## Resilience Diana G. Oblinger, Ph.D. President Emeritus, EDUCAUSE

November 12, 2020



# "Winds of Change"

- Financial stress
- Changing college experience
- Ongoing uncertainty

When everything is changing...

## Make space for the unexpected.

# Use both human and technical capabilities.

Sense and respond.

Time & Talent

What if your goal was to eliminate unnecessary effort?

#### Administration

- Overwhelmed
- Solution: Bot + automated workflow
- Results:
  - Reduce time spent processing paperwork 70-80%
  - Accelerate turnaround time
  - Improve transparency
  - Improve compliance; reduce errors
  - Employees "untethered"



## **Student Services**

- Too much information
  - Students: 450 emails received from university in 3 months
  - Staff: During 6-week enrollment period 200,000 inquiries
- Solution: Chatbot
- Results:
  - 80% of questions answered by bot
  - Reduced "summer melt" by 22%
  - Students are more likely to ask questions and receive answers



## IT Operations

- Duplication of infrastructure or services
- Solution: Shared or consolidated systems in the cloud
- Results:
  - Reduced systems cost
  - Reduced labor costs of maintaining applications 10X
  - Savings re-invested:
    - Student advising and counseling
    - Disaster recovery
    - Improved security



## Advancement

- Not enough time for people
- Solution: Texting; Al
- Results:
  - Fundraising from mobiles up 205% in 2019
  - 49% of mobile giving is in response to text links
  - For text messages:
    - Almost instantaneous opening of messages
    - 98% of messages are read
    - 90% are responded to in 90 seconds



Human & Technical

## Fault Detection and Diagnosis

- Cost of facilities
- Solution:
  - Al and IoT monitor device health
  - Automated work orders
- Results:
  - Reduce costs, downtime and improve carbon footprint
  - Enable remote monitoring (e.g., airflow to reduce virus)
  - Fix machines before they fail



<sup>5</sup> Key Metrics that Affect Operational Efficiency. Image credit: CVP

## Student Retention and Graduation

- Support for at-risk learners
- Solution:
  - Predictive analytics and 800 data-based alerts
  - Trained academic advisors
- Results:
  - Increased 6-year graduation rate by 23%
  - Accelerated graduation, saving students an estimated \$12M in tuition
  - Eliminated equity gaps



## **Coaching and Practice**

- Soft-skill development
- Solution: Human-in-the-loop simulation
  - Avatars are managed by simulation specialists
  - Practice, coach and replay
- Results:
  - More engaging that role-play
  - Better performance with just four 10-minute practice sessions
  - Realistic



#### Research

- Accelerate discovery
- Solution:
  - AI, machine learning and robots
  - Research, clinical trials, production processes
- Results:
  - Reduce time to identify disease targets
  - Speed identification of potential compounds
  - Cut costs and time-to-result for clinical trials



# Sense & Respond

## Personal Resilience

- Cope with a crisis or thrive in your environment
- Solution:
  - Resilience training
- Results:
  - Skills are a source of resilience
  - Improved well-being and optimism
  - Competencies such as critical thinking, adaptability, self-awareness; reflective learning



## Engagement through Communication

- Prepare for the "next normal"
- Solution:
  - Context-sensitive texting
  - Combination of automated and human exchange
- Results:
  - 2-way communication
  - Direct students to resources with a clear "call to action"
  - "Pulse" students
  - Track data



## Distraction & Action

- Individuals act on incomplete information
- Solution: Right information; right time
- Results:
  - Increase applications and admissions
  - Encourage interaction with advisors
  - Retain students
  - Encourage upskilling



## "Skillify" the Curriculum

- Lack of common language for educators and employers
- Solution: Skills library
- Results:
  - Better align programs with market needs
  - Better market programs to students
  - Equip students to market themselves
  - Better engage employers



## Credentials Complement Degrees

- Credentials with value in the recovery
- Solution: Micro-credentials
- Results:
  - Unbundle and reassemble courses to create micro-credentials
  - Alternative to degrees or supplements to a degree
  - Alternative revenue source
  - Embed digital badges into degrees



# If your goal was resilience rather than a return to normal, could you...

**Think Differently** 

## Time & Talent

- Invest time to make time.
- Reduce unnecessary effort. Smart machines can share task hours.
- Simplification may be the best investment an institution can make to free up time and talent for what matters most.

## Human & Technical

- We can use human + "smart machine" capabilities to change the way we work.
- Digital skills, such as using data and AI, will impact all disciplines.
- Technology will not replace people. People who use technology may be more effective.

## Sense & Respond

- Develop competencies for resilience.
- Transform the college experience focusing on need in addition to place.
- Be versatile: learn, adapt, combine, repeat.

Be resilient!

doblinger@educause.edu