Higher Education’s 2019 Trend Watch and Top 10 Strategic Technologies

MANAGERS’ SUMMARY

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Key Findings

- The five trends exerting the most influence on higher education’s IT strategy are (1) the growing complexity of security threats, (2) student success focus/imperatives, (3) data-driven decision-making, (4) increasing complexity of technology, architecture, and data, and (tied for No. 4) contributions of IT to institutional operational excellence. These are the same five trends that exerted the most influence on higher education’s IT strategy in 2018. Each of these trends is influential at 63% or more of colleges and universities.

- Some of the most hyped trends in higher education—adaptive learning, the Internet of Things, alternative credentialing models, and artificial intelligence (AI)—are expected to have only a limited impact on IT strategy in 2019.

- The top 10 strategic technologies are characterized by features that will facilitate student success; improve data collection, security, and use; and support IT business strategies.

- Two technologies—the uses of APIs, and active learning classrooms—remain at the top of the list in 2019. Five other technologies from the 2018 list also appear in the 2019 strategic technologies top 10 list: blended data center, incorporation of mobile devices in teaching and learning, technologies for improving analysis of student data, predictive analytics for student success (institutional level), and IT asset management tools (e.g., CMDB). Additionally, student success planning systems, which rounded out the top 10 in 2018, continues its influence in 2019 as "integrated student success planning and advising systems."

- All institution types are in the planning-expanding phase of deployment for the uses of APIs and active learning classrooms, except associate's and private master's institutions, which are in the tracking-planning phase of these technologies.
• Public and private doctoral institutions are devoting more attention to active learning classrooms than other types of institutions. Early technology adopters are investing more effort in open educational resources and institutional support for accessibility technologies than other institutions. Midsized institutions are focused more on predictive analytics for student success at the institutional level than are smaller institutions.

• Next generation Wi-Fi, privacy-enhancing technologies, software-defined networks, uses of the Internet of Things for teaching and learning, and blockchain are among the most-tracked technologies in 2019, a sign of potential future directions.

**Most Influential Trends**

Five trends are influential at 61% or more of colleges and universities (listed below from highest to lowest level of influence):

- Growing complexity of security threats
- Student success focus/imperatives
- Data-driven decision-making
- Increasing complexity of technology, architecture, data
- Contributions of IT to institutional operational excellence

**The Top 10 Strategic Technologies for 2019**

The top 10 strategic technologies for 2019 were identified from a list of 77 technologies. Numbers in parentheses are the 2018 rankings for technologies in last year’s top 10. Because of a tie for the 10th spot, this year’s list includes 11 technologies.

1. Uses of APIs (1)
2. Active learning classrooms (2)
3. Blended data center (on premises and cloud based) (7)
4. Incorporation of mobile devices in teaching and learning (3)
5. Open educational resources
6. Institutional support for accessibility technologies*
7. Technologies for improving analysis of student data (5)
8. Application performance monitoring
9. Predictive analytics for student success (institutional level) (8)
10. Integrated student success planning and advising systems (10, tie)
10. IT asset management tools (e.g., CMDB) (10, tie)

*This technology was new in the 2019 survey.*