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Digital Transformation: The Pathway to Organizational Value

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Agenda

- Part 1: What is (or is not) Digital Transformation?
  - Activity: Group roundtable discussion of statements about Digital Transformation
- Part 2: Digital Transformation Word Association
- Part 3: Past, Present, and Future of Digital Transformation
  - Activity: Framework thinking and your organization
- Part 4: Scaling Digital Transformation
  - Activity: Takeaways
Part 1

What is (or is not) Digital Transformation?
Aligning for Partnership: How Enterprise IT Can Help Transform the Institutional Mission

by Betsy Reinitz, Christian Boniforti, Josie DeBaere, Jay Eckles, Peggy Kay and Cindy Mitchell

Monday, June 18, 2018

Complementary Definitions and Terms

• Digital Substitution (Digital Enablement)
• Digital Optimization
• Digital Disruption (vs. Disruptive Technology)
• Digital Transformation
Digital Transformation is not… Digital Substitution or Digital Enablement

“We often confuse digital transformation with digital substitution or enhancements. I would consider the development and adoption of e-forms as an example of digital substitution, as we simply turn a paper form and its process into a PDF and eventually into a web form that populates a system or database. This is not transformational and simply replaces a process with a technical tool.” -- Chris Boniforti, Chief Information Officer, Lynn University
Digital Transformation is not... Digital Optimization

The process of using digital data and technology to improve existing business models, operating processes, services or outcomes
Digital Transformation is (is not)… Digital Disruption

Digital disruption is a transformation that occurs when new digital technologies and business models impact the value proposition of existing products and services in a given market.

And a word about Disruptive Technology.
Example - Uber

**Before**
- Walk Outside
- Visually Locate Taxi
- Hail Taxi
- Tell Driver Your Destination
- Driver Figures out “best” Route
- Arrive at Destination
- Determine How Much to Pay
- Fumble through Cash vs Credit Card
- Tip Driver
- Get Receipt

**After**
- Request Uber Come to You with Destination, Best Route & Cost Estimate Already Determined
- Get In Uber
- Arrive at Destination with Payment, Tip, and Receipt Already Processed
- Get out Of Uber and Rate Driver
Example - Netflix

**Before**

1. Drove to Video Store
2. Walk Around Store
3. Argue over Movie to Watch
4. Go to Counter to Rent Movie & Pay
5. Drive Home
6. Put DVD in Player
7. Watch Movie
8. Drive Back to Video Store
9. Drop Off Video Return

**After**

1. Click on Remote for Netflix
2. Sit on Couch while Scrolling through Movies
3. Argue over Movie to Watch
4. Watch Movie
Digital Transformation… Career Disruptor?

IDC has dubbed digital transformation the “DX economy,” and the report notes that “enterprises will be measured by their ability to hit and exceed a whole new set of demanding performance benchmarks enabled by cloud, mobility, cognitive/artificial intelligence, internet of things, augmented reality/virtual reality, and the digital transformations fueled by these technologies.” No longer will digital transformation be about projects or initiatives, the firm says, but “the core of what industry leaders will do and how they operate.”

IDC’s Worldwide IT Industry 2017 Predictions report
Digital Disruption
Always Involves

- Tools
- People
- Data
- Process
Digital Transformation - What Is It?

"Digital transformation is the integration of digital technology into all areas of an organization, resulting in fundamental changes to how organizations operate and how value is delivered to constituents. It is reimagining how we bring people, data, processes, and technology together to create value for our faculty, staff, and students." – Peggy Kay, AVP of Technology Customer Experience, University of the Pacific

"Transformation of IT practices or systems is unto itself of no substantial value to a university. But transformation in the processes of teaching, learning, research, and service that are enabled by newly available technologies indeed delivers value." – Jay Eckles, Interim CIO, University of Tennessee Institute of Agriculture
Digital transformation is a foundational change in how an organization delivers value to its customers

IDG, 2018
Table Exercise

• How would you adjust the definition?
• Discuss: organizations must reconsider what constitutes a team
• Discuss: digital transformation can happen and is happening in higher ed without any changes in how we think or how we work together
Table Exercise

- What are examples of digital transformation you see in higher education?
- Where is the focus using this definition?
  - Technology?
  - Information Technology Division?
  - Elsewhere?
Part 2

Digital Transformation Word Association
Talking about Digital Transformation and a Digital Business First Environment
Word Association Exercise

- Each table has a single word on it, such as Agility, Value, Leverage, Cloud, Culture, Security, Data, Workforce, etc.
- As a group, describe how that word does or does not align with Digital Transformation
- Are there other words your group thinks would work equally well for this exercise?
- How does the usage of these words affect how campus leadership perceives Digital Transformation?
Part 3

Digital Transformation Journey – Staying in Place isn’t an Option
[Revised Definition]
Transformation Journey
Three reasons Digital Transformation is Important

1. Acceleration of Change – The pace of digital change is rising exponentially, making it very difficult to maintain a position of industry leadership, and requiring an acceleration of new digital solutions brought to market

2. Digital Competition – Companies are under ever increasing pressure to compete digitally, and long established business models are being disrupted by “born digital” start-ups

3. Customer Expectations – Customers expect a good experience across all touch points, you must ensure their interactions are seamless and exceptional
Acceleration of Change  Digital Competition  Customer Expectations
85% of the jobs that will exist in 2030 haven’t been invented.... (institute for the future IFTF)

Dell statement – “The pace of change will be so rapid that people will learn ‘in a moment’ using new technologies such as augmented reality and virtual reality. The ability to gain new knowledge will be more valuable than the knowledge itself”.
Inflection pt. of Technology – Birth of the Web

1990
- WWW 1st browser
- 130 web sites

1991
- laptops introduced

1992
- 38 million households with a computer

1993
- Holiday Inn Online Booking

1994
- Bluetooth introduced

1995
- 135 million computers sold worldwide

1996
- Amazon Founded

1997
- Google

1998
- #EDU18
Inflection pt. of Technology – Mobility and BYOx

- Bluetooth becoming popular
- iPod
- Centrino chip introduced
- Nokia 'smart phone'
- Inflection pt. of Technology
- Mobility and BYOx
- YouTube
- Google Maps
- Google buys 'struggling' YouTube $1.65B
- 60% households with computer
- Amazon declares First profit
- 218.5 million PCs shipped
- OnLine Travel Services wikipedia
- Google 8 Billion pages indexed
- Facebook
- Public Wi-Fi
- Becoming popular
- 100 million views
- 300 million users
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2000
- 4.7 B mobile subscriptions
- Blackberry supports eMail, calendar
- Wikipedia
- Twitter
- iTunes 1 Billion downloads
- First profit
- iPOD
- First profit
- 300 million users
- 100 million views
- 8 Billion pages indexed
- 218.5 million PCs shipped
- First profit
- First profit
- First profit
Inflection pt. of Technology – Dawn of adoption, IoT

- Skype HD
  - 600 million users
- Microsoft buys Skype
  - $8.5 B
- Facebook
  - 800 million users
- TV moving to the Internet
- Online media downloads
  - Exceed DVD
- Over 1 Billion Smartphones
- Angry Birds
- Facebook
  - 1 Billion Users
- .NET goes to open source
- Microscale 3D printing
- Oculus Rift
- Google buys WhatsApp
  - $15 B
- Agile Robots
- 76.1 M Wearables
- Windows 10
  - Single codebase
  - Single platform
- Holo Lens
- Facebook
  - 1.59 Billion Users
- Over 1.9 Billion Smartphones
- Apple Pay
  - Car to Car Communications
- Nano architecture
- 4G takes root
- 1.2 billion mobile apps
  - Over Christmas
- Blackberry layoffs
  - In the thousands
- Smart Home
  - Revenue $79 B
- IoT Spend $656 B
- 4G takes root
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158 exabytes Internet traffic
173 million wearables

$1.7 Trillion IoT spend

200+ Billion Devices

$11 Trillion Economic Impact

$7 Trillion IoT AR Market

5G

50+ Billion Devices

200+ Billion Devices

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89% Of organizations* have adopted, or have plans to adopt a “digital-first” business strategy.

IDC, 2018

* - Services 95%, Education 89%, Government 82%
Examples of Digital Business Goals

52% of enterprises say enabling worker productivity through tools such as mobile, data access, and AI-assisted processes are the essence of their digital business strategy.

49% say better managing business performance through data availability, and visibility is what defines their digital business.

46% say meeting customer experience expectations using digital technologies is the center of their digital business.

44% say increasing understanding of customer needs through data collection and analysis is an important outcome from digital technology investments.

IDC, 2018
Acceleration of Change  Digital Competition  Customer Expectations
The face of competition is changing

• Customers
  – From passive to dynamic targets
  – Building relationships based on what we know (mine)

• Companies
  – Domino’s Pizza company
    • Becomes a technology company using data, insights and core value proposition
    • Stock price 2010: 8.76, 2018 (9/29): 294.8 – greater valuation in last 8 years than Amazon, Google
The face of competition is changing

• Symmetric Competition
  – Toyota: Toyota vs. Honda, Ford, GM, Tesla (etc.) –
  – Hilton vs. Marriott, IHG

• Asymmetric Competition
  – Toyota vs. Google, Apple, Uber
    • capacity and need is shifting with ride share
  – Hilton vs. AirBnB
    • Listings grew from 50,000 (2011) to 550,000 (2014)
    • Market cap 2\textsuperscript{nd} behind Marriott, ahead of Hilton, IHG
The face of competition is changing

• What about Higher Education
  – Competency based? Corporate? Immersive forms of learning?

• What is your form of competition?
  – Perhaps... Those who know the student better they you
  – Perhaps... Those who are faster to recruit & admit
  – Perhaps... Those who have better methods of advising
  – Perhaps... Those who yield more philanthropically
But we contend...
Digital Experiences are becoming the New Competition
Acceleration of Change → Digital Competition → Customer Expectations
Digital Experience
the New Normal

Disruption
Nike, Amazon, Uber

Consumerization
Machine Learning, geo location, patterns

BOTs
Scalable, trusted

Home Automation
Smart Homes, Digital Assistants

Social
Highly connected, private communities

Immersive Tech
Virtual Experiences, Augmented Reality

Gamification
Logic, Competition, Social, Scholarship

What will the Digital Experience (expectation) be in 2025?
Digital Transformation Journey

Thinking  Training  Technology
This is the way we’ve always...
Biggest Perceived Issue as Barrier to Transformation

Culture
Transformation
In Thinking

• Integrated thinking
  – External focus for what we do
  – Internal focus for how we do it
  – Who is at the table
• Change Leadership, Management
  – Culture
  – Enhancements
• Data
  – Classification
  – Collection
  – Conversion
Transformation

In Training

Roles
- Role based training and workforce development
- Leadership – if digital first, what does that mean?

Processes
- Commonality in approach – (on boarding, regulatory, security/privacy)
- Teach LEAN

Technologies
- Digital Literacy – know how to use the tool
- Digital Fluency – know when and why to use the tool
How we arrived here

&

Why we need to change our approach
Digital Transformation
Application/IT Thinking

Design/Process: Internal focus
Digital Transformation
Services Thinking

Design/Process: Internal Focus
Outcome: Inside Out Focus
Where are you in your transformation journey?
Digital Transformation Journey

Thinking – process, culture, about data (mine vs. ours; what I can do with it, what more I need to do X)

Are you siloed (1) or Integrated/System (5)

Training (workforce) – roles, are they the same as they were 15 years ago? Leadership – are they digital first in their understanding of value to the mission? Processes – are you LEAN? Technologies – are you digitally literate? Digitally Fluent? What programs do you have in place to raise the awareness and level of competency – after your enterprise thinking (adjustment) are you training the workforce (LEAN practitioner)

Digital Literacy scale:

Leadership 1-5

Workforce (regarding current investments and use/possibilities) 1-5

Technology (are your tools still implemented in a 1990s approach? 2005 approach? Or are you transitioning to a 2020 approach?)

Application Centric (silos, departments, little integration, little ability to provide a service)

Services (silos, but connected... a bit... use of modern tools, but not engaging, personalized, interactive, dynamic)

Platform/Integrated (outside in, inside out)
Digital Transformation Journey
For each area, what are the blockers holding you from moving forward?
(organizational alignment, culture, team skills, team direction, old processes, additive implementations, communication, awareness, mindset, tools)

For your journey – what are some expected outcomes?

For each area, what steps can you take to move the needle forward?
(governance, data culture, board presentation, staff alignment, engagement, training to become fluent)
Part 4

Takeaways and Thinking about Digital Transformation from different economies
- Staff hires and skill sets matter
  - Automate tasks that don’t add value
  - Security and Data skills
- Review and understand ecosystem
  - Networks include light bulbs, HDTV, games, and enterprise sensitive data
- Preparing organization for Digital Transformation
- Anticipate the benefits
- Understand when to jump in, adoption
  - Ex: LED light bulb vs. electric car vs. HDTV
“Hackett says its clients are having trouble “finding professionals who can understand systems and deploy them within the appropriate context of their business.” Those workers also need “to be able to make sense of data and …tell a story and interpret results.”
What does Digital Transformation look like for a smaller institution?

- More singles & doubles, rather than home runs
- Innovation on a smaller scale and budget to improve service
  - Example: Use AI chatbots like AdmitHub to transform how Admissions communicates with prospective students
- Partner with local community organizations
  - Example: Working with Lobaki VR to develop a VR lab and new VR workforce development/career tech program
  - Example: Leveraging work already done by Base Camp Coding Academy to bring similar to program to CCC
Be Careful of Blind Spots

“After recognizing that there are inherent risks in using spreadsheets, they need to be open to looking at new ways to eliminate or reduce reliance on them, across the entire organization and in any process.”
Thoughts on moving forward...
Digital Transformation == Human Transformation

Customer Centric Approach

Fostering Collaboration & Management Buy In

New Teams

Unapologetic Change & Startup Mentality

Human Transformation
Digital Transformation and People

- Find someone to guide you
- Don't allow the 'no' person to interrupt progress
- Top down understanding – what needs to be done at YOUR institution... where are you, honestly, and what needs to be accomplished (ex: training, culture, governance, roles, etc.)
- Collaborate, use dynamite to blow up silos in thinking, silos in behavior, silos in design – caution (this is the way...)
- Find champions – people who are adapting to new models of doing their work and excelling
- Make sure you have good (great) data people, process people
- Training – workforce (how and when to use the tool), IT Staff (new level of value, SME)
Mindset

- Core Mission
- Think Broadly
- Overcome Pain
- Share Credit Widely
- Show, Don’t Tell
- Be Collaborative
- Be Transparent

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Digital Transformation and Process

• Learn the process (is and to be states)
• Invest in and learn LEAN
• Learn the business
  – ALL of your activities must map
• Governance - critical to success
• Add value quickly
  – no long projects
Process

Focus on One Thing at a Time
Innovate with R&D Lab or Skunkworks
Co-design / Crowdsourced
Collaborate & Partner
Stop Doing what isn’t Working
Digital Transformation and Data

Data – the currency of Higher Education

– Data definition – know data elements from an organizational point of view, not just departmental.
– Classifications – consistent – know what data is available and to what point it is available for use, value, wisdom, action
– Quality – revenue is …
– Analytics
– Interfaces – what is the framework you will use to manage the data movement, integrations
– Of course … data security/privacy - it is a trust and reputation thing
Tools

- Use Existing Components in New Ways (e.g., AI & ML Services / Code Libraries)
- Efficiently scalable (e.g., Cloud)
- Modular (e.g., Ethos, Salesforce HEDA)
- Track Performance (e.g., Monitoring)
- Sustainability
Food for thought – take aways

- Create a strong business process, LEAN group
- Ensure your leadership is thinking about a digital first business
- Consider innovation
- Partner, partner, partner – facilities, academics, HR, admin, faculty...
- Remove silos – in thinking, in your division, across the organization
- Experiment... how could robots, AR/VR, digital assistants, workflow, analytics
- Workforce development – literacy -> fluency
- Influence stakeholders, consider the workforce of tomorrow as you plan your teams
Thank you!

Questions?
Please take a moment to evaluate this session

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