
Digital Transformation Task Force Members:
Jim Phelps, University of Washington
Jennifer Sparrow, The Pennsylvania State University
Dave Weil, Ithaca College

EDUCAUSE Staff:
Malcolm Brown
Betsy Reinitz
Karen Wetzel

Agenda

- What is digital transformation?
  - We convened a task force to help us figure this out
- No, but really, what IS digital transformation?
  - Let’s hear from task force members about it
- What’s Next? What is EDUCAUSE planning?
- Your questions and discussion with the panelists
Speakers

Members of the Digital Transformation Task Force

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Director, Enterprise Architecture and Strategy
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Jennifer Sparrow
Senior Director of Teaching and Learning with Technology
The Pennsylvania State University

Dave Weil
Associate Vice President and Chief Information Officer
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EDUCAUSE Staff

Malcolm Brown
Director of Learning Initiatives

Betsy Reinitz
Director, Enterprise IT Programs

Karen Wetzel
Director, Working and Community Groups

Polls

How important is digital transformation at your institution? (select one)

- Very important: We consider digital transformation in everything we do
- Somewhat important: We’re starting to communicate about digital transformation across our institution
- Not important: We get digital transformation means in other industries, but we don’t know how to think about it for our institution
- What’s digital transformation?

How would you define digital transformation? (please submit your response in the chat)
Digital Transformation Task Force Charge

- Develop a **definition** of digital transformation appropriate to higher education that could be used across EDUCAUSE programs and offerings.
- Issue **recommendations** for how EDUCAUSE should help its members understand the importance of digital transformation and position their institutions to move forward with it in areas such as IT organization and leadership, workforce and staffing, and analytics.

Digital transformation is a **cultural, workforce, and technological shift**.

- In its cultural dimension, it requires:
  - a **new approach to how campus leaders interact** with each other
  - an **emphasis on change management**
  - a movement toward **institutional agility and flexibility** to meet quickly changing needs
- Dx requires **dramatic shifts in workplace skills** at all levels and **professional development** that enables the workforce to keep pace with the rapid tempo of change
- Dx is being driven by technology trends and changes that enable new approaches that in turn propel **new business models, improved student outcomes, different teaching and learning methods, and new research capabilities**.
From Disruption to Transformation

WE ARE HERE

Refine
Improving current technologies

Disrupt
Inventing new technologies, initial impact

Transform
Broad change and lasting impact on industries, culture, people

Source: Adapted from Scenarios, Pathways, and the Future-Ready Workforce, Jim Phelps, EDUCAUSE Review, September/October 2018

The Cultural Shift

What do you think the cultural shift will involve for higher education?
Why is it important to be planning for this shift now?
Customer / User Experience is Core

Where can we delight our customers? Where is there pain that we can fix?

How do we deliver an easy, intuitive interface?
Customer / User Experience is Core

Customer Experience Design

Where can we delight our customers? Where is there pain that we can fix?

User-Centered Design

How do we deliver an easy, intuitive interface?

Hyper-Personalization

What does this customer need right now? What is their context?

Customer / User Experience is Core

Customer Experience Design

User-Centered Design

Hyper-Personalization
Customer / User Experience is Core

“Where is my luggage? I hope it makes it on my flight! Don’t lose my bag!”

Customer / User Experience is Core
There is my bag!

Highly matrixed organization focused on delivering seamless digital experiences.
Digitization Principles, NYU

- **Obsess Over Our Clients**
  - Listen, seek feedback, empower, and create new value for our clients

- **Data Driven Personalization**
  - Leverage data to meet each of our unique needs and circumstances

- **User Experience Comes First**
  - Ensure predictable, intuitive, consistent, accessible, mobile, searchable services

- **Automate Delivery**
  - Understand where automation generates satisfaction and savings

- **Continuously Improve**
  - Act on feedback, and share back with the community how their input has direct impact

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Data Drives Everything

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MACHINE LEARNING

BIG DATA
Data Drives Everything

Gather ALL the data. Make it available to play with. Experiment, look for patterns and insights.

The Workforce Shift

What do you think the workforce shift will involve for higher education? Why is it important to be planning for this shift now?
The Workforce Shift

- Instructional Design 2.0
- Business Relationship Management
- Business Analysts
- Data Science

Amount an IT Worker Should Expect the IT Job to Change in 4 years

100.00%
The Technology Shift

What do you think the technology shift will involve for higher education?
Why is it important to be planning for this shift now?
Rapid advancement of numerous technologies

- Analytics
- Cloud computing
- Software as a service
- Artificial Intelligence, “bots”
- Mobile
- Social networks
- 5G Cellular Networks
- Low cost of storage
- Computing power on-demand
- ....and numerous other developments

Allows for...

- Pervasive connectivity
- Hyper-personalization
- Increased consumer expectations and demands – often driven from outside of the institution and outside of our control
  - Example: A new social networking tool, or Google Maps experience
The power of the “AND”

- Transformative outcomes emerge when the new technologies are combined in different and powerful ways
- Examples:
  - Cheap storage AND pervasive connectivity – access to huge dataset anyplace at anytime to allow for providing better information and research
  - AI AND Social Networks AND pervasive connectivity – ability to respond to our student’s needs by responding in real time to inquiries and comments made on social networks

With Dx, we need to think of data as currency

- Institutions that will experience the biggest benefits from Dx will have spent time thinking about how data moves throughout their institution
- They will have thought about the architecture of their technology infrastructures to look at how to streamline the flow of data between applications, and implement the necessary tools and structures to leverage the data being generated by the various applications and systems used throughout the institution
Institutions should be architecting for Dx now

- Effective architecting involves both the technical architecture (blueprints, vision, “urban planning”) and the governance to oversee it, review changes and progress, and prevent chaos

- Some examples include:
  - Leveraging API-based methods for accessing data
  - Implementing iPAAS (integration platform as a service) technologies, such as Dell Boomi, Mulsoft, Snaplogic
  - Establishing effective data governance and IT governance programs and processes
  - Investing in Identity and Access Management infrastructures
  - Etc.

Questions?
Dx Task Force Recommendations

- Make Dx a 2019 Strategic Goal
- Adjust resources to reflect Dx where possible
- Develop a webpage to house Dx resources at www.educause.edu/dx
- Design a digital transformation toolkit
- Produce a series of products focusing on workforce, technology, and culture
- Design professional learning opportunities around Dx
- Address Dx through external partnerships

Where to find more

- Email dx@educause.edu
- Website www.educause.edu/dx
Thank you!

How has your concept of Dx changed?

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