,061</td>
</tr>
<tr>
<td><strong>Total costs and expenses</strong></td>
<td>$ 50,890</td>
<td>$ 57,529</td>
<td>$ 58,755</td>
<td>$ 59,722</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>($3,446)</td>
<td>($8,419)</td>
<td>($6,795)</td>
<td>($2,372)</td>
</tr>
<tr>
<td><strong>Other income (expense):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>($26)</td>
<td>(9)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>—</td>
<td>91</td>
<td>37</td>
<td>163</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>($98)</td>
<td>(102)</td>
<td>(356)</td>
<td>(79)</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>($3,380)</td>
<td>($8,327)</td>
<td>($6,758)</td>
<td>($2,209)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$ 34,612</td>
<td>$ 35,238</td>
<td>$ 37,092</td>
<td>$ 43,252</td>
</tr>
<tr>
<td><strong>Costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>7,550</td>
<td>7,903</td>
<td>7,845</td>
<td>8,749</td>
</tr>
<tr>
<td>Technology and content development</td>
<td>6,134</td>
<td>6,466</td>
<td>7,082</td>
<td>7,529</td>
</tr>
<tr>
<td>Program marketing and sales</td>
<td>19,587</td>
<td>21,526</td>
<td>21,567</td>
<td>20,231</td>
</tr>
<tr>
<td>General and administrative</td>
<td>6,711</td>
<td>8,871</td>
<td>8,477</td>
<td>10,064</td>
</tr>
<tr>
<td><strong>Total costs and expenses</strong></td>
<td>$ 39,982</td>
<td>$ 44,766</td>
<td>$ 44,971</td>
<td>$ 46,573</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>($5,370)</td>
<td>($9,528)</td>
<td>($7,879)</td>
<td>($3,321)</td>
</tr>
<tr>
<td><strong>Other income (expense):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>($126)</td>
<td>($126)</td>
<td>($127)</td>
<td>($173)</td>
</tr>
<tr>
<td><strong>Interest income</strong></td>
<td>28</td>
<td>24</td>
<td>21</td>
<td>94</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>—</td>
<td>—</td>
<td>(250)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>($98)</td>
<td>(102)</td>
<td>(356)</td>
<td>(79)</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>($5,468)</td>
<td>($9,630)</td>
<td>($8,235)</td>
<td>($3,400)</td>
</tr>
</tbody>
</table>

15. Quarterly Financial Information (Unaudited) (Continued)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$ 34,612</td>
<td>$ 35,238</td>
<td>$ 37,092</td>
<td>$ 43,252</td>
</tr>
<tr>
<td><strong>Costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>7,550</td>
<td>7,903</td>
<td>7,845</td>
<td>8,749</td>
</tr>
<tr>
<td>Technology and content development</td>
<td>6,134</td>
<td>6,466</td>
<td>7,082</td>
<td>7,529</td>
</tr>
<tr>
<td>Program marketing and sales</td>
<td>19,587</td>
<td>21,526</td>
<td>21,567</td>
<td>20,231</td>
</tr>
<tr>
<td>General and administrative</td>
<td>6,711</td>
<td>8,871</td>
<td>8,477</td>
<td>10,064</td>
</tr>
<tr>
<td><strong>Total costs and expenses</strong></td>
<td>$ 39,982</td>
<td>$ 44,766</td>
<td>$ 44,971</td>
<td>$ 46,573</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>($5,370)</td>
<td>($9,528)</td>
<td>($7,879)</td>
<td>($3,321)</td>
</tr>
<tr>
<td><strong>Other income (expense):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>($126)</td>
<td>($126)</td>
<td>($127)</td>
<td>($173)</td>
</tr>
<tr>
<td><strong>Interest income</strong></td>
<td>28</td>
<td>24</td>
<td>21</td>
<td>94</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>—</td>
<td>—</td>
<td>(250)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>($98)</td>
<td>(102)</td>
<td>(356)</td>
<td>(79)</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>($5,468)</td>
<td>($9,630)</td>
<td>($8,235)</td>
<td>($3,400)</td>
</tr>
</tbody>
</table>

100

101
2U, Inc.
Selected Financial Data

The following selected consolidated financial data for the years ended December 31, 2016, 2015, 2014, 2013 and 2012, and the selected consolidated balance sheet data as of December 31, 2016, 2015, 2014, 2013 and 2012 are derived from our audited consolidated financial statements. Our historical results are not necessarily indicative of the results to be expected in the future. The selected consolidated financial data should be read together with Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in conjunction with the consolidated financial statements, related notes, and other financial information included elsewhere in this Annual Report on Form 10-K.

### Consolidated Statement of Operations

#### Year Ended December 31,

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands, except share and per share amounts)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>205,864</td>
<td>150,194</td>
<td>110,239</td>
<td>83,127</td>
<td>55,879</td>
</tr>
<tr>
<td>Costs and expenses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing and support</td>
<td>40,982</td>
<td>32,047</td>
<td>26,838</td>
<td>22,718</td>
<td>14,926</td>
</tr>
<tr>
<td>Technology and content development</td>
<td>35,239</td>
<td>27,211</td>
<td>22,621</td>
<td>19,472</td>
<td>8,299</td>
</tr>
<tr>
<td>Program marketing and sales</td>
<td>106,610</td>
<td>82,911</td>
<td>65,218</td>
<td>54,103</td>
<td>45,390</td>
</tr>
<tr>
<td>General and administrative</td>
<td>46,021</td>
<td>34,123</td>
<td>23,420</td>
<td>14,840</td>
<td>10,342</td>
</tr>
<tr>
<td>Total costs and expenses</td>
<td>226,896</td>
<td>178,292</td>
<td>138,117</td>
<td>111,135</td>
<td>78,957</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(21,032)</td>
<td>(26,098)</td>
<td>(27,878)</td>
<td>(28,006)</td>
<td>(23,078)</td>
</tr>
<tr>
<td>Other income (expense):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>(35)</td>
<td>(552)</td>
<td>(1,213)</td>
<td>27</td>
<td>(73)</td>
</tr>
<tr>
<td>Interest income</td>
<td>353</td>
<td>167</td>
<td>92</td>
<td>26</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>(250)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total other income (expense)</td>
<td>348</td>
<td>(635)</td>
<td>(1,121)</td>
<td>53</td>
<td>(35)</td>
</tr>
<tr>
<td>Loss before income taxes</td>
<td>(20,684)</td>
<td>(26,733)</td>
<td>(28,999)</td>
<td>(27,953)</td>
<td>(23,113)</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net loss</td>
<td>(20,684)</td>
<td>(26,733)</td>
<td>(28,999)</td>
<td>(27,953)</td>
<td>(23,113)</td>
</tr>
<tr>
<td>Preferred stock accretion</td>
<td>(259)</td>
<td>(347)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net loss attributable to common stockholders</td>
<td>$20,425</td>
<td>(26,733)</td>
<td>(28,999)</td>
<td>(27,953)</td>
<td>(23,113)</td>
</tr>
<tr>
<td>Net loss per share attributable to common stockholders, basic and diluted</td>
<td>$ (0.44)</td>
<td>(0.63)</td>
<td>(0.91)</td>
<td>(3.81)</td>
<td>(3.33)</td>
</tr>
<tr>
<td>Weighted-average common shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted</td>
<td>46,609,751</td>
<td>42,420,356</td>
<td>32,075,107</td>
<td>7,432,055</td>
<td>7,037,090</td>
</tr>
<tr>
<td>Adjusted EBITDA (loss)(1)</td>
<td>$4,541</td>
<td>$ (6,629)</td>
<td>$ (14,779)</td>
<td>$ (21,245)</td>
<td>$ (18,814)</td>
</tr>
</tbody>
</table>

(1) Adjusted EBITDA is a financial measure not in accordance with generally accepted accounting principles, or GAAP. For more information about Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net loss, the most directly comparable financial measure calculated and presented in accordance with GAAP, see the section below titled “Adjusted EBITDA.”

### Adjusted EBITDA

To provide investors with additional information regarding our financial results, we have provided within this Annual Report on Form 10-K Adjusted EBITDA, a non-GAAP financial measure. We have provided a reconciliation below of Adjusted EBITDA to net loss, the most directly comparable GAAP financial measure.

We have included Adjusted EBITDA in this Annual Report on Form 10-K because it is a key measure used by our management and board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short-and long-term operational plans. In particular, the exclusion of certain expenses in calculating Adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business.

Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation;
- Adjusted EBITDA does not reflect interest or tax payments that may represent a reduction in cash available to us; and
- other companies, including companies in our industry, may calculate Adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider Adjusted EBITDA alongside other GAAP-based financial performance measures, including various cash flow metrics, net income (loss)
and our other GAAP results. The following table presents a reconciliation of Adjusted EBITDA to net loss for each of the periods indicated:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss</td>
<td>$(20,684)</td>
<td>$(26,733)</td>
<td>$(28,999)</td>
<td>$(27,953)</td>
<td>$(23,113)</td>
</tr>
<tr>
<td>Adjustments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>35</td>
<td>552</td>
<td>1,213</td>
<td>(27)</td>
<td>73</td>
</tr>
<tr>
<td>Interest income</td>
<td>(383)</td>
<td>(167)</td>
<td>(92)</td>
<td>(26)</td>
<td>(38)</td>
</tr>
<tr>
<td>Depreciation and amortization expense</td>
<td>9,750</td>
<td>7,220</td>
<td>5,572</td>
<td>4,335</td>
<td>2,869</td>
</tr>
<tr>
<td>Stock-based compensation expense</td>
<td>15,823</td>
<td>12,499</td>
<td>7,527</td>
<td>2,426</td>
<td>1,395</td>
</tr>
<tr>
<td>Total adjustments</td>
<td>25,225</td>
<td>20,104</td>
<td>14,220</td>
<td>6,708</td>
<td>4,299</td>
</tr>
<tr>
<td>Adjusted EBITDA (loss)</td>
<td>$ 4,541</td>
<td>$(6,629)</td>
<td>$(14,779)</td>
<td>$(21,245)</td>
<td>$(18,814)</td>
</tr>
</tbody>
</table>

SPECIAL NOTE REGARDING EXHIBITS

In reviewing the agreements included as exhibits to this Annual Report on Form 10-K, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about the Company or the other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about the Company may be found elsewhere in this Annual Report on Form 10-K and the Company’s other public filings, which are available without charge through the SEC’s website at http://www.sec.gov.

The Company acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, it is responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this report not misleading.
<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description</th>
<th>Form</th>
<th>File No.</th>
<th>Exhibit Number</th>
<th>Filing Date</th>
<th>Filed Herewith</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Amended and Restated Certificate of Incorporation of the Registrant.</td>
<td>S-K</td>
<td>001-36376</td>
<td>3.1</td>
<td>April 4, 2014</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Amended and Restated Bylaws of the Registrant.</td>
<td>S-K</td>
<td>001-36376</td>
<td>3.2</td>
<td>April 4, 2014</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Specimen stock certificate evidencing shares of Common Stock.</td>
<td>S-1/A</td>
<td>333-194079</td>
<td>4.2</td>
<td>March 17, 2014</td>
<td></td>
</tr>
<tr>
<td>10.1*</td>
<td>Services Agreement, by and between the Registrant and University of Southern California, on behalf of the USC Rossier School of Education, dated as of October 29, 2008, as amended to date.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.1</td>
<td>February 21, 2014</td>
<td></td>
</tr>
<tr>
<td>10.2*</td>
<td>Master Services Agreement, by and between the Registrant and University of Southern California, on behalf of School of Social Work, dated as of April 12, 2010, and Addenda dated as of April 12, 2010 and July 22, 2011.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.2</td>
<td>February 21, 2014</td>
<td></td>
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<tr>
<td>10.2.1*</td>
<td>Second Addendum to the Master Services Agreement, by and between the Registrant and University of Southern California, on behalf of the School of Social Work, dated as of March 14, 2014.</td>
<td>S-1/A</td>
<td>333-194079</td>
<td>10.2.1</td>
<td>March 17, 2014</td>
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<td>10.2.2*</td>
<td>Amendment to Master Services Agreement, by and between the Registrant and University of Southern California, on behalf of School of Social Work, dated as of November 5, 2015.</td>
<td>10-K</td>
<td>001-36376</td>
<td>10.2.2</td>
<td>March 10, 2016</td>
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<td>10.3</td>
<td>Amended and Restated Investor Rights Agreement, dated as of March 27, 2012, by and among the Registrant and certain of its stockholders.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.6</td>
<td>February 21, 2014</td>
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<tr>
<td>10.4*</td>
<td>Fourth Amended and Restated 2008 Stock Incentive Plan, as amended to date.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.7</td>
<td>February 21, 2014</td>
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<td>10.5*</td>
<td>Form of Incentive Stock Option Agreement under 2008 Stock Incentive Plan.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.8</td>
<td>February 21, 2014</td>
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</tr>
<tr>
<td>10.6*</td>
<td>Form of Non-Qualified Stock Option Agreement under 2008 Stock Incentive Plan.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.9</td>
<td>February 21, 2014</td>
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<tr>
<td>10.7*</td>
<td>2014 Equity Incentive Plan.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.11</td>
<td>February 21, 2014</td>
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<tr>
<td>10.8*</td>
<td>Form of Stock Option Agreement under 2014 Equity Incentive Plan.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.12</td>
<td>February 21, 2014</td>
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<td>10.9*</td>
<td>Form of Restricted Stock Unit Award Agreement under 2014 Equity Incentive Plan.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.13</td>
<td>February 21, 2014</td>
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<td>10.10*</td>
<td>Summary of Non-Employee Director Compensation Plan.</td>
<td>10-Q</td>
<td>001-36376</td>
<td>10.1</td>
<td>May 12, 2014</td>
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<td>10.12*</td>
<td>Form of Indemnification Agreement with directors and executive officers.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.15</td>
<td>February 21, 2014</td>
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<td>10.14*</td>
<td>Amended and Restated Revolving Credit Agreement, by and among the Registrant, Comerica Bank as Administrative Agent and as a Lender, Issuing Lender and Swing Line Lender and Square 1 Bank as a Lender, dated as of December 31, 2013.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.4</td>
<td>February 21, 2014</td>
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<td>10.16</td>
<td>Office Lease, by and between Lanham Office 2015 LLC and 2U Harkins Road LLC, dated as of December 23, 3015.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.11</td>
<td>February 21, 2014</td>
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<td>10.17</td>
<td>Agreement of Lease, by and between 55 Prospect Owner LLC and 2U NYC, LLC, dated as of February 15, 2017.</td>
<td>S-1</td>
<td>333-194079</td>
<td>10.12</td>
<td>February 21, 2014</td>
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<td>Exhibit Number</td>
<td>Description</td>
<td>Form</td>
<td>File No.</td>
<td>Exhibit Number</td>
<td>Filing Date</td>
<td>Filed Herewith</td>
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<tr>
<td>31.1</td>
<td>Certification of Chief Executive Officer of 2U, Inc. pursuant to Exchange Act</td>
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<td>Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</td>
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<td>31.2</td>
<td>Certification of Chief Financial Officer of 2U, Inc. pursuant to Exchange Act</td>
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<td></td>
<td>Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</td>
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<tr>
<td>32.1</td>
<td>Certification of Chief Executive Officer of 2U, Inc. in accordance with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</td>
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<td>32.2</td>
<td>Certification of Chief Financial Officer of 2U, Inc. in accordance with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</td>
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<td>101.INS</td>
<td>XBRL Instance Document.</td>
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<td>101.CAL</td>
<td>XBRL Taxonomy Extension Calculation Linkbase Document.</td>
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<td>101.DEF</td>
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<td>101.LAB</td>
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<td>101.PRE</td>
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</tr>
</tbody>
</table>

* Portions of this exhibit, indicated by asterisks, have been omitted pursuant to a request for confidential treatment and have been separately filed with the Securities and Exchange Commission.
† Indicates management contract or compensatory plan.
Christopher “Chip” Paucek  
Chief Executive Officer and Co-Founder

Paul A. Maeder  
Board Chair  
Compensation Committee Member  
General Partner of Highland Capital Partners

Mark J. Chernis  
Audit Committee Chair  
SVP of Strategic Partnerships and Investments at Pearson plc

Timothy M. Haley  
Nominating and Governance Committee Chair  
Founding Partner and Managing Director of Redpoint Ventures

John M. Larson  
Compensation Committee Chair  
Executive Chairman and CEO of Triumph Higher Education Group, Inc., and President of Triumph Group, Inc.

Robert M. Stavis  
Audit Committee Member  
Partner at Bessemer Venture Partners

Sallie L. Krawcheck  
Nominating and Governance Committee Member  
CEO and Co-Founder of Ellevest and Owner and Chair of Ellevate Network

Earl Lewis  
Audit Committee Member  
President of the Andrew W. Mellon Foundation

Edward S. Macias  
Nominating and Governance Committee Member  
Provost Emeritus and Barbara and David Thomas Distinguished Professor in Arts & Sciences at Washington University in St. Louis

Coretha M. Rushing  
Compensation Committee Member  
Corporate Vice President and Chief Human Resources Officer at Equifax Inc.

LEGAL COUNSEL  
Skadden, Arps, Slate, Meagher & Flom LLP and Affiliates  
New York, New York

AUDITORS  
KPMG LLP  
McLean, Virginia

SHAREHOLDER INFORMATION  
Copies of the Company’s Form 10-K filed with the Securities and Exchange Commission for the year ended December 31, 2016, committee charters, Code of Business Conduct and Ethics, and other documents may be obtained free of charge on investor.2u.com or by contacting:

ANNUAL MEETING  
The annual meeting of stockholders will be held on June 5, 2017 at 2:00 pm, at 2U Headquarters, 7900 Harkins Road, Lanham, MD 20706

TRANSFER AGENT  
American Stock Transfer & Trust Company  
6201 15th Avenue  
Brooklyn, NY 11219

2U, Inc.  
Investor Relations  
7900 Harkins Road  
Lanham, MD 20706  
301-892-4350