University strategy in a digital world

Can digital approaches help improve student outcomes?

EY-Parthenon survey of higher education institutions and their students

EY Parthenon

Building a better working world

Introduction

As pervasive as the word "digital" is today, its many meanings result in it being fundamentally misunderstood. Certainly, digital covers core marketing and communications platforms like websites, email, online advertising, mobile and social media. But it is also used to discuss the digital component behind key business model disruptors, including sharing-economy apps, content streaming services, internet-enabled thermostats, liquid office spaces and consumer-to-consumer banking, just to name a few. It even spreads to key innovations like big data, the Internet of Things, artificial intelligence, machine learning, blockchain and robotics. As a result, digital disruption is fueling changes and unlocking opportunities (and risks) within every industry, from retail to financial services, automotive to health care, and energy to consumer goods.

Higher education is not immune. The more pervasive digital becomes in the economy, and the more these disruptive technologies continue to drive change, the more integral they become to the success of higher education institutions. Digital reaches across the university community, including students, parents, alumni, employers, faculty and staff. It has become unthinkable that universities would be able to effectively manage most of their biggest challenges without the use of digital, whether they be in attracting, retaining and engaging students and alumni; operating efficiently and effectively; driving quality and innovation in teaching and learning; fostering research collaboration; or partnering with employers. As a result, colleges and universities need to reframe the question from "what is our digital strategy?" to "what is our university strategy in a digital world?"

To better understand how higher education institutions are furthering their university strategy with the help of digital, EY-Parthenon conducted a survey of students and institutions in January 2017.

This survey reaffirmed what many in higher education already know to be true: institutions believe in the impact of digital over the next decade. They believe in the power of digital to drive better learning and student success outcomes. They have been and plan to continue putting resources behind digital advancements in these areas. They are exploring a mix of teaching and learning technologies but are laser-focused on predictive analytics as a solution to student success. The results of this survey also highlight how these initiatives, hereafter referred to as "Teaching & Learning" and "Student Success," stack up against students' expectations.

The survey also highlighted a critical gap in how institutions might be approaching digital: digital tools can help realize an institution's strategy, but cannot do it alone. Despite institutions' focus on predictive analytics tools for student success, students themselves are still relatively dissatisfied with advising and career services. They seek improvements in advising and career services tools and processes – digital or not. Strong analytics are only the first step to improving retention rates, and to be effective, the vibrant student success system also needs to include insight-driving visualization tools and robust processes around intervention.

Institutions believe in the impact of digital, particularly when driving Teaching & Learning and Student Success initiatives

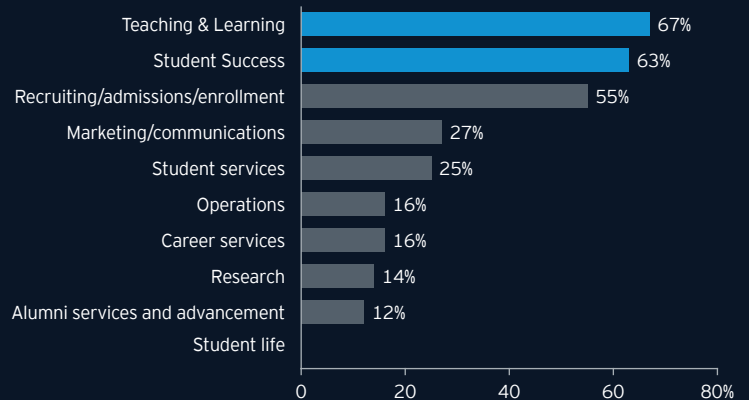## Institutions believe in the impact of digital over the next decade

93%
of institutional respondents expect digital tools and technology changes to have a significant or highly significant impact on their institution over the next decade.

Institutions adopt digital mostly because they believe it can be helpful in driving better learning and student success outcomes

3x
as many institutional respondents mentioned **driving outcomes as a primary driver for digital adoption** as any other goal.

~2/3
of institutions ranked **Teaching & Learning** and **Student Success** as top opportunity areas for their institution to create value with digital.

Teaching & Learning	67%
Student Success	63%
Recruiting/admissions/enrollment	55%
Marketing/communications	27%
Student services	25%
Operations	16%
Career services	16%
Research	14%
Alumni services and advancement	12%
Student life	

0   20   40   60   80%

Institutions have been, and plan to continue, dedicating resources to digital improvements in Teaching & Learning and Student Success

>40%
of institutions already **increased staff dedicated to Student Success and Teaching & Learning** in the past three years.
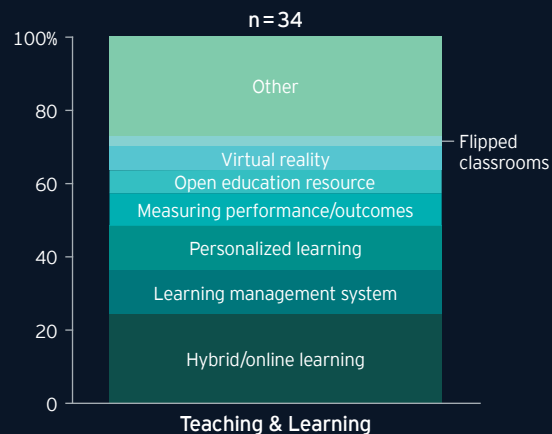
~2/3
of institutions **plan to increase dedicated staff**,

and

>3/4
of institutions **plan to increase spending** in the next three years.

Teaching & Learning digital tools: institution and student opinions

Institutions

Institutions point out a variety of impactful opportunities for new digital tools within Teaching & Learning

Q Within Teaching & Learning, what specifically do you see as the most impactful opportunity for new digital tools and capabilities?

n=34

Chart (stacked bar, 0–100%) for Teaching & Learning:
- Other
- Flipped classrooms
- Virtual reality
- Open education resource
- Measuring performance/outcomes
- Personalized learning
- Learning management system
- Hybrid/online learning

Students

Students are satisfied with the digital Teaching & Learning offerings at their institutions

Q At institutions, how many students are satisfied with the digital teaching and learning tools?

91%

Say the **digital tools meet or exceed** their expectations.

Insights

Institutions are properly investing in digital Teaching & Learning tools and students are largely satisfied with their offerings

When it comes to digital investments in Teaching & Learning, institutions are further along on the learning curve. They've been investing here for some time and feel more comfortable doing so. These investments are visible to students because they interface with these digital tools directly, and students are generally satisfied with the offerings.

The learning curve

Competence / Time
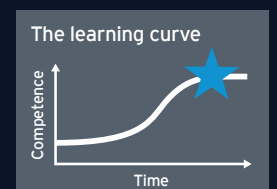
Student Success digital tools: institution and student opinions

Institutions

Institutions are early in the adoption of technology to support Student Success, currently focusing investment on predictive analytics

Q Within Student Success, what specifically do you see as the most impactful opportunity for new digital tools and capabilities?

n=32

Chart (stacked bar, "Student Success"):
- Other
- Predictive analytics

Y-axis: 0, 20, 40, 60, 80, 100%
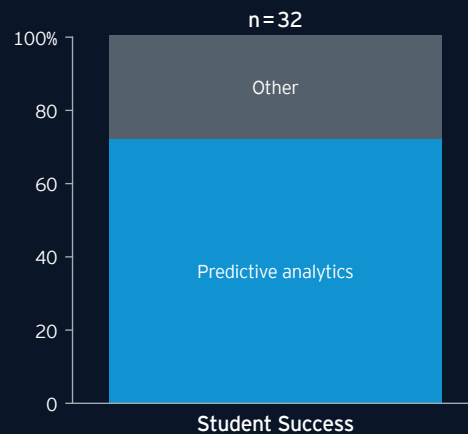
Students

Students believe that digital capabilities around Student Success are important and there is still room for improvement

Q How well does your university meet your expectations for the digital capabilities in each of the following areas?

1 Teaching and learning	6 Student services
2 Research	7 Student life
3 Marketing and communications	8 Alumni services and advancement
4 Admission process	9 Student success
5 Operations	10 Career services

Rank of score: #1 is best

Students comments

More online tutoring with the ability to contact counselors via text, Skype and email instead of only being able to speak to them when you have an appointment.
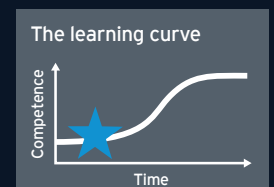
– Student

I think it will make student success services **more flexible, accessible and accommodating** for all students.

– Student

Insights

Institutions and students agree that digital investment in Student Success is important, but students are not yet realizing its value
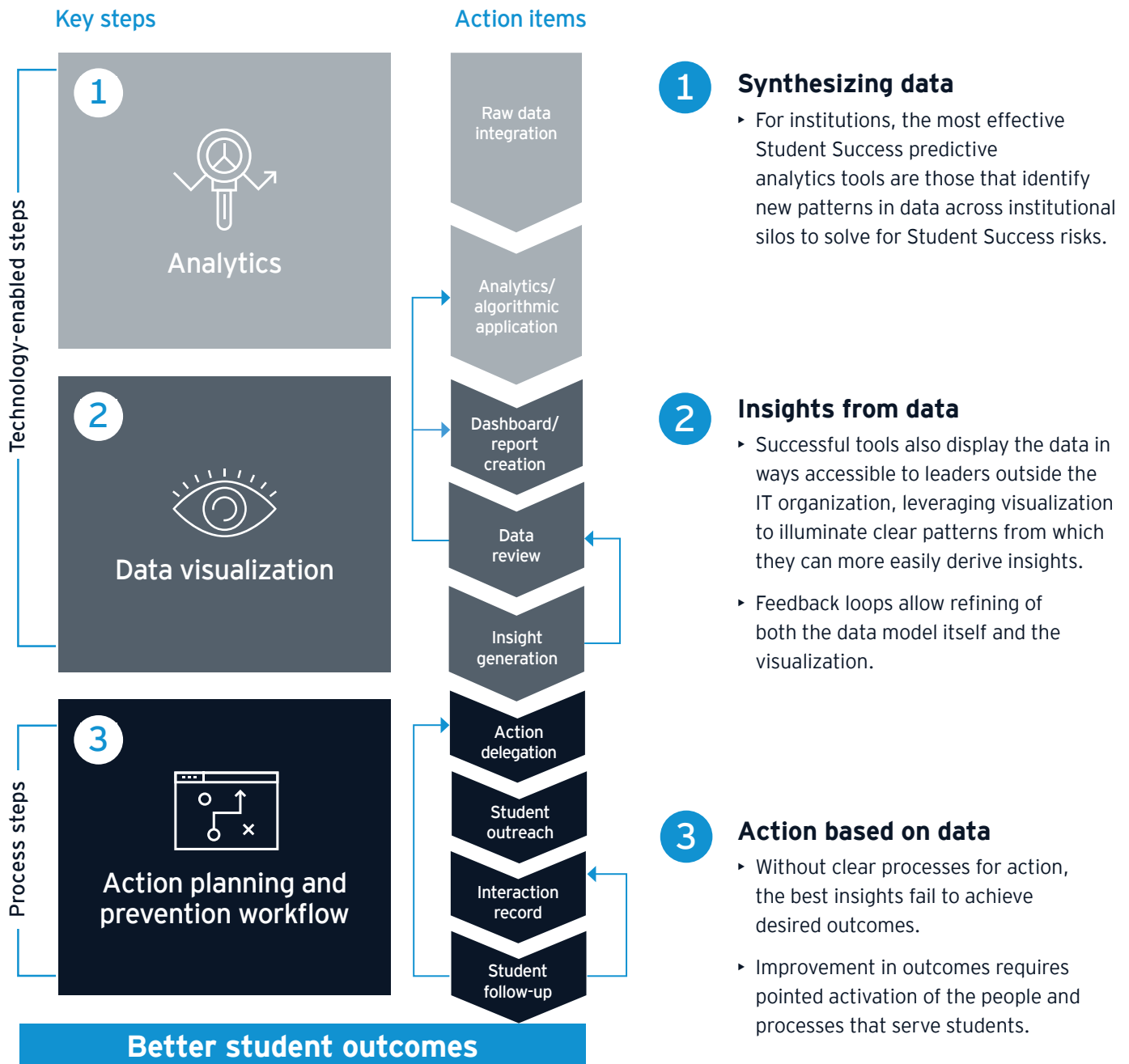
When it comes to digitizing Student Success, institutions are still in the early stages of the learning curve, and they are focused largely on predictive analytics. For students to fully benefit from these investments, institutions need to address the full student retention work flow. For more details, see the next page.

The learning curve

(chart: Competence vs Time)

Strong analytics are only the first step to improving student retention

To be effective, a vibrant Student Success system also needs to include insight-driven visualization tools and robust processes around intervention

Student retention improvement workflow

Key steps

Technology-enabled steps

1 Analytics

2 Data visualization

Process steps

3 Action planning and prevention workflow

Better student outcomes

Action items

- Raw data integration
- Analytics/ algorithmic application
- Dashboard/ report creation
- Data review
- Insight generation
- Action delegation
- Student outreach
- Interaction record
- Student follow-up

1 Synthesizing data

- ‣ For institutions, the most effective Student Success predictive analytics tools are those that identify new patterns in data across institutional silos to solve for Student Success risks.

2 Insights from data

- ‣ Successful tools also display the data in ways accessible to leaders outside the IT organization, leveraging visualization to illuminate clear patterns from which they can more easily derive insights.
- ‣ Feedback loops allow refining of both the data model itself and the visualization.

3 Action based on data

- ‣ Without clear processes for action, the best insights fail to achieve desired outcomes.
- ‣ Improvement in outcomes requires pointed activation of the people and processes that serve students.

Conclusion

Our survey indicates that institutions and students agree on the impact of digital in this new era of higher education. Institutions are making a wide variety of investments in digital capabilities in Teaching & Learning, and students are satisfied with the resulting offering. However, when it comes to Student Success and predictive analytics, the institutions' investments are less visible to students and the potential benefits of the new tools have not yet been fully realized, resulting in lower levels of student satisfaction.

While predictive analytics tools have the potential to enhance student success and retention rates, simply investing in the tools is not enough – predictive analytics is only one piece of a larger puzzle. For the investment to be effective, institutions must build out a more comprehensive process where they are not only using the predictive analytics technology to synthesize data across the institution, but also leveraging that data to drive insights that inform actions. Implementing this ongoing and fluid process will help to enable institutions to fully utilize their digital tools and to deliver tangible value to their students.

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