2017 Trends to Watch: Higher Education

IT as an enabler of innovation and competitive institutional differentiation
Summary

Catalyst

There has been a significant amount of change in the higher education industry over the past decade. With funding pressures and increasing focus on student success and completion, IT plays a pivotal role in delivering key services, enabling digital transformation, and providing competitive institutional differentiation. The ability to achieve this is dependent on IT partnering with institutional leadership at a strategic level to meet institutional goals. This report outlines the changes in the market and explores which trends will have the biggest impact in 2017. This analysis is important for both vendors targeting higher education and institutions, to ensure that they understand the key forces that will shape the education landscape in 2017.

Ovum view

Last year, Ovum identified three key trends that would strongly impact higher education in 2016: the expansion of delivery models for teaching and learning, meaningful progression of student experience strategies, and a serious discussion about next-generation IT strategy. All three remain important as we look to 2017, but with significant advancement. As the delivery models for teaching and learning have expanded – and to an extent continue to expand – institutions will support the use of innovative technology to improve pedagogy. In an effort to enhance the student experience, institutions will be forced to develop sustainable strategies that, if followed through and supported by the right technology, will improve student success. Finally, the movement toward next-generation IT strategy will focus on IT agility. In an environment where disruption is recurrent, the capacity for innovation, flexibility, and agility will determine whether institutions are able to survive and differentiate themselves. IT departments will have a significant opportunity to lay the groundwork for using technology to deliver innovation, flexibility, and agility, as well as long-term value to institutions.

Key messages

- Institutions will support the use of innovative technology in teaching and learning.
- More thought will be given to how to improve the student experience.
- The movement toward next-generation IT strategy will focus on IT agility.

Recommendations

Recommendations for institutions

Incorporate the use of innovative technology when devising pedagogical strategies

Students expect technologies (i.e. video and virtual reality) to deliver integrated and personalized learning. They want to decide for themselves their education needs and rate of progress. Institutions, and faculty in particular, need to embrace and apply these technologies in the design of teaching and learning. For institutions to compete in an increasingly digital and competitive market, enabling these technologies is a critical role for the IT department.
Develop a collaborative and campus-wide approach to improving student success

While individual departments across the institution can have a profound impact on student success, developing a collaborative, campus-wide approach with a shared vision of student success, and communicating that vision across the institution, means that resources can be aligned more effectively to support defined goals. Collaboration between every campus stakeholder that holds a piece of the student success puzzle and values the full student experience creates multiple safety nets for students. From student affairs to academic affairs, all of these functions and more play a role in student success. A successful campus-wide student success strategy will include common goals, consistent messages, and appropriate incentives to ensure the participation of all stakeholders.

Consider the CIO and IT department to be trusted partners of the institution

When purchasing technology services – or making any large purchase for that matter – it is common to seek out knowledgeable acquaintances who can share the pros and cons of the proposed investment. Institutional leaders should consider the CIO and IT team as a trusted partner in making these investment decisions. After all, IT teams are far more than maintainers of systems, and this is what the CIO and the IT team should be positioning themselves as. Being the go-to technical counselor that can navigate through the myriad of options with their peers will strengthen the value of the IT team, and its reputation.

Recommendations for vendors

Meet institutions where they are at in terms of SIS modernization

Over the past 12 months, student information system (SIS) providers have addressed a pressing need for innovation in administrative systems, and they will continue to do so moving forward. Given the number of institutions that will go to market for a new SIS over the coming 12 to 18 months, this is entirely positive. However, while delivering all services through a cloud model would be an attractive proposition in a greenfield implementation, few institutions find themselves in that space. Rip and replace with an alternative delivery paradigm in a big-bang approach is simply too risky, especially when critical applications such as SIS are considered. Therefore, vendors must be mindful of this and support institutions at every stage of SIS modernization.

When it comes to cloud, focus on differentiation

As "cloud" has become another industry buzzword and the term has unfortunately become devalued, institutions have become confused as to whether the benefits are real, and whether they are worth the risks and change costs. In light of this, Ovum recommends that vendors focus on differentiators that they can use to distinguish themselves from their competitors. For example, the industry has unique business requirements, and domain expertise is critical. Vendors that have that expertise are advised to leverage it, and those that do not must acquire it. Successful partnerships with institutions are based on relationships, and relationships are built on shared understanding. Without expertise in higher education, this will be difficult to achieve.
Business trends and technology enablers

Key trends and enablers summarized

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Source: Ovum

Institutions will support the use of innovative technology in teaching and learning

From nontraditional to "new traditional" students, institutions will be forced to consider new needs

In the 2016 Trends to Watch: Higher Education report, Ovum identified servicing the needs of nontraditional students as a key trend for 2016 and beyond. While this still applies, this term is likely to change. According to the National Center for Education Statistics (NCES), 8.4 million adult learners were enrolled in higher education in 2010; by 2021, this is expected to have increased to 10.3 million. Adult learners will constitute over 41% of postsecondary students in the next five years. By that time, adult learners will be referred to as the "new traditional" rather than the "nontraditional."
As this new traditional demographic becomes the majority in higher education, the needs of these students will carry more weight. If institutions want to make the educational investment worthwhile for these students, it will be critical to meet and exceed their expectations by creating a high-value student experience. Higher education is currently linear and insular, in that it highlights a degree as the ultimate goal. Nontraditional students need much more flexibility in terms of what the college experience offers to them. While some adult students enter higher education late, for others it is a change of direction, and institutions must help these students move toward a credential that makes sense for them.

Meeting the expectations of new traditional students is going to come down to a narrowing in focus. University and college league tables incentivize institutions to try to be all things to all people, but institutions will realize that they cannot continue to do this. The value proposition of higher education will change, and institutions will begin thinking about the role of higher education in students' lives. For many new traditional students, it will come down to career prospects. Institutions will realize that students are hiring higher education to help them obtain a job, and they can help them achieve this goal.

Institutions will expect more from their online learning platforms

As stated earlier, institutions will be forced to consider the increasing expectations of a changing student demographic. A high standard of teaching and learning, with the appropriate technologies to support pedagogy, is a key part of improving the student experience and meeting those needs. As students and faculty expect new and flexible ways of studying and collaborating, institutions will expect more from their online learning platforms (OLPs) and other technologies that aid pedagogy. Ovum's 2016/17 ICT Enterprise Insights survey indicates that institutions currently have a weak perception of the quality of all major learning management system (LMS) solutions (Figure 1). While they were all above the average rating, not even the most-used LMS solutions – Blackboard, D2L, and Moodle – were perceived as having "fairly strong" or "very strong" quality.

Moving forward, LMS/OLP providers will need to focus on enriching their solutions through personalized learning and support for a range of pedagogical techniques. In this environment, a student can study and progress at their own pace, using collaboration functionality that increases interactions among students and between students and faculty.
Pedagogy will be facilitated by alternative content forcing change in the textbook publishing industry

Students expect institutions to provide a range of online learning and content tools, including video and open educational resources (OERs). The large-scale digitization of information is creating many opportunities for institutions to enhance pedagogy with new forms of content creation and dissemination. Institutions have traditionally structured and provided access to content in the form of textbooks. Moving forward, video and OER will be increasingly disruptive forces in the facilitation of teaching and learning, resulting in the decline of print textbooks.

The unsustainable cost of print textbooks, an expanding digital landscape, and an increase in low-cost alternatives will force the textbook publishing industry to change in order to survive. Publishers will have to prepare for a market that will be decentralized, and one that will move away from textbook titles and toward digitization. This is entirely positive, and the proliferation of devices in the student age group will offer publishers the opportunity to increase access to their digital offerings.

Eventually, publishers will move beyond the current business model of textbook publishing and toward positioning themselves as learning companies that promote better learning outcomes for students. However, publishers should be aware that providing the content alone will not improve learning outcomes. Rather, providing the capabilities to keep students engaged and help them to succeed will be more valuable, and will allow publishers to successfully compete in the market. After all, the goal of publishers will be to support future growth as opposed to protecting declining revenues. Rethinking how to engage with institutions will enable publishers to better navigate the disruption facing the publishing market.
More thought will be given to how to improve the student experience

Improving student outcomes will not be possible without an institutional approach that leverages technology

Given the ongoing challenge of improving student success in higher education globally, ensuring that technology actively supports institutional student success initiatives is crucial. Student success solutions involve the use of data collection and analysis tools to predict student success or risk, alert those who can intervene, and assess the effectiveness of interventions. The sooner institutions can identify when a student is beginning to show signs of struggling, the earlier they can intervene. To do this requires the interrogation of data through analytical tools – tools that can be used by nontechnical advisors and faculty.

The ability for student advisors, faculty, and students to use existing and emerging technologies is an essential part of a student success strategy. Learning analytics will gain increasing prominence as applications to improve the student experience and enable better decision-making. As primary tools for faculty and administrators, they provide real-time evidence of student learning progress and support needs, enabling early intervention to ensure academic completion, as well as reporting faculty performance. This is evidence that analytics are an important part of student success solutions, particularly for teaching and learning. The findings of Ovum's 2016/17 ICT Enterprise Insights survey indicate that almost 40% of institutions have fully deployed analytics for tracking student learning and progress (Figure 2). This is likely to increase over the next 12 months, and IT teams will have a critical role in working with a range of stakeholders – from faculty to student advisors – to identify, assess, implement, and enable access to solutions best suited to improving student outcomes.

**Figure 2: Higher education institutions’ analytics deployments**

![Figure 2: Higher education institutions’ analytics deployments](image)

Source: Ovum ICT Enterprise Insights
Investments in next-generation SIS will grow

According to Ovum’s 2016/17 ICT Enterprise Insights (ICTEI) survey, investments in student information systems (SIS) will happen at a faster rate than any other core application over the next 18 months (Figure 3). Approximately 56% of institutions have strategic or minor investment planned for their SIS in the near future. This is unsurprising given that the next generation of SIS solutions – primarily from Ellucian, Oracle, Unit4, and Workday – are beginning to emerge, added to an institutional need for innovation in administrative systems. Over the next 12 to 18 months, an increasing number of institutions will consider the cost of maintaining legacy systems and either upgrade to the next version of existing vendor solutions or replace legacy systems entirely with new vendor offerings. With the continued pressure of tight budgets and the need for differentiation in a competitive market, there is a growing appetite among institutions for upgrading or replacing legacy SIS solutions with modern technology. As Ovum has stressed in the past, modernization of existing SIS solutions is more likely to be the case given the cost and time-consuming nature of "rip and replace."

The movement toward next-generation IT strategy will focus on IT agility

As pressures on education technology services mount, cloud talk continues

The findings of Ovum’s 2016/17 ICTEI survey show that a significant number of higher education institutions have deployed core enterprise applications on-premise (Figure 4). However, it is also evident that a number of institutions have either outsourced the delivery of their systems or are using a cloud-based delivery model for most solution areas, which suggests that cloud momentum, albeit slow, exists. With pressure on budgets and the search for increased business value from scarce resources, “do more with less” is a familiar phrase to drive the search for efficiencies in all institutions. However, the accelerating rate of change and the drive for innovation are generating harsh pressure
to not only do things cheaper, but also quicker. Agility, in terms of being able to change what you deliver quickly, is now as important – if not more important – than cost.

Additionally, institutions are under pressure to service the demands of nontraditional or new traditional students. They generally arrive with a well-developed expectation of service gained elsewhere in their life experience and expect their chosen institution to match the delivery capabilities of the best consumer banks, social media sites, and online shopping channels. Furthermore, they are more likely to move institution if they are not getting the service they expect. While cloud computing is not the be-all and end-all solution to these pressures on education technology services, as a new way to source IT services and applications faster, the cloud discussion will certainly continue.

**Figure 4: Higher education institutions’ choice of delivery models**

![Figure 4: Higher education institutions' choice of delivery models](image)

*Source: Ovum ICT Enterprise Insights*

**Slowly but surely, IT will be recognized as a catalyst to change the business functions of the institution**

The business functions within institutions will be transformed more than ever before in response to the way in which education is consumed. Digital transformation invokes cultural change. Its value needs to be indicated, understood, and accepted at all levels of the institution's community. As a critical partner in transformation, IT will bring an awareness of innovation and the potential application of new technologies to improving the institution's internal functions and processes. Undoubtedly, IT will not be the source of all innovation, but it will certainly be an enabler. Institutional CIOs and their IT teams have an absolute duty to bring new ideas to the table and ensure that innovation is a team game. IT will not necessarily "lead" all innovation, but it will enable it. Rather than imposing an idea of innovation upon the institution, IT will lay the foundations for the innovation and be a catalyst to change the business functions of the institution.

**Appendix**

**Further reading**

"Oracle advances its cloud story in higher education," IT0008-000281 (October 2016)

*The Future CIO*, IT0007-000903 (September 2016)
2017 Trends to Watch: Higher Education

Ovum Decision Matrix: Selecting a Student Success Solution for Higher Education, 2016–17, IT0008-000273 (June 2016)

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Ovum Consulting
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