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# Education Digital Transformation and Innovation Primer for 2020



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Initiatives: Education Digital Transformation and Innovation

Education institutions worldwide are faced with multifaceted challenges, including the growing impact of digitalization and changing expectations from students, staff and faculty. Education CIOs can leverage our 2020 agenda to shape their digital strategies and execute their plans.

## Scope

This research focuses on the digital journey of education, its impact on the education ecosystem, and infusion of that knowledge into institution strategy and new business and operational models.

Our research in this area addresses the following topics:

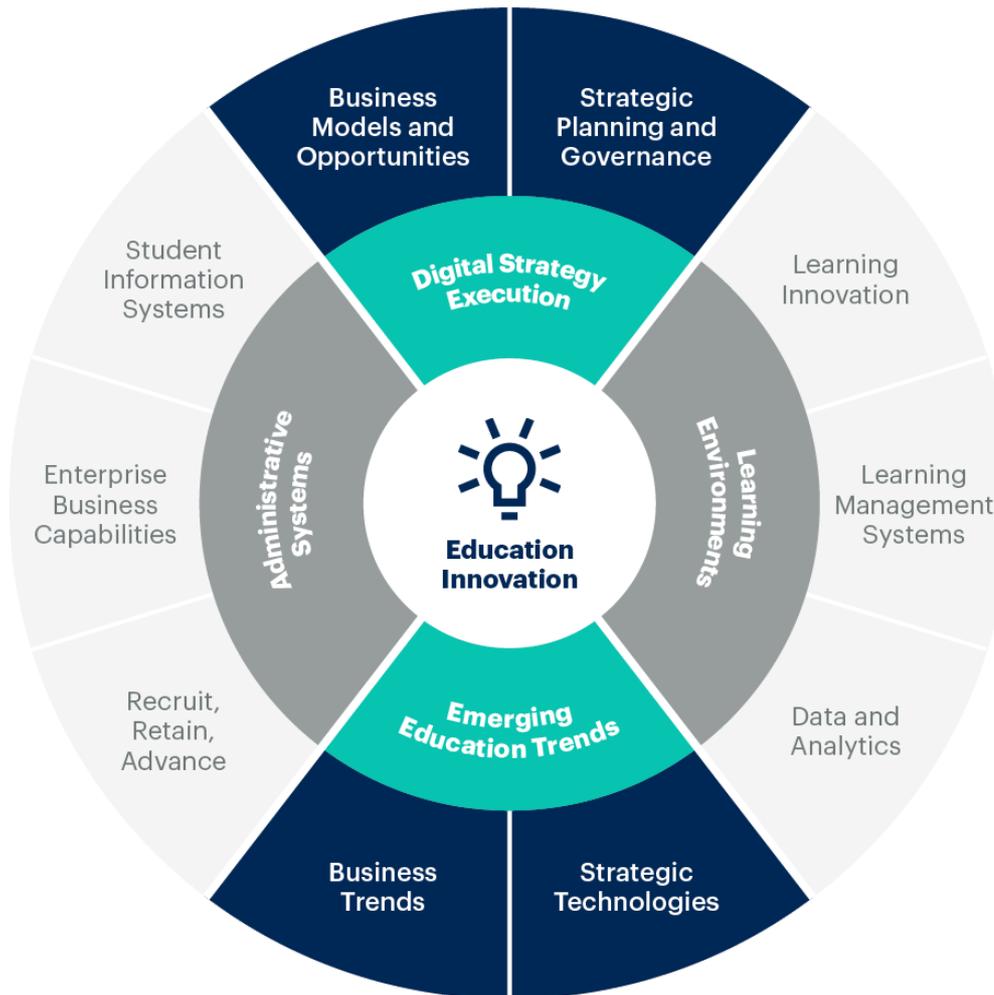
- **Digital strategy execution** — Building and executing a digital strategy in education require a high degree of stakeholder engagement, clarity of vision and ability to make timely decisions. This topic helps those who advance engagement to drive strategic planning, establish basic governance and execute on the plan.
- **Emerging education trends** — Education is essentially an information industry and is highly impacted by the evolving digital capabilities throughout society, including increasing expectations from students, staff and faculty. This topic helps with understanding K-12 and higher education business trends, technology trends and their impact on current and future operational and business models.

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## Analysis

**Figure 1. Education Digital Transformation and Innovation Overview**

## Education Digital Transformation and Innovation



Source: Gartner  
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Globally, education institutions are on a digital journey that takes them from the early stages of digital enablement through digital optimization to digital transformation. The journey encompasses basic steps, such as making an assessment of digital and optimization efforts moving to the cloud. More importantly, many institutions recognize that the transformational power of digital is forcing them to change their business model.

The 2020 Gartner CIO agenda survey identifies higher education as the industry with the lowest proportion of “fit” organizations able to cope with disruption and win in the turns. Higher education has the highest proportion of organizations yet untested by a severe disruption, indicating that institutions may be unprepared to handle changes in demographics, the impact of AI on the workforce and the value of a formal degree. And K-12 is facing its own similar challenges as it wrestles with these same changes. Yet, education CIOs struggle to meet this innovation and transformation challenge and demonstrate IT’s value. The 2020 Gartner CIO agenda survey indicates that just 44% of CIOs report being formal members of the executive team.

Gartner tools can help CIOs engage stakeholders to define the digital journey and plot a common path toward reaching their digital ambition, while fostering the change needed for their institutions to succeed. CIOs must execute on their ambition by delivering experiments, pilots and real services. Yet, CIOs remain responsible for maintaining basic underlying services and technology, while enabling the agility that plays a central role in digitalizing the institution. This requires a firm grasp of strategy and tactics, and an ability to prioritize the right issue at the right moment. CIOs need strategic and tactical guidance for education's ongoing journey of digital enablement, optimization and transformation.

## Topics

Education CIOs must be focused on executing the mission of their institution, and understanding how technology can enable that mission. Simply put: mission first, then technology.

While technology in itself often drives change, CIOs must be able to tell how technology impacts the institution's operation model, business model (sustainable funding model) and ultimately the education ecosystem. CIOs then need to build and execute strategy and tactics that further that mission, delivering impact on the institution and education ecosystem.

Our research centers on the following topics:

### Digital Strategy Execution

The education sector lags behind other industries in defining digital business strategy, ambition and an aligned business model. What drives that ambition and shapes the business model is an understanding of the dynamics of the education ecosystem and how to leverage it. Balance innovative technology demands while supplying institutionally aligned technology services. Make IT collaborative, overcoming cultural barriers, where people understand their roles in the digitalization process to jointly develop and execute the digitalization process.

### Questions Your Peers Are Asking

- What business models and business opportunities will propel my institution forward?
- How should I engage stakeholders in strategic planning and governance?

### Recommended Content

🔑 Some recommended content may not be available as part of your current Gartner subscription.

- "Higher Education Ecosystem 2030: Planning in the Face of Radical Uncertainty"
- "Higher Education Ecosystem 2030: Jobs U"
- "Higher Education Ecosystem 2030: Classic U"
- "Higher Education Ecosystem 2030: Scholar U"

- “Higher Education Ecosystem 2030: Your Own U”
- “ The Future of Work Will Demand Changes to Higher Education”
- “Develop an Online Learning Strategy Before Launching Online Programs in Higher Education”
- “Scaling Higher Education – Scale Is Different in the Digital Dimension”
- “Scaling Higher Education – Lessons Learned From 2 Case Examples”
- “Scaling Higher Education – The Journey to Digital Transformation Goes Through Enablement and Optimization”
- “Finding and Building Talent in the Digital Talent Ecosystem”
- “New Institutions Will Renew and Replace Industrial Age Institutions”
- “Continuous Learning Delusion Imperils Your People and Enterprise”

### **Planned Research**

- Best practices for defining the institution’s digital business ambition and elements of the roadmap required to execute on this ambition
- Elements of digital business models for higher education
- Digital operational models for education
- Stakeholder identification, analysis and engagement best practices
- Toolkits for working collaboratively with stakeholders to identify the top trends and technologies most relevant to the higher education institution
- Higher education strategy development through the use of scenario planning

### **Emerging Education Trends**

Based on the 2020 Gartner CIO survey and client interactions, we have identified higher education business trends and strategic technologies for 2020. These include reinventing credentials, online differentiation and developing digital dexterity. Higher education strategic technologies, including “nudge tech,” next-generation security and career software, are positioned to make an impact. K-12 will also add new trends this year such as esports, skills-based curriculum and an increase in AI-enhanced product offerings.

### **Questions Your Peers Are Asking**

- What are the emerging business trends that should influence my strategy?

- What are the emerging strategic technologies that should be part of my strategy?

## Recommended Content

🔑 Some recommended content may not be available as part of your current Gartner subscription.

- “Top 10 Business Trends Impacting Higher Education in 2019”
- “Top 10 Strategic Technologies Impacting Higher Education in 2019”
- “Top Five Strategic Technologies Impacting K-12 Education in 2019”
- “Hype Cycle for Education, 2019”
- “Predicts 2020: Education Needs to Brace for Changes to the World of Work”
- “Maverick\* Research: Generation AI Must Be Protected From a Dystopian Future”
- “Prepare for AI’s New Adaptive Learning Impacts on K-12 Education”
- “2020 CIO Agenda: A Higher Education Perspective”

## Planned Research

- Top 10 business trends and strategic technologies impacting higher education in 2020
- Top 5 trends in K-12 education in 2020
- “Hype Cycle for Education, 2020”
- Special CIO agenda perspectives for higher education
- Research showcasing best practices and business value creation by early adopters of new business trends and strategic technologies such as digital credentials and smart campus
- 2021 education predictions

## Suggested First Steps

- “Toolkit: Workshop for Building a Strategic Technology Map to Support Your Future University”: This Toolkit enables higher education CIOs and IT leaders to run a collaborative workshop with key stakeholders.
- “Toolkit: Connect the Dots to Engage Education Stakeholders in Technology Strategy”: This Toolkit gives the CIO a method to mash up Gartner’s Hype Cycle with the Strategic Technology

Map in a workshop format to visualize and present multiple technology options to the institution stakeholders.

- “Toolkit: Workshop for Building a Digital Moment and Corresponding Strategic Technology Map”: This Toolkit enables CIOs and IT leaders to run a collaborative workshop with key stakeholders to build digital moment and strategic technology map (STM) pairs.
- “Toolkit: Visual Business Ecosystem Modeling With Higher Education Examples”: This Toolkit allows CIO and IT leaders to identify threats and opportunities by modeling the market breadth and analog and digital depth of the higher education ecosystem.

## Essential Reading

- “Higher Education Ecosystem 2030: Planning in the Face of Radical Uncertainty,”: Higher education. CIOs can navigate disruptive forces that are creating critical uncertainties by leveraging Gartner’s 2030 higher education scenarios.
- “Top 10 Strategic Technologies Impacting Higher Education in 2019”: Higher education CIOs should use the top 10 strategic technologies relevant to the higher education industry.
- “Top 10 Business Trends Impacting Higher Education in 2019.”: Higher education CIOs should use the top 10 business trends driving the global higher education industry while highlighting the impact on IT organizations.
- “Higher Education Ecosystem 2030: Jobs U”: Higher education CIOs should enable curriculum agility and build a capability to issue digital microcredentials.
- “Higher Education Ecosystem 2030: Classic U”: Higher education CIOs should share data, technology and applications; design an educational technology platform; and train and disburse technology staff across the organization.
- “Higher Education Ecosystem 2030: Scholar U”: Higher education CIOs can thrive by supporting personalized services and a research infrastructure in which AI is disruptive.
- “Higher Education Ecosystem 2030: Your Own U”: Higher education CIOs should model agile approaches, establish support needed for new funding mechanisms, build technology organizations and systems, and study the implications of new models.
- “Top Five Strategic Technologies Impacting K-12 Education in 2019”: Higher education CIOs should use the top five trends relevant to the K-12 education industry.
- “Hype Cycle for Education, 2019”: Higher education CIOs are facing significant challenges from the rise of more intelligence and complexity in technologies, and must focus on technologies that deliver new capabilities across the institution, impact the educational model and personalize learning.

- “Digital Business Platform Models in Higher Education”: Higher education CIOs concerned about threats to institutional revenue should advocate for and deploy digital business platform models that can leverage the ecosystem and transform their institution and industry.
- “Visual Strategic Planning Using the Gartner Higher Education ‘Business Model’ Scenarios and Corresponding Strategic Technology Maps”: Higher education CIOs must differentiate between business models and create aligned strategic IT capabilities to be competitive or just survive.
- “Connect the Dots to Engage Faculty in Technology Strategy: The Learning Stack Example”: Higher education CIOs can use Gartner’s strategic technology map as a method to visualize and present technology options to the faculty, connect the dots to tell a compelling story and get buy-in for what to do and not to do.
- “How CIOs Can Use Strategic Technology Maps to Help Build and Execute Strategy for Digital Moments”: Higher education CIOs should be familiar with how digital moments will be a central feature of the digital “industry” ecosystem.
- “Concrete Governance in Higher Education: How a Simple Three-Layered Portfolio Approach Enables Sustainable Decisions”: Higher education CIOs can get good governance started through what is a simple, three-layered portfolio approach.
- “A Proven Simple Visual Tool to Aid the Service Portfolio Dialogue Between Higher Education Stakeholders”: Higher education CIOs can use the simple service selection tool described here to help IT organizations focus on services where they can add value.
- “Setting the Foundation for a Higher Education Ecosystem Model”: Higher education CIOs can help their institutions interact, communicate, provide value and compete as business, civic and educational ecosystems become increasingly digital.

## Tools and Toolkits

- “Toolkit: Workshop for Building a Customized List of Top 10 Business Trends in Higher Education, 2018”: This Toolkit enables higher education CIOs to run a collaborative workshop with key stakeholders to build a customized list of top 10 business trends for the institution.
- “Toolkit: Workshop for Building a Customized List of Top 10 Strategic Technologies in Higher Education, 2018”: This Toolkit enables higher education CIOs to run a collaborative workshop with key stakeholders to build a customized list of top 10 strategic technologies for the institution.

## Document Revision History

Education Digital Strategy Execution Primer for 2019 - 7 February 2019

Education Digital Strategy Execution Primer for 2019 - 7 February 2019

Executing a Digital Strategy in Education Primer for 2018 - 16 January 2018

Executing a Digital Strategy in Education Primer for 2017 - 30 January 2017

Executing a Digital Strategy in Education Primer for 2016 - 22 January 2016

## Recommended For You

Scaling Higher Education — The Journey to Digital Transformation Goes Through Enablement and Optimization

Scaling Higher Education — Scale Is Different in the Digital Dimension

3 Priorities to Ensure Your Higher Education LMS Supports Digital Transformation

Higher Education Ecosystem 2030: Classic U

Predicts 2020: Education Needs to Brace for Changes to the World of Work

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## Additional research

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