

# **Digital Transformation and the Smart Campus**

## **University of New Mexico, Tech Days**

June 6, 2019

# Agenda – Digital Innovation and the Smart Campus

**01** Introductions

**02** Digital Transformation – The Student Experience

**03** Developing a “Smart Campus”

**04** Q & A

# Introduction



Anna Winskill is an Associate Director with Gartner and is a key member of its Education practice. With Gartner she has advised a number of Higher Education, as well as K-12, organizations, on how to better meet student, faculty and staff needs through the use of technology. Recent clients include Smith College, New York University, and MIT. Ms. Winskill has been asked to advise more and more on the role Education institutions can play in Smart Community Strategies, including recent engagements with the City of Henderson, Nevada and Clark County, Nevada.



John Thompson-Haas is a Senior Director in Gartner Consulting and helps leads its Higher Education Service Line. He is an experienced technology and strategy leader with over 20 years of experience in Higher Education. Mr. Thompson-Haas has successfully lead multiple, large, complex projects implementing Student Systems across the country. In addition to his technology experience he has nearly a decade of experience creating strategies for Colleges and Universities to guide them in navigating the fast changing technology world in higher education..

# Gartner at a glance

## About Gartner

- **Founded** in 1979
- Member of the **S&P 500**
- **\$3.9B revenue** in 2017
- 35 consecutive quarters of **double-digit growth**
- **15,000+ associates** in 100+ offices around the world
- Deep global insight into **every major business function**:



Customer Service & Support



Finance



Human Resources



Information Technology



Legal & Compliance



Marketing & Communications



Product and R&D



Sales



Strategy



Supply Chain

## Clients we serve

- **300,000+ professionals** across all business functions
- **15,000+ distinct organizations** in more than 100 countries
- **C-suite executives** from small companies to global, multinational enterprises
- **73% of the Global 500** rely on Gartner for insight and advice



73% of the Global 500

# **Gartner Consulting has extensive experience working in higher education, giving us the context to understand the unique culture of institutions like University of New Mexico**

***Gartner Consulting has worked with community colleges, public and private universities, and for-profit schools on a wide range of strategic initiatives: process transformation, ERP, security, benchmarking, cost transparency, and overarching institution IT strategy.***

***The following is a partial, representative list of our research and consulting clients:***

- Amherst College
- Austin Community College
- Broward College
- City University of New York
- Central Connecticut State College
- Central Michigan University
- Drexel University
- Florida State University
- George Mason University
- Joliet Junior College
- Laureate Education
- Lehigh University
- Miami Dade College
- Minnesota State Colleges and Universities
- Massachusetts Institute of Technology
- New York University
- Northeastern University
- Pennsylvania State University
- Smith College
- University of British Columbia
- University of Florida
- University of Georgia
- University of Maryland
- University of Michigan
- University of North Carolina
- University of Notre Dame
- University of Southern California
- University of South Florida
- University of Texas
- University of Washington
- University of Virginia
- Vanderbilt University
- Virginia Community College System
- Wake County Technical Community College
- Washington State Board of Community and Technical Colleges
- Yale University

# Digital Transformation of the Student Experience

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# Higher Education is becoming a dynamic and very competitive business giving today's students more options at their fingertips.



# The Future of the Student Experience is Personal

Today's digitally minded students have grown up in a world dominated by the internet, social media and smartphones. They want their educational and campus life experiences to be reflective of the experiences in other aspects of their lives.

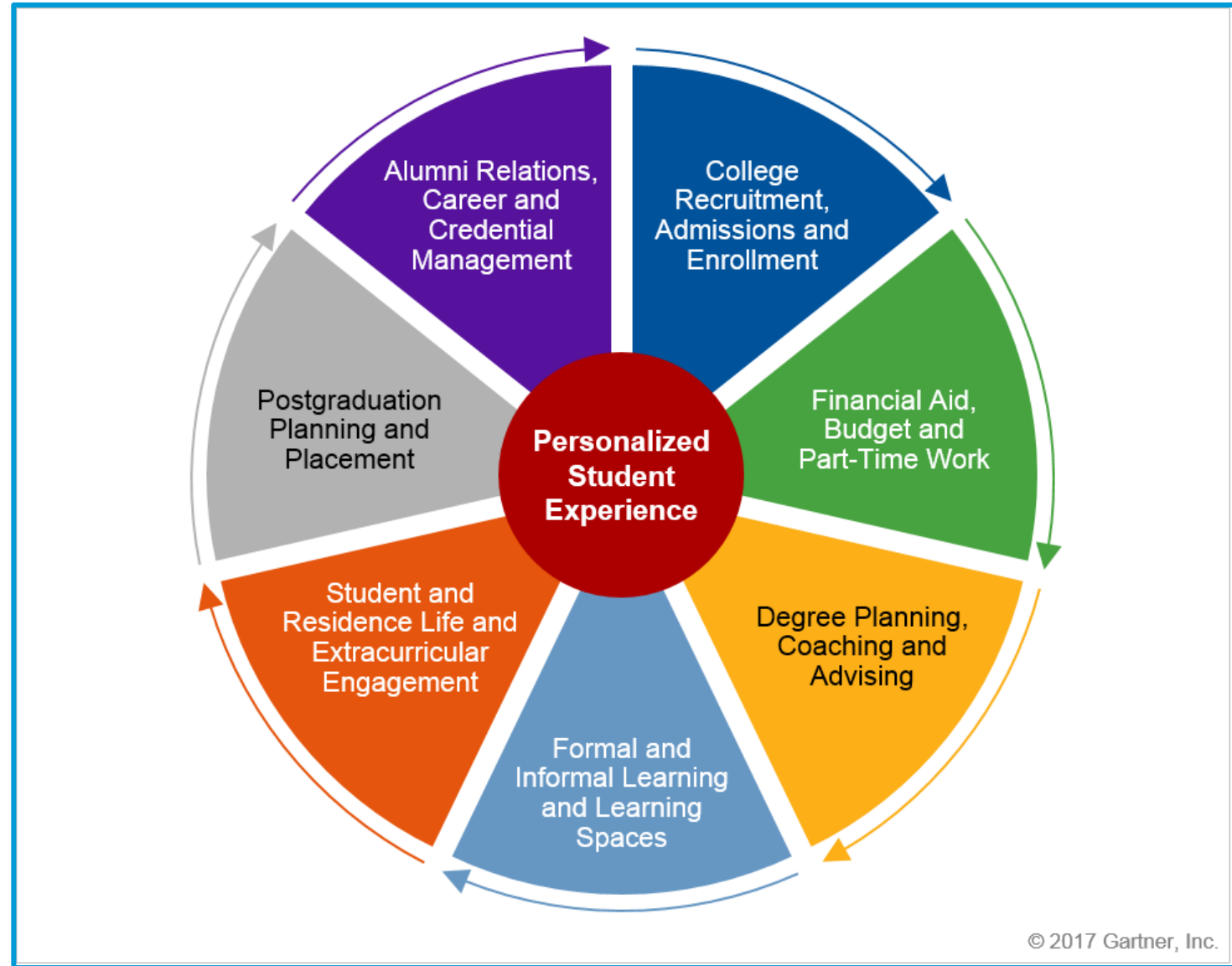


By 2021, more than **50%** of higher education institutions will begin redesigning their student experience with the goal of making it more integrated and personalized.

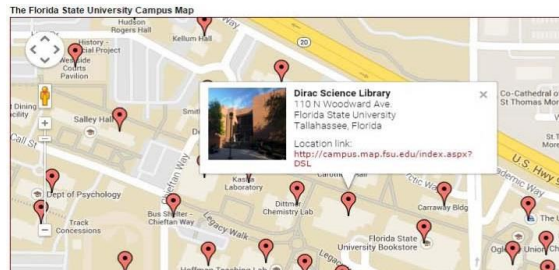


# What is the Student Experience?

**Totality of all aspects of student life — from recruitment and enrollment through post-graduation engagement — in a unified, student-centric manner**



# Digital Innovation creates new ways for Higher Education Institutions to create data-rich and technology centric platforms for the student campus experience.



Higher Education Institutions share a common set of objectives:

- ★ Create a learning environment that attracts and enables student's to achieve their educational goals and objectives
- ★ Increase student access to data when and where they need it through connected devices
- ★ Respond to the needs of a new generation of tech savvy students

***"Digital Innovation" enables the use of digital technologies to enhance the student experience and drive learning opportunities. It advances digital ambition to actionable outcomes for digital higher education institutions.***



# Administrators also have high expectations for intelligence on campus.

**FINANCE:** What drives facilities costs, and how can we economize?

**STUDENT:** Which shuttle will get me to my next class the fastest?

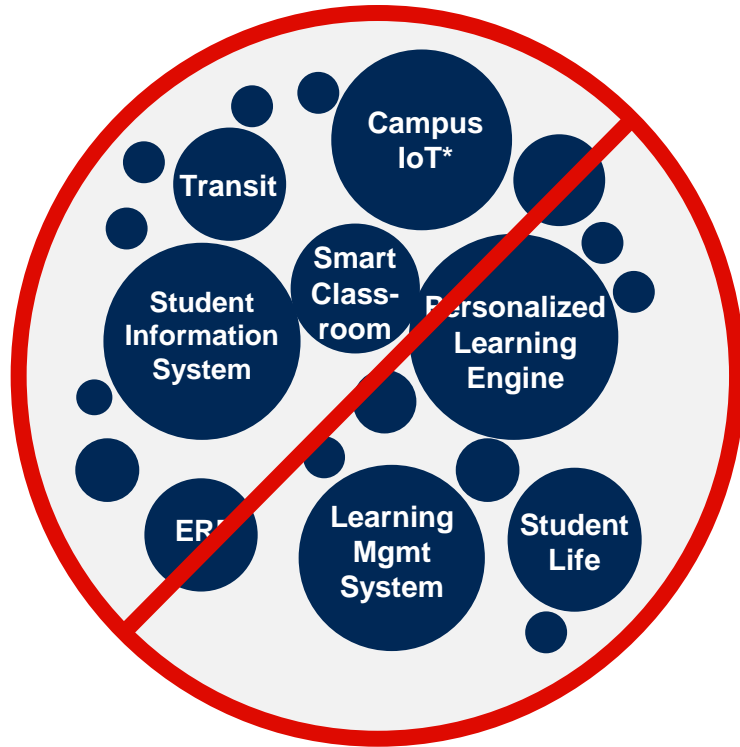
**PROVOST:** Can campus data help proactively identify at-risk students?



**PUBLIC SAFETY:** Correlations between incidents and locations/conditions?

# While digital is important for building a seamless and enjoyable university experience, a Smart Campus is **NOT** a technology showcase.

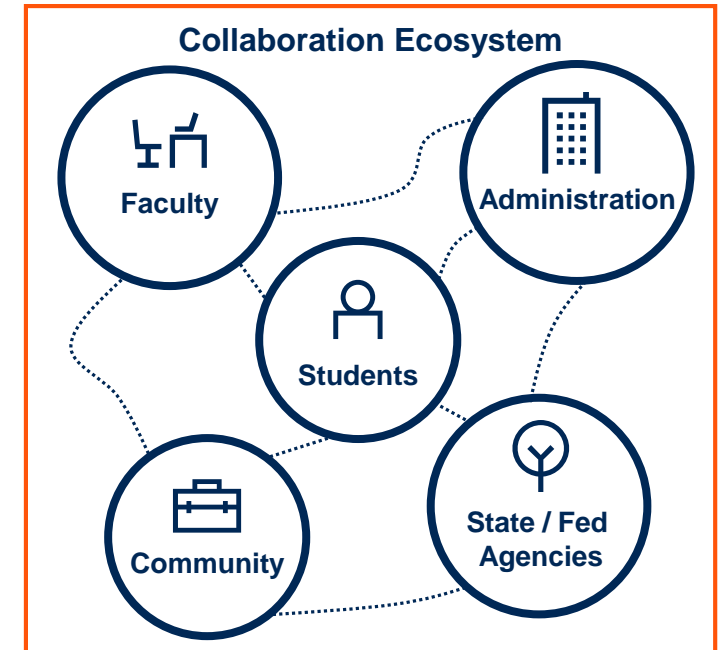
## IT-Driven Approach to Higher Ed Innovation



Smart Campuses are outcome-driven. They transform student learning and quality of life by co-creating solutions to achieve meaningful results.

### Digital Campus Outcomes

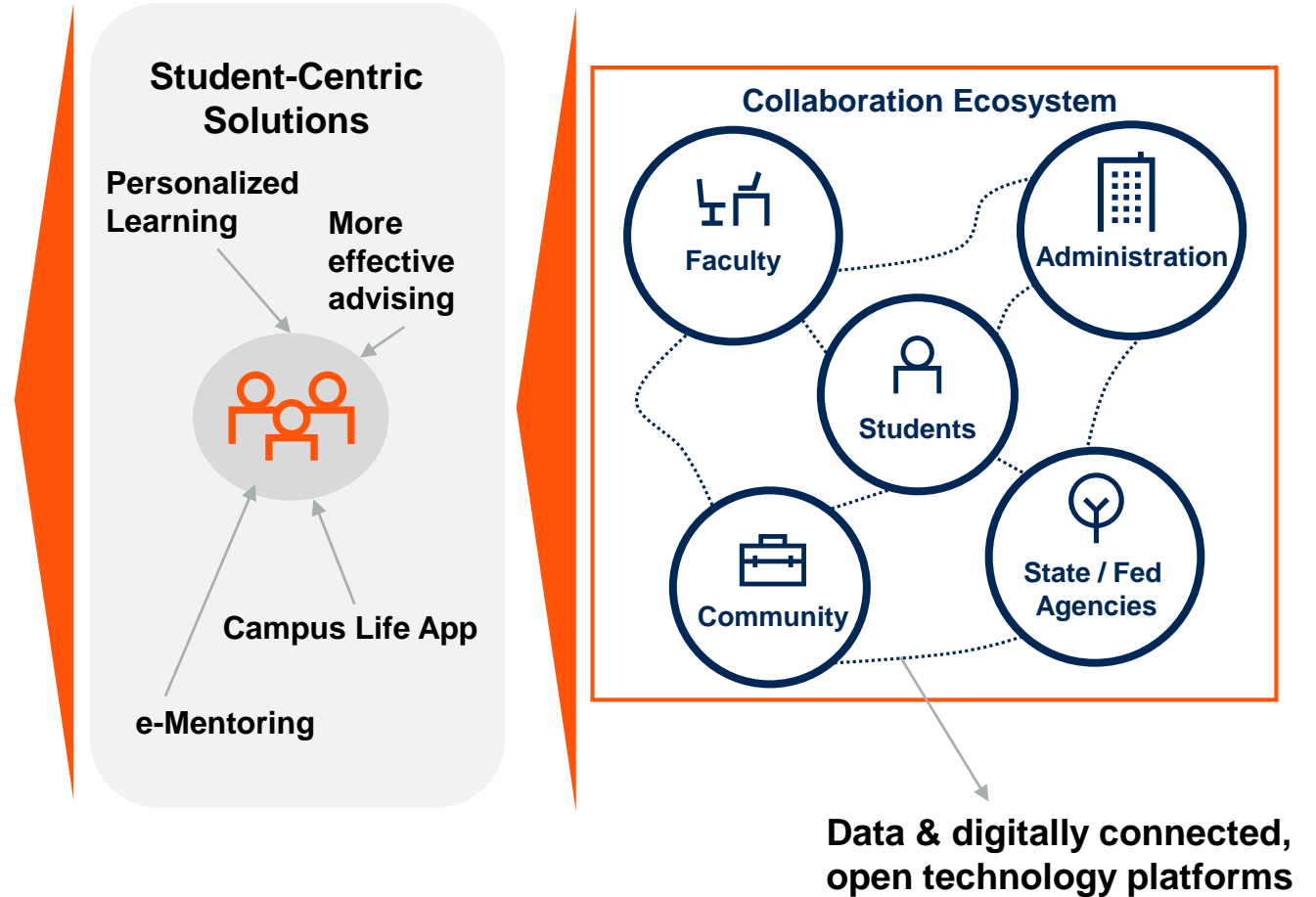
- ✓ Vibrant Campus Life
- ✓ Improved Learning Outcomes
- ✓ Expanded Mobility Choices
- ✓ Safe Environment



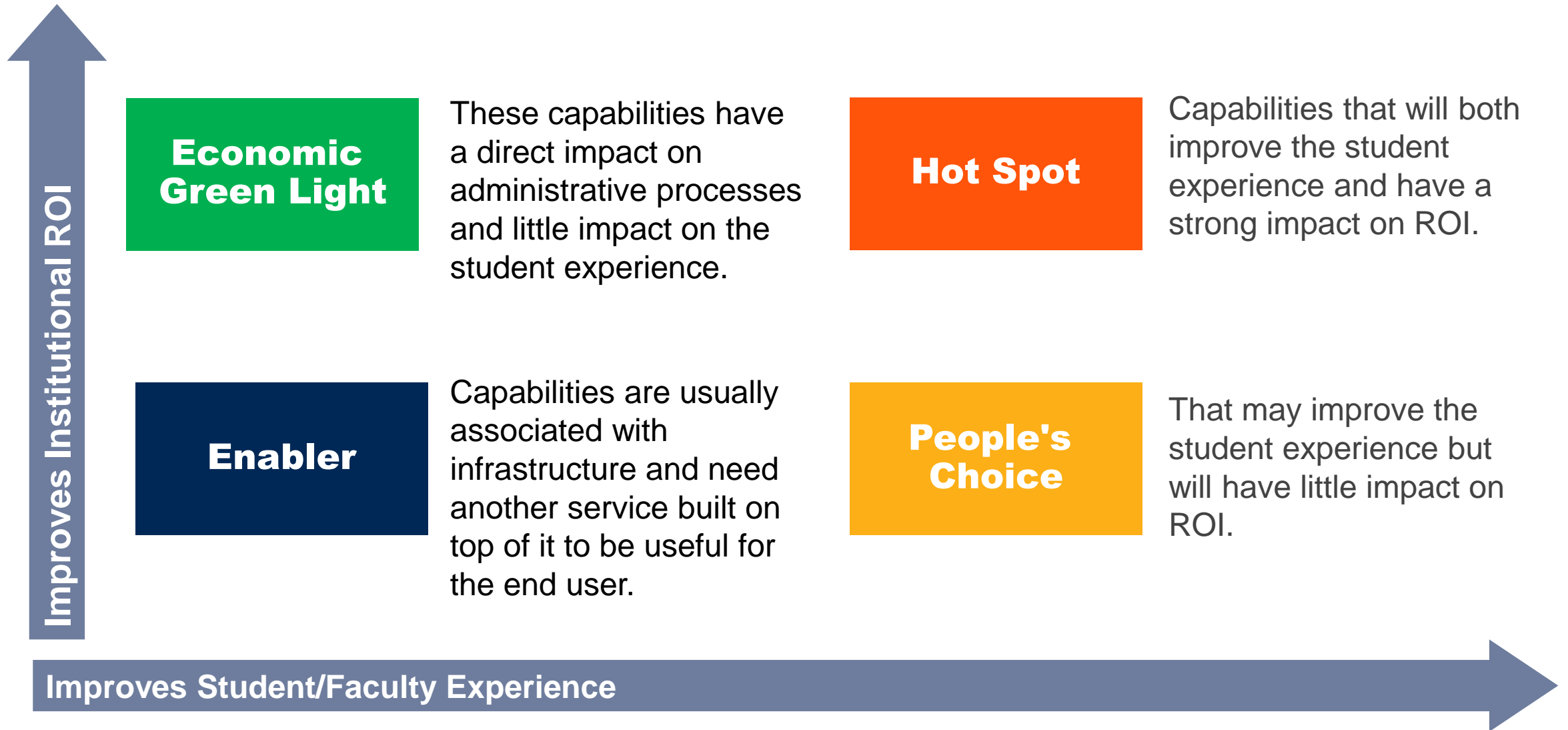
# The Digital Campus is Achieved by a Focus on the Student

## Digital Campus Outcomes

- ✓ Vibrant Campus Life
- ✓ Improved Learning Outcomes
- ✓ Expanded Mobility Choices
- ✓ Safe Environment



# Strategic Capability Map



# Digital Campus: Three Key Takeaways

- 01** The landscape of education is changing, and in this increasingly dynamic marketplace, technology is a competitive differentiator
- 02** Focus on the desired Student outcomes – not the technology
- 03** Focus on initiatives that have a high impact on both the student experience and institutional ROI

# Developing a “Smart Campus”

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# Connected devices (i.e. IoT) have changed our lives and expectations forever.

Students, faculty, visitors, and administrators all expect university services and campus life to be as easy as ordering on Amazon Prime (aka a “Smart Campus”).

**FACULTY:** Where is there available parking nearby during my office hours?

**RESEARCHER:** Can my lab experiment alert me 15 minutes before it finishes running?

**STUDENT:** Which shuttle will get me to my next class the fastest?



**STUDENT:** I'm not as prepared for my final as I hoped. Where is the nearest study group?

# What is a smart campus?

## Definition



A smart campus is an environment that enables **humans and technology-enabled systems to interact in increasingly open, connected, coordinated and intelligent ways**. This creates a more immersive, interactive, and automated experience for students, staff, faculty and other stakeholders to engage seamlessly with the institution and with one another.

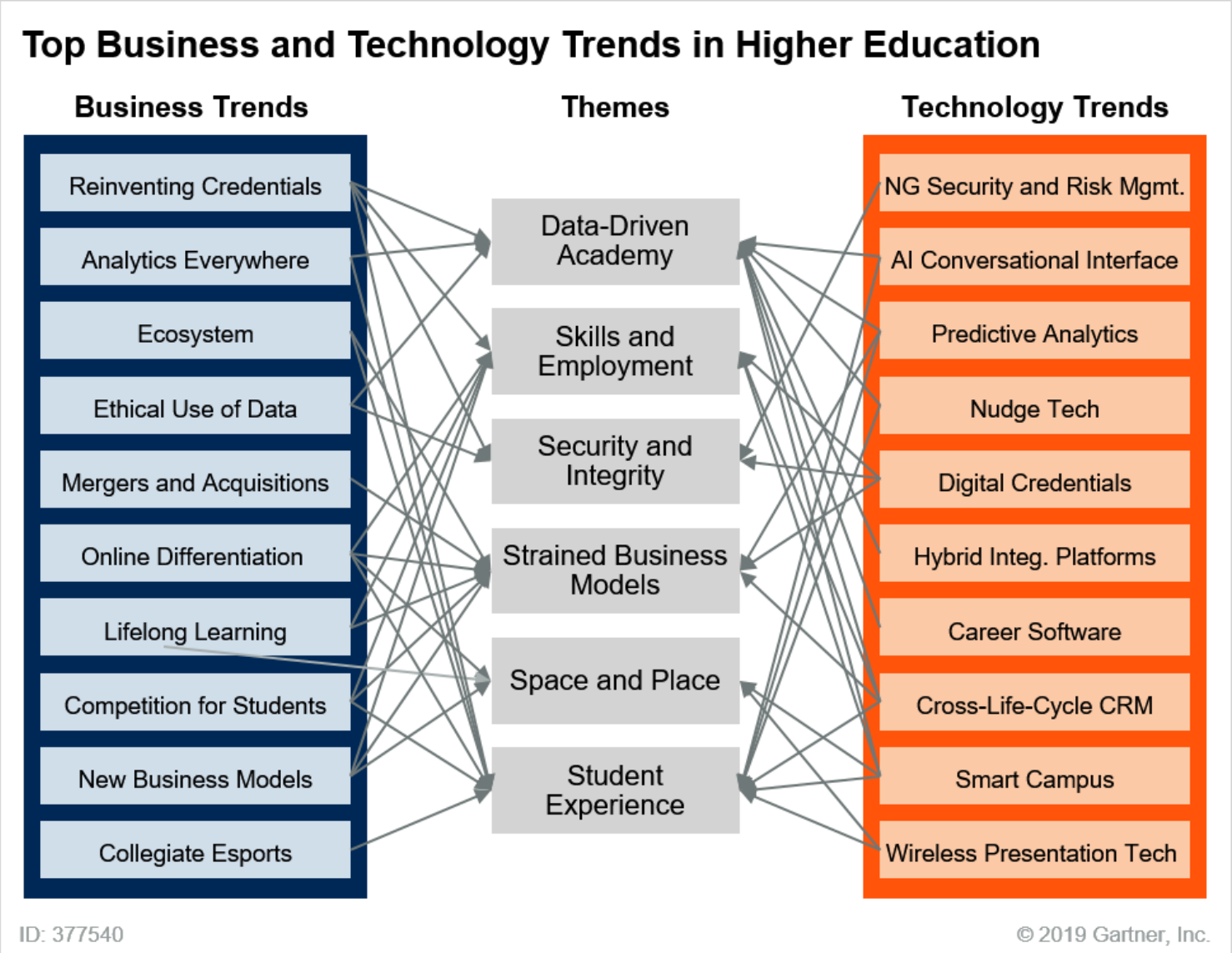
## Characteristics

- Provides students and other stakeholders with **on-demand access to information and data** to drive better outcomes
- Supports each student's **personalized learning** and living needs through concierge-level services
- Delivers **concierge-level services** through technology-driven processes that are seamless and frictionless
- Provides **sustainable solutions** that are self-populating, self-regulating, and self-teaching

## Benefits

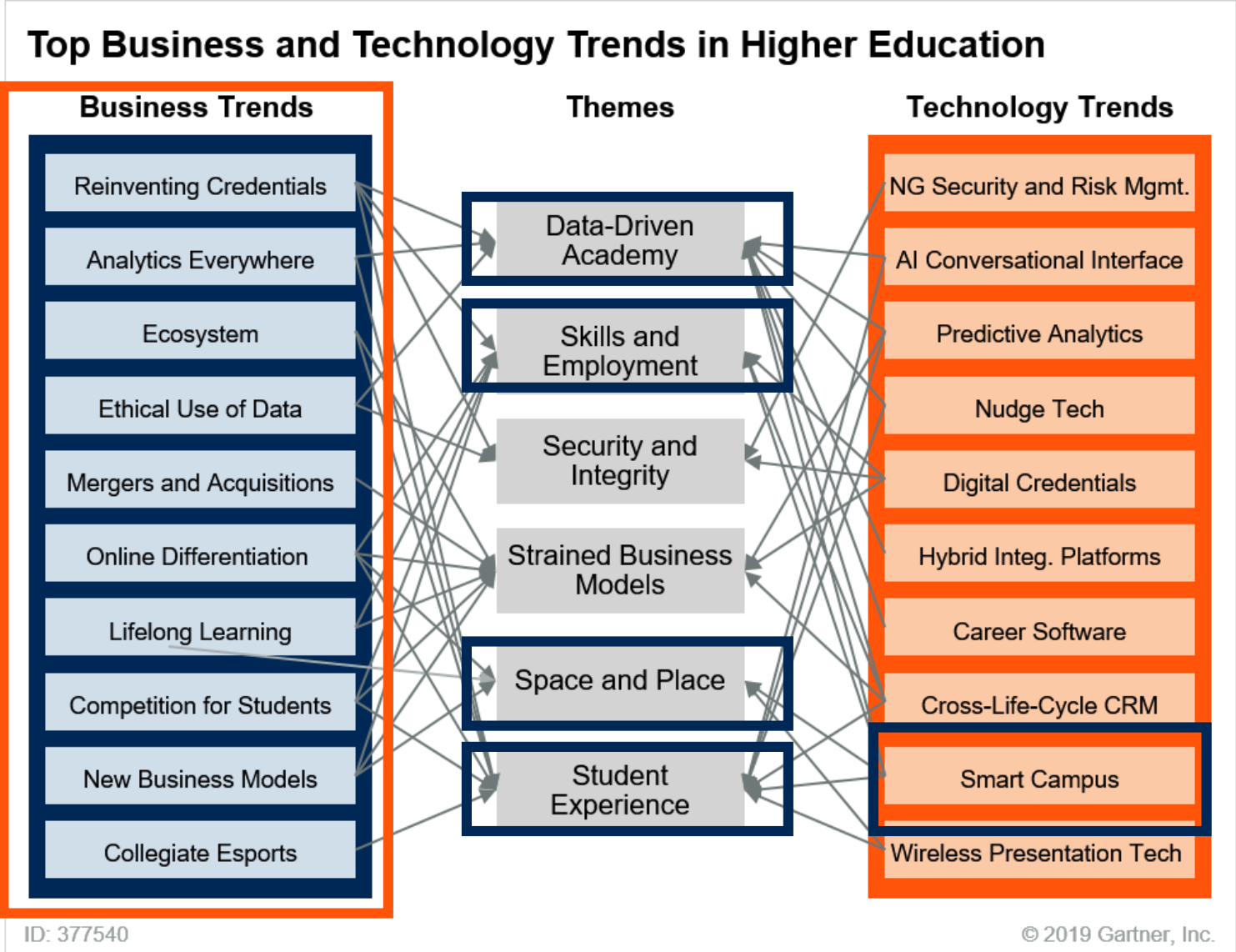
- Gives an institution a **competitive advantage** through differentiation
- Offers a **unique, compelling experience** for students and other stakeholders
- Delivers **consistent, ongoing value** for all students and ecosystem participants
- Addresses institutional challenges and creates **meaningful outcomes**

# Gartner's View of Key Trends In Higher Education for 2019



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# Gartner's View of Key Trends In Higher Education for 2019



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# The Smart Campus is a key component of an institution's digital platform.

**ENGAGE:** Students, prospects, faculty, alumni, donors, parents, community, etc. (direct and social)

**SENSE:** Campus, research, personal



**INTERACT:** Other institutions, research partners, content providers, credentials

**DECIDE:** Management information, learning analytics, big data

**RUN:** ERP, LMS, Collaboration, Email, productivity, etc.

# A well-functioning smart campuses leverages IOT systems built on a dependable Wi-Fi network.

The network must be scalable to handle not only the campus infrastructure, but also the thousands or millions of electronic devices that students bring along.



## Personalized Digital Campus Portals

- Personalize and streamline the campus experience
- Centralized control of mobile applications that access student needs such as transportation, appointment scheduling, course registration & grade tracking, educational content and collaboration, event notifications and management

## Advising

- Ensure students have seen an Advisor before registration
- Notify Advisors when a student is showing signs of being "at risk"
- "Nudge" students toward tutoring events
- Monitor student progress through guided academic pathways

## Smart Kiosks

- College campus navigation, information directories
- View event calendars, purchase tickets, schedule appointments
- Provide student administrative services
- Display important information for students and faculty
- Provide distributed printing stations across campus

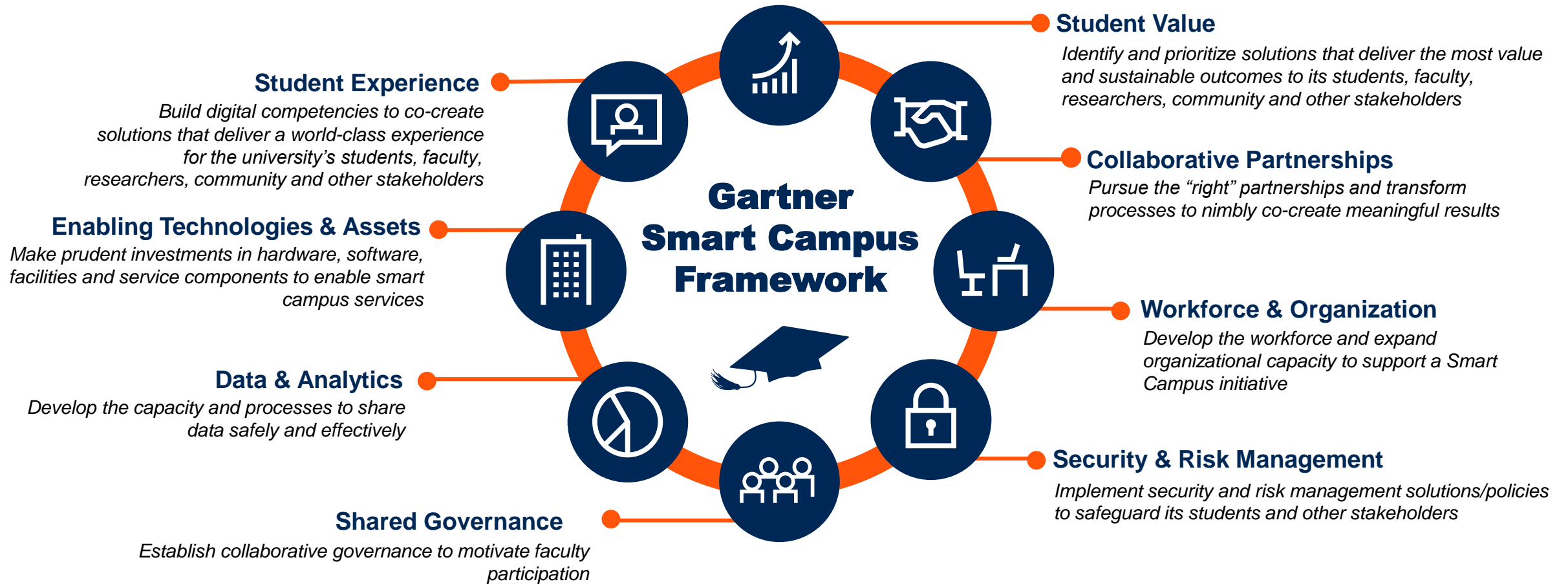
## Digital Information Boards

- Students prefer to receive information through digital channels
- Content is easily managed and maintained
- Content is centrally created and distributed
- Increase efficiency and less costs than non-digital channels

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# What does it take to build a Smart Campus?

Institutions must build capabilities and capacity across 8 key dimensions.



# A simple effective four-step approach to developing a smart campus strategy and roadmap

1

## Define the Smart Campus Vision

### Activities

- Develop a Smart Campus vision with university leaders, IT leaders, and other campus stakeholders
- Develop vision statement and guiding principles
- Define the mission-critical priorities and problems to solve through smart campus initiatives

2

## Assess Current Capabilities and Assets

### Activities

- Conduct interviews with business stakeholders to assess current capabilities
- Study the IT costs, staffing and service levels required to meet the “Smart Campus” vision

3

## Prioritize Opportunities

### Activities

- Assess capabilities required to implement proposed initiatives
- Summarize and confirm smart campus strategic initiatives and target outcomes
- Prioritize top 10–12 smart campus initiatives

4

## Develop Strategy and Roadmap

### Activities

- Draft a strategy and roadmap for smart campus initiatives
- Facilitate a review session with university stakeholders to validate the smart campus strategy and roadmap
- Finalize the smart campus strategy and roadmap



# Smart Campus: Three Key Takeaways

- 01** A smart campus creates competitive differentiation delivers better outcomes and experiences for students and other campus stakeholders by leveraging digital technologies and a human-centric approach to problem solving
- 02** Fostering a smarter campus involves building capabilities and capacity across eight key dimensions
- 03** Every campus has unique goals and priorities– the journey starts with defining a vision

# Q & A

# Contacts for Further Information

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