

Tariq Al-idrissi, Trent University
Opinder Bawa, University of San Francisco
Susan Grajek, EDUCAUSE
Kellie Campbell, Vermont Technical College
Sasi Pillay, Washington State University

### Agenda

- 1. Overview and Themes for 2020's Top 10 Issues
  Susan Grajek, EDUCAUSE
- 2. Privacy is Not Dead, Keep Up the Good Fight,
  Tariq Al-idrissi, Associate Vice President-IT, Trent University
- 3. Sustainable Funding,
  Opinder Bawa, VP and CIO, University of San Francisco
- 4. Having a Seat at the Table and Extending a Hand...

  Kellie Campbell, Chief Technology Officer, Vermont Technical College
- 5. Sasi Pillay, Washington State University

# 2020 Top 10 Issues

Simplify, Sustain, Innovate: The Drive to Digital Transformation Begins

> Susan Grajek EDUCAUSE



#### Setting the Stage: Higher Education's Grand Challenges



#### **Student success**

- Persistence, retention, completion
- Engagement
- Outcomes



#### **Financial health**

- Enrollment
- Costs
- Funding
- Natural disasters



# Reputation and relevance

- Affordability
- Political climate
- Teaching
- Academic programs
- Research



# **External competition**

- Alternative credentials
- Employer-based learning
- Talent
- Global HE

- 1. Information Security Strategy: Developing a risk-based security strategy that effectively detects, responds to, and prevents security threats and challenges
- 2. **Privacy**: Safeguarding institutional constituents' privacy rights and maintaining accountability for protecting all types of restricted data
- 3. Sustainable Funding: Developing funding models that can maintain quality and accommodate both new needs and the growing use of IT services in an era of increasing budget constraints
- **4. Digital Integrations**: Ensuring system interoperability, scalability, and extensibility, as well as data integrity, security, standards, and governance, across multiple applications and platforms
- **5. Student Retention and Completion**: Developing the capabilities and systems to incorporate artificial intelligence into student services to provide personalized, timely support

- **6. Student-Centric Higher Education**: Creating a student-services ecosystem to support the entire student life cycle, from prospecting to enrollment, learning, job placement, alumni engagement, and continuing education
- 7. Improved Enrollment: Using technology, data, and analytics to develop an inclusive and financially sustainable enrollment strategy to serve more and new learners by personalizing recruitment, enrollment, and learning experiences
- **8. Higher Education Affordability**: Aligning IT organizations, priorities, and resources with institutional priorities and resources to achieve a sustainable future
- **9. Administrative Simplification**: Applying user-centered design, process improvement, and system reengineering to reduce redundant or unnecessary efforts and improve enducer experiences
- **10. The Integrative CIO**: Repositioning or reinforcing the role of IT leadership as an integral strategic partner of institutional leadership in supporting institutional missions

#### **Simplify**

- 4. Digital Integrations
- 9. Administrative Simplification

#### Sustain

- 1. Information Security Strategy
- 2. Privacy
- 3. Sustainable Funding
- 8. Higher Education Affordability

#### Innovate

- 5. Student Retention and Completion
- 6. Student-Centric Higher Education
- 7. Improved Enrollment

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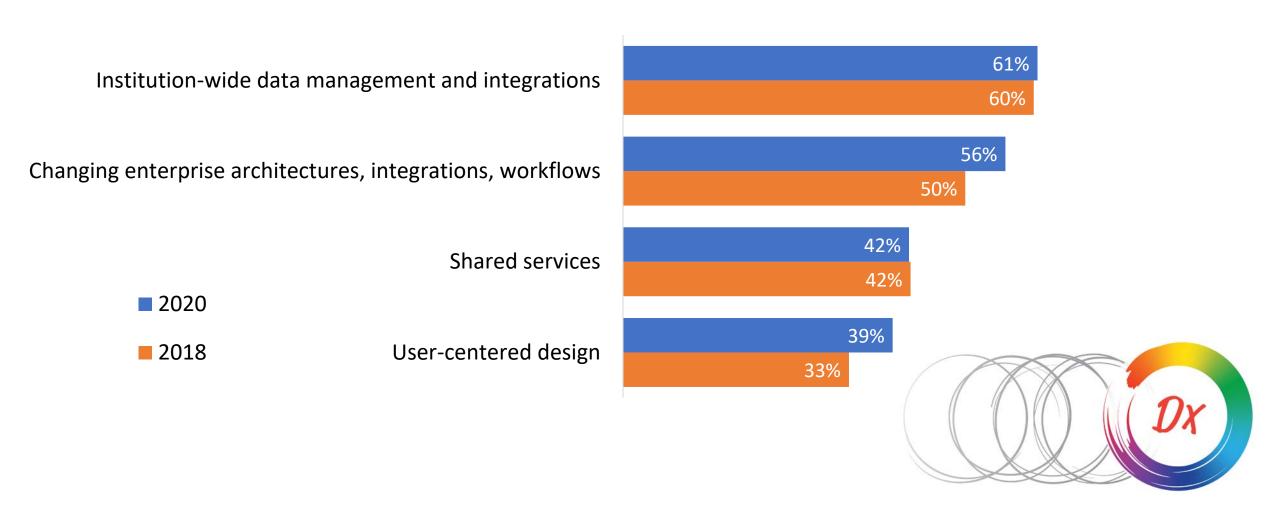


#### **Simplify**

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# Simplify: Two-Year Change in Related Trends Incorporated into IT Strategy

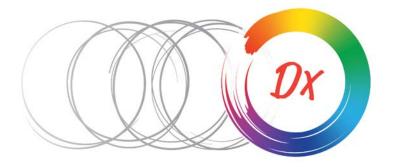




### Simplify: Hopes in 3-5 Years



- We develop standards and tools to simplify out of the box integrations and facilitate better analytics
- Institutional services are as easy to use as consumer apps
- Institutions direct more of their efforts toward students' needs, from student mental health, to retention, to recruitment, to debt avoidance, to job placement.

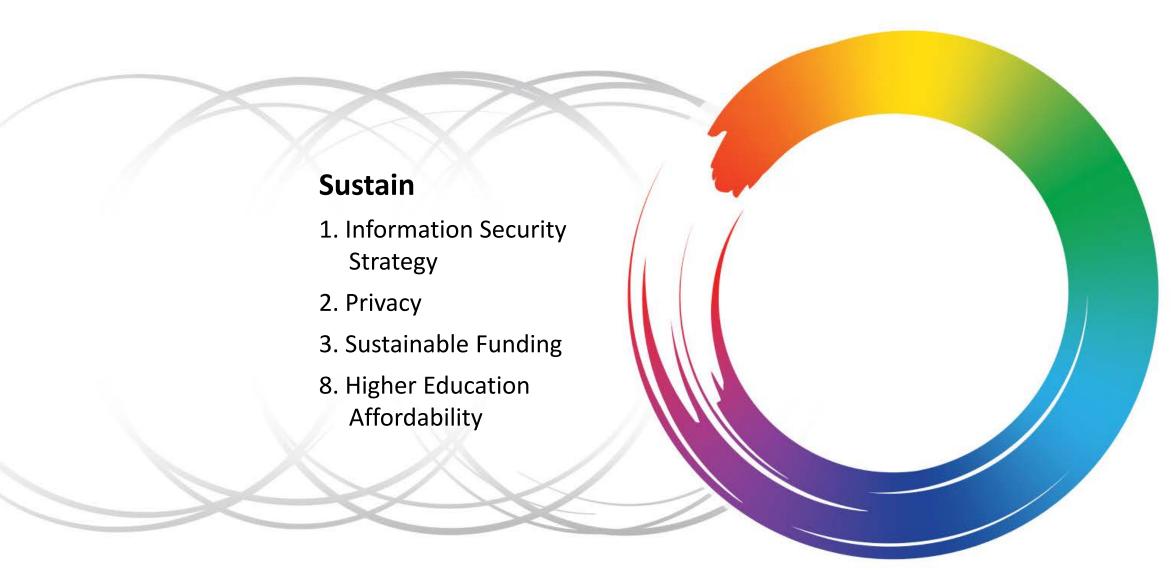


# Simplify: Takeaways

- Break down the silos
- If the whole is more than the sum of the parts, there needs to be a whole in the first place.







#### **Sustain**

- Information Security Strategy: Developing a risk-based security strategy that effectively detects, responds to, and prevents security threats and challenges
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#### Sustain: Two-Year Change in Related Techs

Percentage of institutions that have implemented technology 60% 55% 50% 45% 40% 41% 40% 39% 39% 35% 30% 24% 20% 10% 11% 35% 0% Cloud-based DNS security Security analytics E-signature DDoS prevention technologies (e.g., products and security services 2018 DocuSign, Adobe (e.g., Duo, Qualys services 2020 Sign, and SignNow) ThreatPROTECT, cloud-based email



# Sustain: Hopes in 3-5 Years



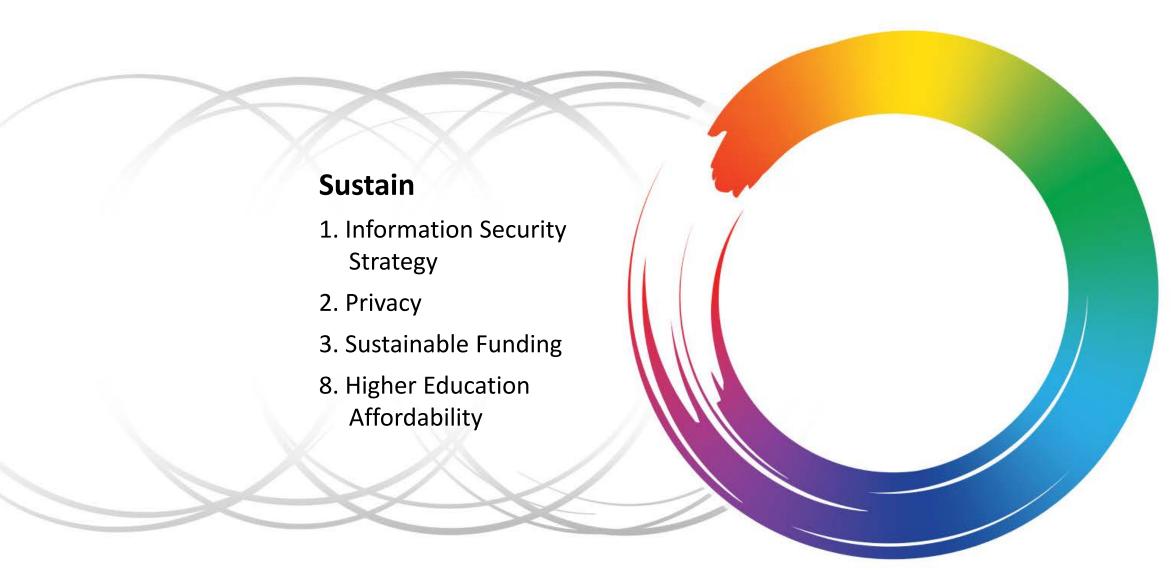
- We adopt a data common framework
- Privacy is as important as information security
- Institutions understand IT's value to business models and missions, and fund it accordingly.
- Other parts of the higher education ecosystem share accountability for affordability as a societal good

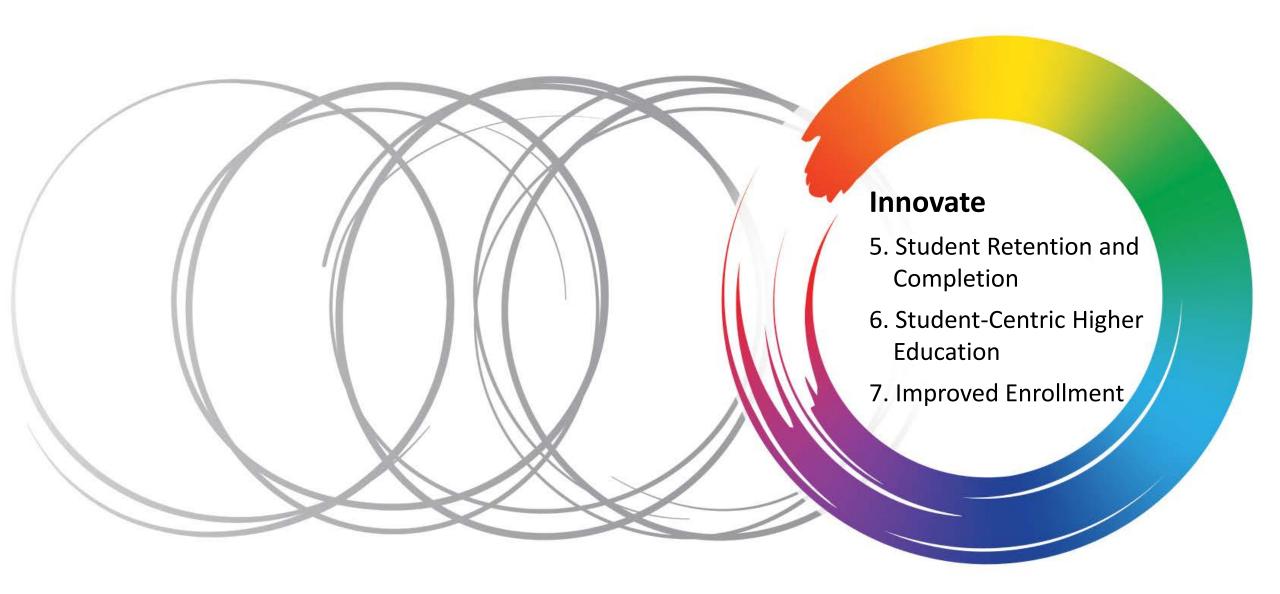


# Sustain: Takeaways

- Data is the currency of the institution
- We have to have a sustainable strategy for both our currencies







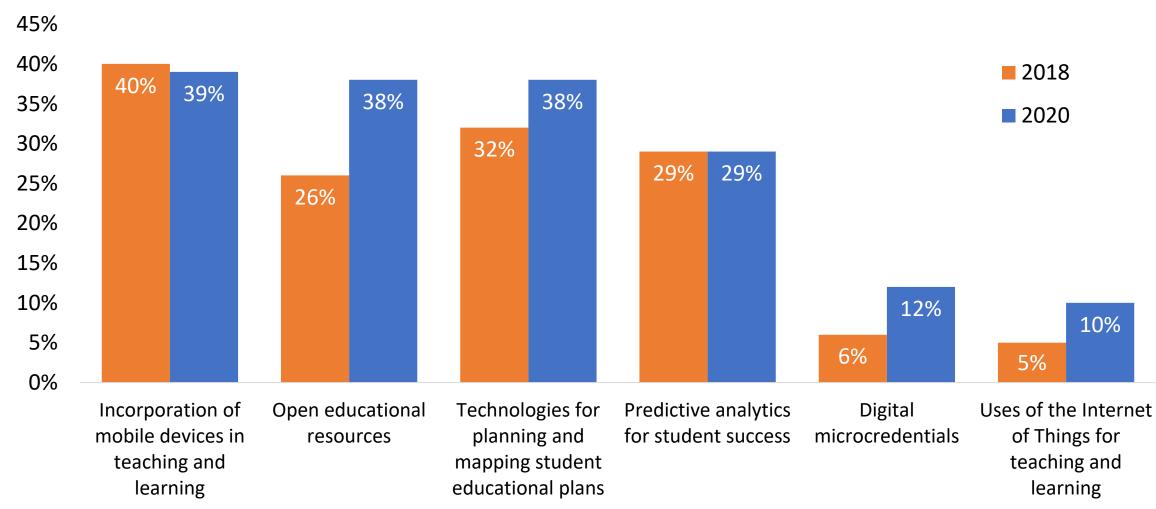
#### **Innovate**

- **5. Student Retention and Completion**: Developing the capabilities and systems to incorporate artificial intelligence into student services to provide personalized, timely support
- 6. Student-Centric Higher Education: Creating a student-services ecosystem to support the entire student life cycle, from prospecting to enrollment, learning, job placement, alumni engagement, and continuing education
- 7. Improved Enrollment: Using technology, data, and analytics to develop an inclusive and financially sustainable enrollment strategy to serve more and new learners by personalizing recruitment, enrollment, and learning experiences



#### Innovate: Two-Year Change in Related Techs

Percentage of institutions that have implemented technology

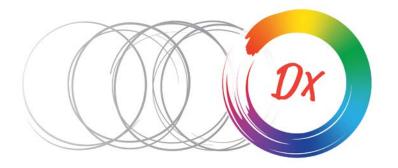




#### Innovate: Hopes in 3-5 Years



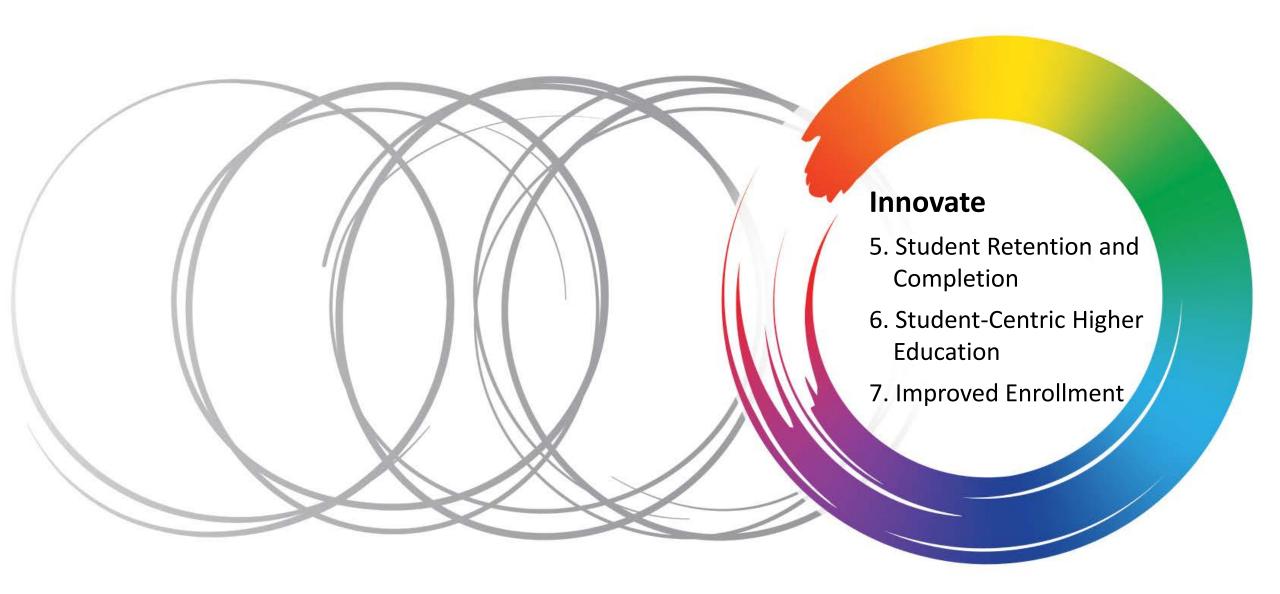
- Institutions begin to see how many of their credentials, or "products," need to be refactored, why, and how
- Different institutions focus on different types of students and thereby differentiate their offerings
- Today's rudimentary success metrics give way to measures that capture the contribution of HE to people's ability to thrive in life, however they define it



### Innovate: Takeaways

- People, process, technology, product
- From doing things differently to doing different things





# Drive to Dx

# 10. The Integrative CIO:

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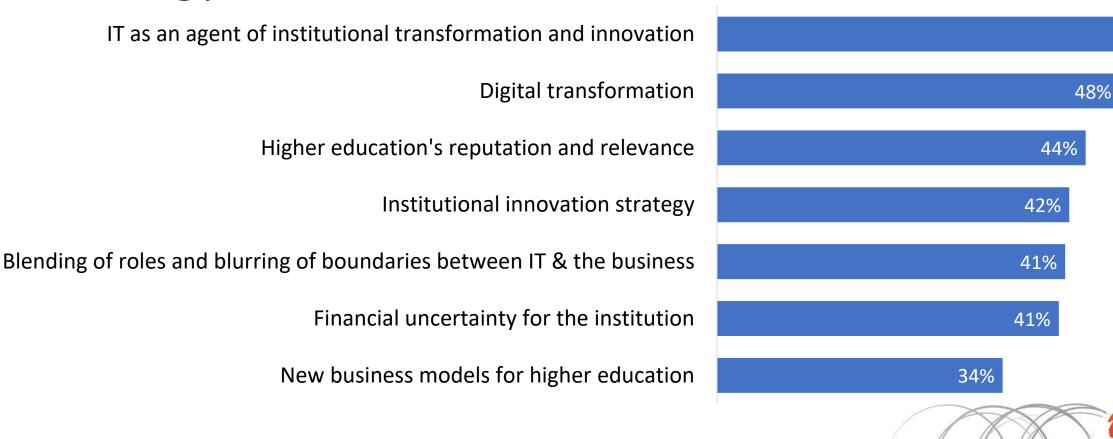
The INTEGRAM

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The INTEGRAM

THE INTEGRAM Repositioning or reinforcing the role of IT leadership as an integral strategic partner of institutional leadership in supporting institutional missions

# Drive to Dx: Related Trends' Influence on IT Strategy



52%



#### Drive to Dx: Hopes in 3-5 Years



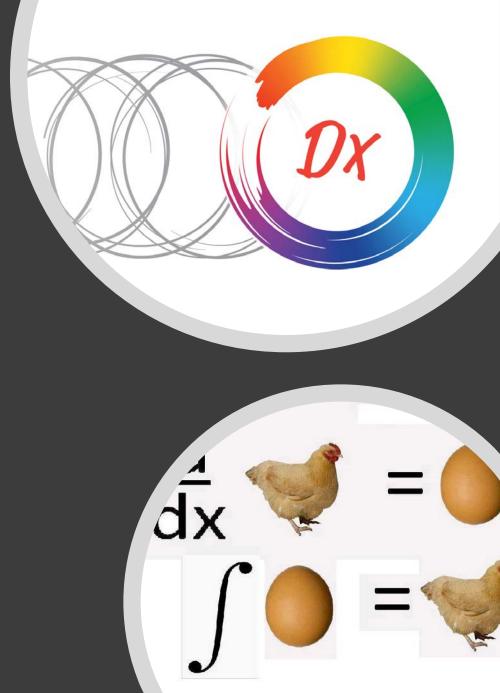
- CIOs have the transformation skills and strategic mindset to provide solutions to propel institutions and our sector forward.
- Institutions recognize the value CIOs bring, even for discussions that don't directly involve IT
- Innovation is a common capability of higher education institutions





# Driving to Digital Transformation

Which changes first: the CIO or the institution?



# What is Digital Transformation?

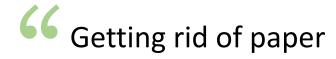
Efficient use of available technology.

Being connected to Gen Z, who are digital natives.

66 Innovation Re-thinking how we provide service to our students, in an innovative way.

Information anywhere all the time.

Automation. Stop the manual madness.

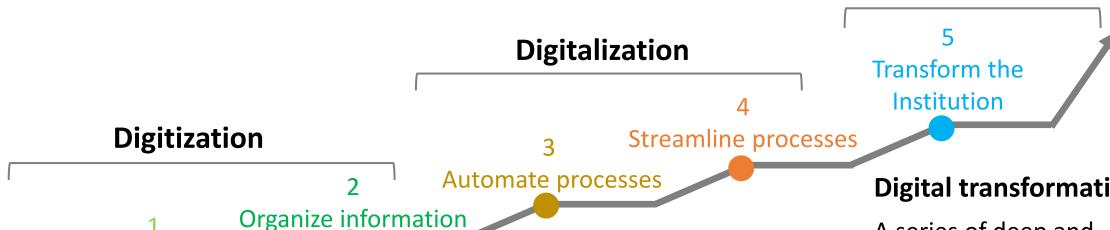


# What is Digital Transformation (Dx)?

Digital transformation (Dx) is a series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution's operations, strategic directions, and value proposition.



### Digital Transformation in context



#### **Digitization**

Digitize information

Changing from analog or physical to digital form

#### **Digitalization**

Using digital technologies and information to transform individual institutional operations

#### **Digital transformation**

**Digital Transformation** 

A series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution's operations, strategic directions, and value proposition.

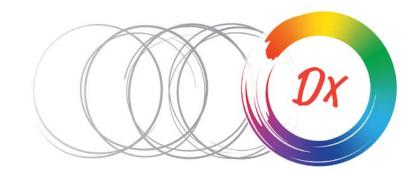


#### Why IT Matters to Higher Education **EDUCAUSE**reVIeW

#### **Digital Transformation Signals: Is Your Institution on** the Journey?



🚢 by Malcolm Brown, Betsy Reinitz and Karen Wetzel 🕟 Wednesday, October 9, 2019 🛮 Enterprise Connections



#### **Technology Shifts**

IT leaders must adopt innovative practices and create digital environments that provide unprecedented agility and flexibility. At the same time, they must also manage a complex and ever-changing technology ecosystem in a way that enables the institution and its academic and business units to rapidly and efficiently achieve its strategic aims. New technologies do not by themselves bring about Dx. Institutional Dx initiatives can succeed only through the strategic application of a changing set of technologies in support of new institutional directions.

Is there evidence of these shifts in technology?

- □ Agility
- ☐ Intentional strategy for sourcing technology-related services (e.g., cloud, on premises, shared services, consortial arrangements)
- □ Technology architecture with agility and flexibility as key priorities
- □ Focus on business outcomes
- Close relationship between technology planning and institutional goals and

#### **Culture Shifts**

Dx requires a new approach to how campus leaders interact with each other—an approach that entails a laser focus on progress toward institutional goals, a broad emphasis on change management, and an increase in institutional agility and flexibility to meet rapidly changing needs.

Is there evidence of these shifts in culture?

- □ Focus on institutional goals
- □ Focus on institutional differentiation
- □ Strategic innovation aimed at key institutional ambitions
- Focus on student and faculty success
- □ Leaders willing to consider new strategic directions
- □ Reliance on data and analytics to adjust institutional course
- Shift from risk aversion to risk management
- □ Institutional flexibility and agility

#### Workforce Shifts

Changes related to Dx not only are having an inexorable impact on the day-to-day work of higher education professionals but also are creating a need for new skills and competencies across the institutional community. These changes are creating new opportunities and threats and demanding a reinvention of human resource management.

Is there evidence of these shifts in workforce?

- □ New jobs and roles (e.g., chief data officer, chief innovation officer, vendor management, business relationship management)
- □ Familiarity across roles with the "business" of higher education
- □ Increasing importance of enterprise architecture
- Expanding IT liaison roles that align with institutional strategy
- ☐ Roles that cross boundaries (e.g., positions residing in an academic department with close ties to the IT organization)
- Agility involving new and shifting competencies across many roles

Is Your Institution Driving to Digital Transformation?

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Thank you!

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