The Next Generation Digital Learning Environment & A Framework for Change

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Presentation Agenda

1   Major Trends

2   Education Disrupted

3   Next Generation Learning Environments

4   Solutions for Higher Education

5   A Framework for Change

Major Trends

Technology Trends in Higher Ed

Campus-Wide IT Strategy

Digital Learning

- Immersive Video
- Active Learning
- Support Services
- Student-Centered

Data-Driven Campus

- Connected Campus
- Network Analytics
- Troubleshooting
- Space Utilization

Artificial Intelligence

- Gap identification
- Digital assistants
- Friendly robots
- Faculty as facilitators

Campus & Cyber Security

- Network security
- Physical safety
- Student data and info
- Security policy

Education Disrupted

The Number of A-G Graduates has Increased by 28%

California has a higher college attendance rate than all but ten states

3% higher than the national average of 43%

50% increase in enrollments at UC campuses this fall

RTI International
Legislative Analyst's Office

Prices have increased for Eight Straight Years

Total outstanding student loan debt in the US is $1.52 Trillion

Second largest form of consumer debt, only behind mortgages

California is ranked at #4 – 50% of graduates have debt

Fewer than 50% of Students Complete their Degrees within Six Years

1/3 students drop out entirely and never finish their degrees

Students want interactive and self-guided approaches

Challenging to integrate new technologies into established practices

National Student Clearing House

Security Threats Further Undermine Engagement and Success

From 2001 to 2014, arrests for weapons possession ranged from 1,000 to 1,400 annually

60% of Higher Ed institutions reported at least one breach (55% for other industries)

One university paid $28K in Bitcoin to hackers who took control of campus email and network

The cost of attacks

Any security breach at a college or university can have serious implications; these may include legal ramifications for violations to FERPA or CIPA, damage to an institution's reputation, lost productivity, and significant financial costs. Time away from teaching and learning–as well as limits to college or university operations–is a critical concern.

49%
Of respondents that say that their systems were down for nine hours or more as a result of a recent security breach.

32%
Of respondents say that more than half of their systems were impacted.

51%
Number of attacks that resulted in financial damages of more than $500,000.

23%
Number of attacks that resulted in losses of between $100,000–$499,000.

Next Generation Learning Environments

Creating Greater Capacity at Utah State University

70% more classrooms equipped with video

49% increase in new programs

22% increase in student growth while minimizing cost

Utah State University

Creating Cost Savings at Northampton University

Consolidated two buildings into one based on space utilization analysis

Using intent-based networking to personalize, provision, manage network as a single fabric

Students can work across campus…enrollment now increasing

Connect, learn, reflect & inspire

Northampton University

Improving Completion Rates and Saving Money with 4-VA

26,594 students impacted

19 courses redesigned with OER, $1.4M in textbook savings

Flexibility helps non-traditional students complete courses

4-VA Consortium

Better Supporting Faculty at U of Wisconsin Whitewater

Took advantage of strategic partners

Paid stipends for technology explorer programs

University of Wisconsin Whitewater

Creating Safer, More Secure Campuses

Uses core network and facial recognition to ID non-residents

100% accuracy

Fraction of cost of optical turnstiles

Better student experience

Securing Patient and Research Data at University of Kansas Hospital
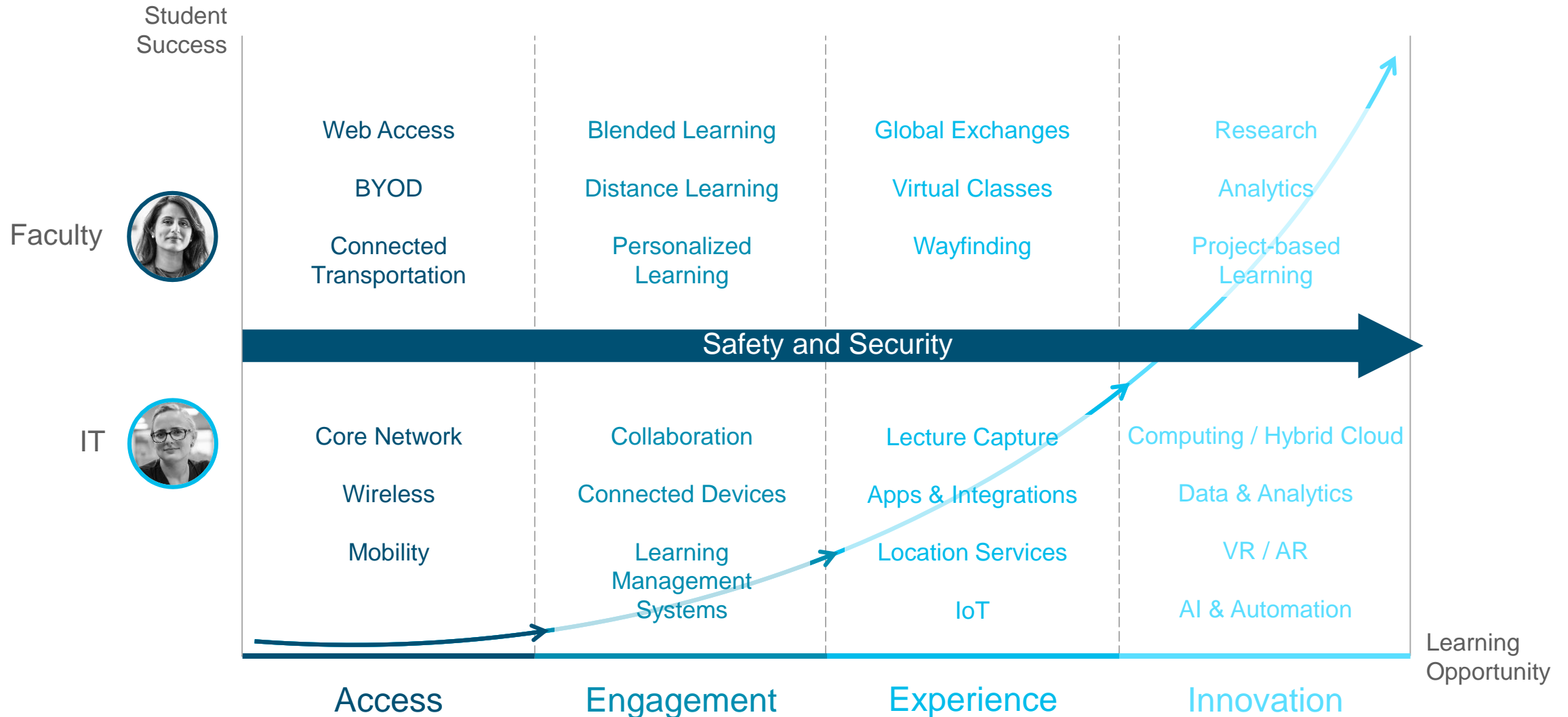
Decreased threats by +/- 99%

Shortened investigation time by 75%

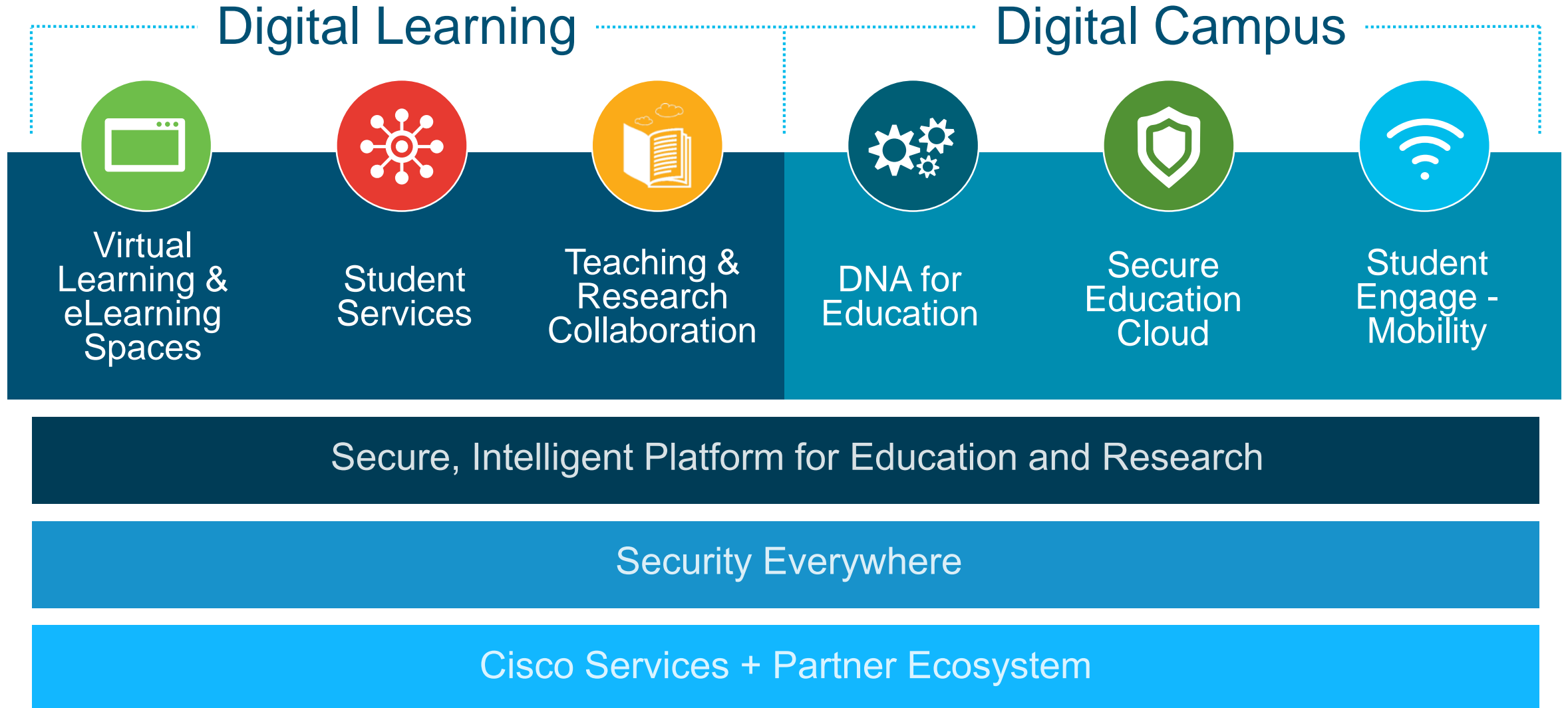Increased visibility and automation while decreasing exposure to ransomware

University of Kansas

Solutions for Higher Education

Driving the Evolution

Student Success

Faculty

	Access	Engagement	Experience	Innovation
	Web Access	Blended Learning	Global Exchanges	Research
	BYOD	Distance Learning	Virtual Classes	Analytics
	Connected Transportation	Personalized Learning	Wayfinding	Project-based Learning

Safety and Security

IT

	Access	Engagement	Experience	Innovation
	Core Network	Collaboration	Lecture Capture	Computing / Hybrid Cloud
	Wireless	Connected Devices	Apps & Integrations	Data & Analytics
	Mobility	Learning Management Systems	Location Services	VR / AR
			IoT	AI & Automation

Access   Engagement   Experience   Innovation

Learning Opportunity

Serve as a Strategic Partner: Focus on the Problems to be Solved

Digital Learning
- Virtual Learning & eLearning Spaces
- Student Services
- Teaching & Research Collaboration

Digital Campus
- DNA for Education
- Secure Education Cloud
- Student Engage - Mobility

Secure, Intelligent Platform for Education and Research

Security Everywhere

Cisco Services + Partner Ecosystem

A Framework for Change

Framework

1. Vision & Leadership

2. Culture

Digitizing Education

3. Methodology
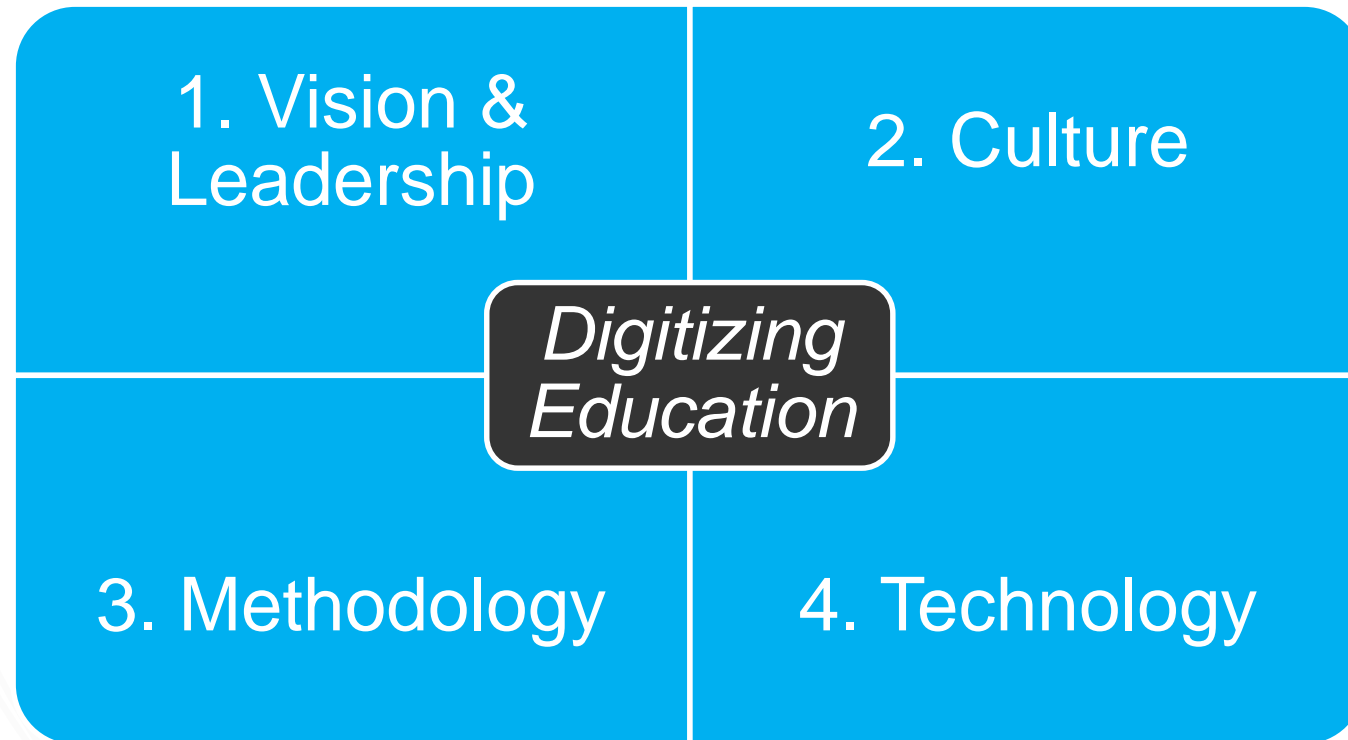
4. Technology

Framework

Phase 1: Vision and Leadership
- What is the what? The BIG idea
- Priority investments and business case
- Communications and processes
- Stakeholder engagement

Phase 2: Culture
- Buy-in
- Engagement
- Adoption of technology
- Champions to drive scale

Phase 3: Methodology
- Teaching pedagogy
- Use cases
- Best practice collaboration
- Student engagement and experience

Phase 4: Technology
- Core foundation – integrated platform
- Ubiquitous wireless access
- Security everywhere
- Video and collaboration
- Data center and analytics
- Ecosystem partners

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