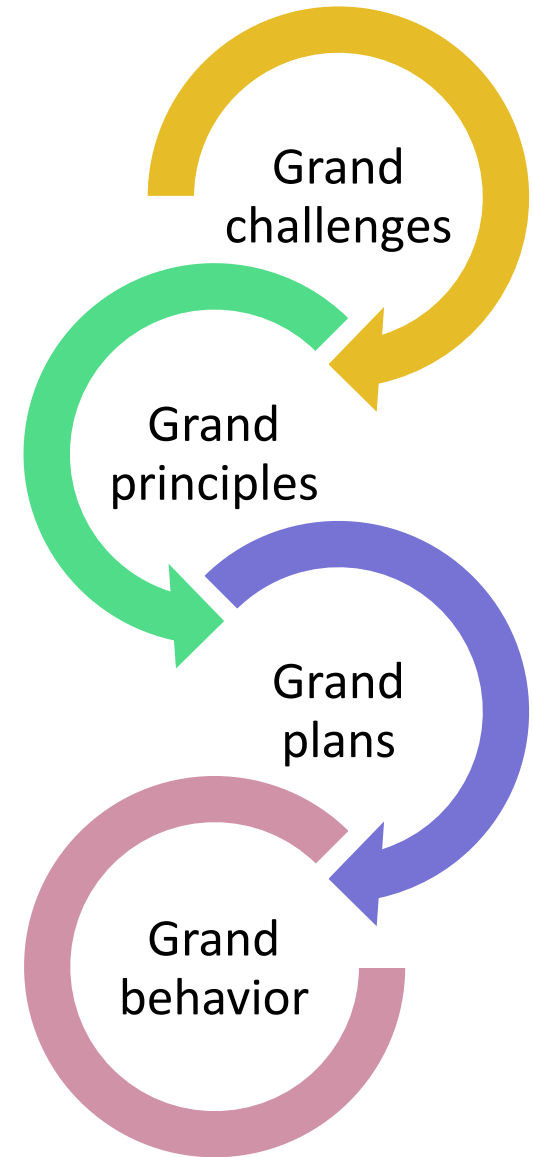


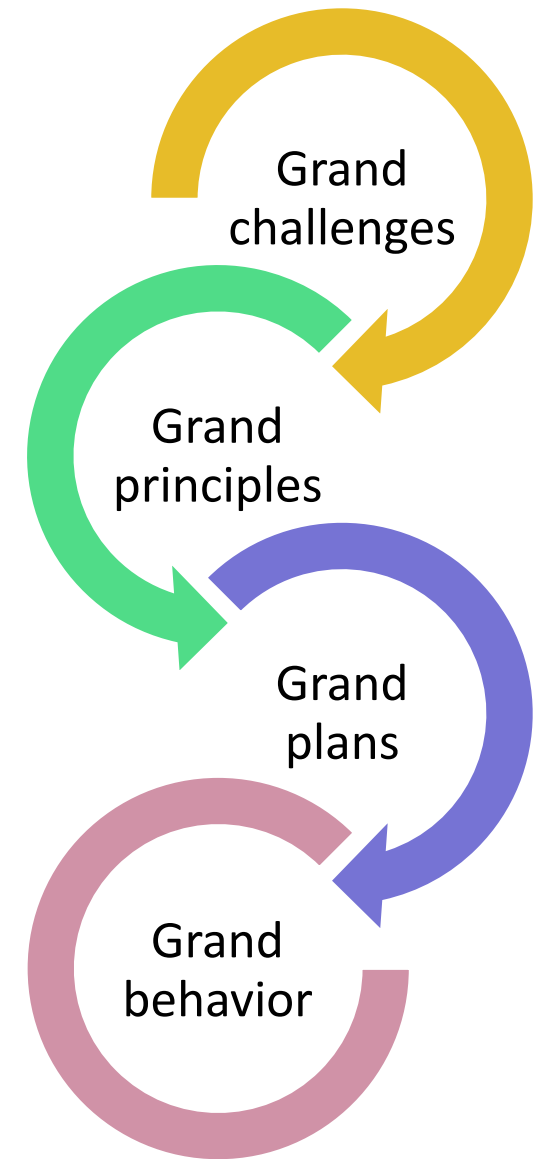
Grand Strategy for Grand Challenges: an approach to Digital Transformation

Susan Grajek, Ph.D.
Vice President, EDUCAUSE



Overview

- Higher education must address its Grand Challenges
- A Grand Strategy approach can help
 - Integrate interests, threats, resources, and policies.
 - Provide a grand principle to guide the institution seeking a way forward in a complex and changing ecosystem
 - Provide a long-term vision that treats institutional resources holistically and focuses on the most consequential priorities
- Start with a Grand Principle that best fits ends and means: Simplification or Innovation are good choices
- Digital transformation can supply a set of Grand Plans and Behaviors to fuel your Grand Strategy



“*Efficient use of available technology.*

“*21st century technology in higher ed.*

“*Automation. Stop the manual madness.*

What is Digital Transformation?

“*Studentless campus.*

“*Using data in a different way.*

“*Working smarter.*

“*How my organization is positioned digitally (web, social media, etc).*

“*Competition from third parties like employers and for-profit institutions will accelerate. All of a sudden accreditation is not as important for some skills.*

“*Thinking through what the future of work looks like and how universities can help shape the future of work and help students of all levels prepare for it.*

What are Leaders' Top Priorities?

“*A major earthquake would put us out of business.*

“*We're reinventing the general education curriculum to meet students' new ways of learning*

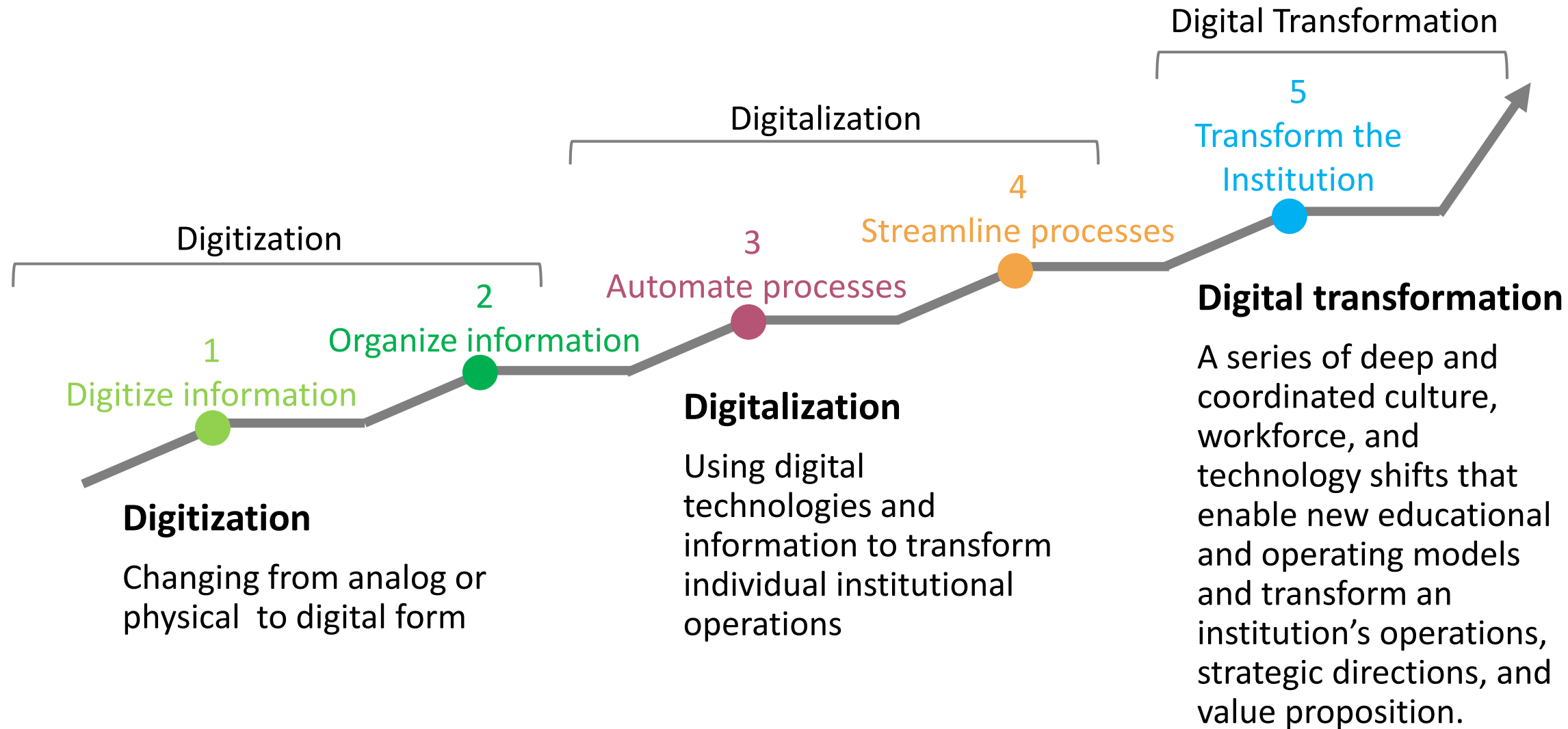
“*We hope to increase research and innovation productivity, measured by an increase in overall funding*

Digital Transformation in Higher Education

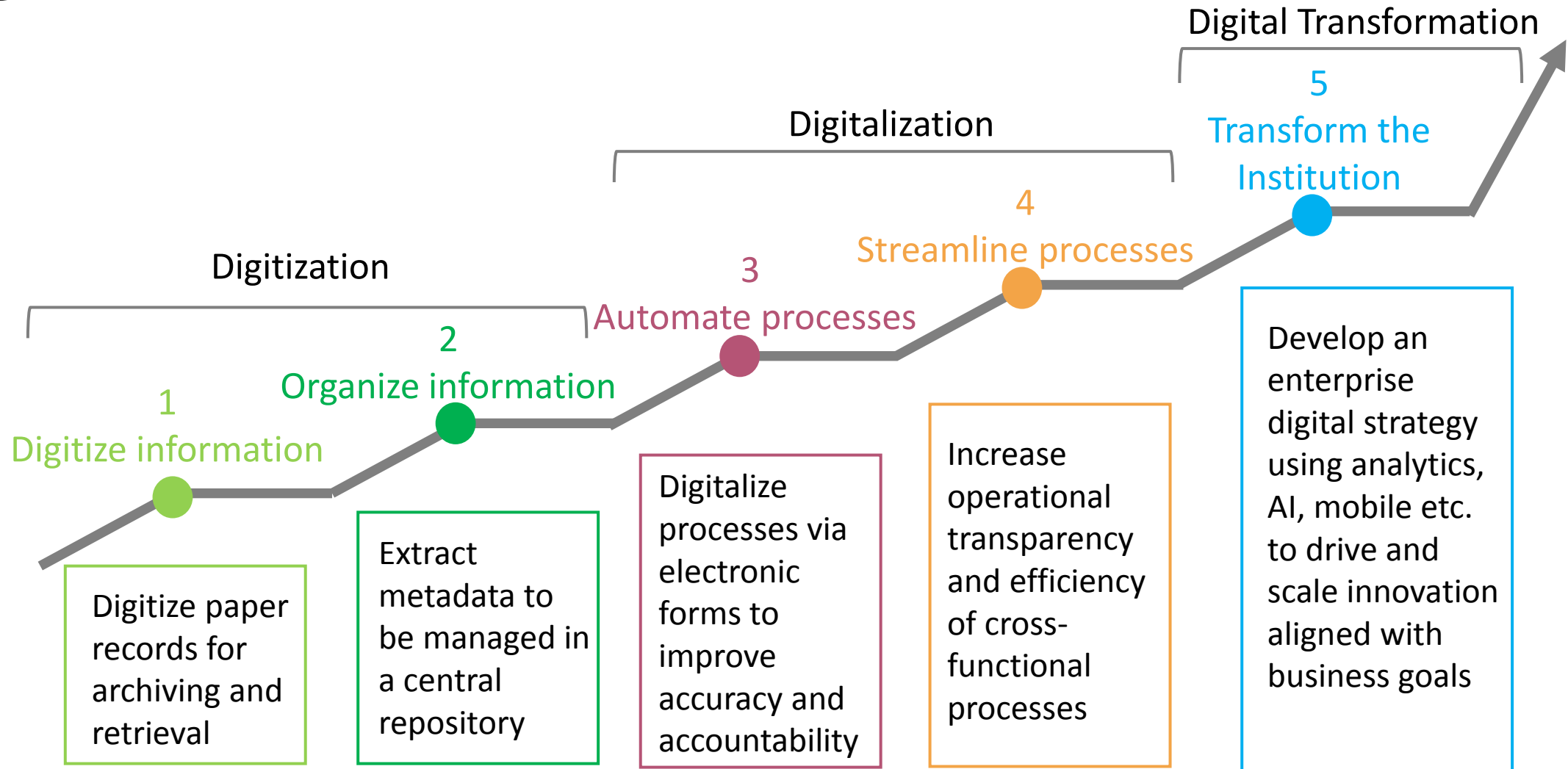
The process of optimizing and **transforming the institution's operations, strategic directions, and value proposition** through deep and coordinated shifts in culture, workforce, and technology



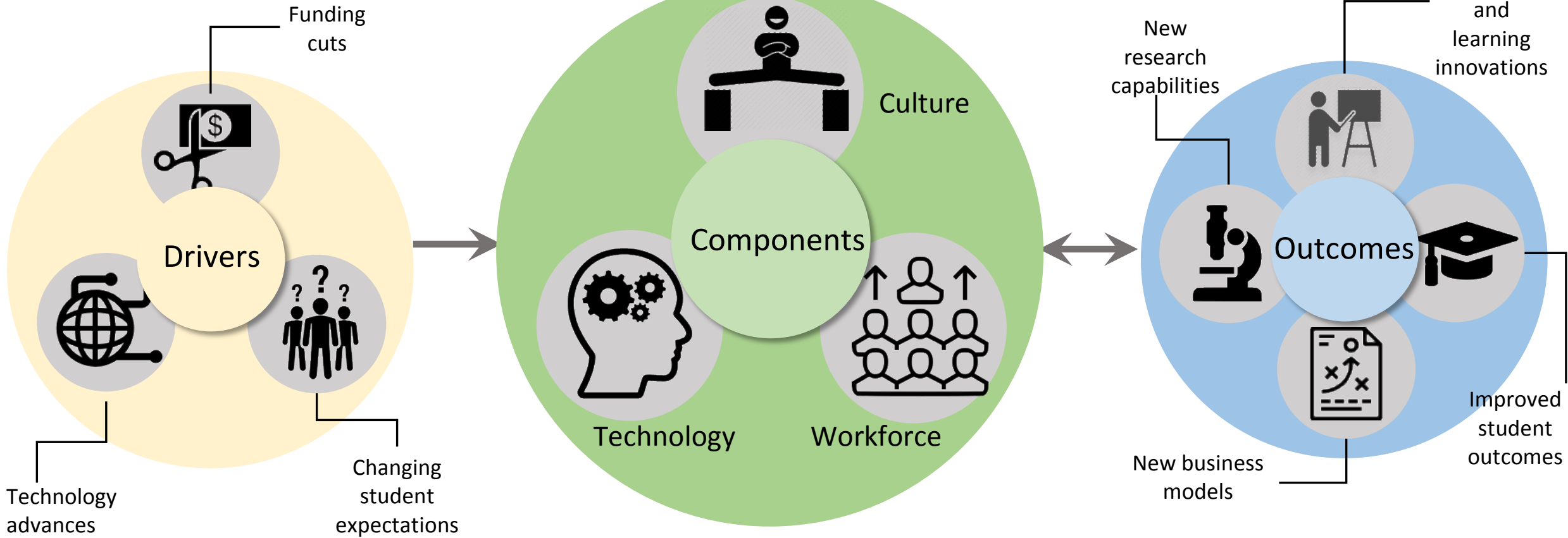
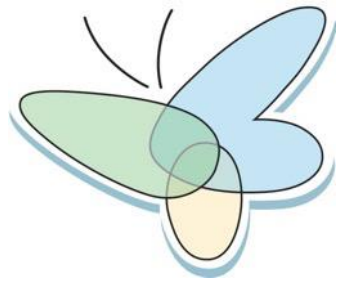
Digital Transformation in context



Digital Transformation in context



Digital Transformation



Getting Ready for Digital Transformation: Change Your Culture, Workforce, and Technology

by **Susan Grajek** and **Betsy Reinitz** ⌚ Monday, July 8, 2019 ★ Editors' Pick

Digital Transformation Signals: Is Your Institution on the Journey?

by **Malcolm Brown, Betsy Reinitz and Karen Wetzel**  Wednesday, October 9, 2019 **Enterprise Connections**



Technology Shifts

IT leaders must adopt innovative practices and create digital environments that provide unprecedented agility and flexibility. At the same time, they must also manage a complex and ever-changing technology ecosystem in a way that enables the institution and its academic and business units to rapidly and efficiently achieve its strategic aims. New technologies do not by themselves bring about Dx. Institutional Dx initiatives can succeed only through the *strategic application* of a changing set of technologies in support of new institutional directions.

Is there evidence of these shifts in technology?

- ☐ Agility
- ☐ Intentional strategy for sourcing technology-related services (e.g., cloud, on premises, shared services, consortial arrangements)
- ☐ Technology architecture with agility and flexibility as key priorities
- ☐ Focus on business outcomes
- ☐ Close relationship between technology planning and institutional goals and

Culture Shifts

Dx requires a new approach to how campus leaders interact with each other—an approach that entails a laser focus on progress toward institutional goals, a broad emphasis on change management, and an increase in institutional agility and flexibility to meet rapidly changing needs.

Is there evidence of these shifts in culture?

- ☐ Focus on institutional goals
- ☐ Focus on institutional differentiation
- ☐ Strategic innovation aimed at key institutional ambitions
- ☐ Focus on student and faculty success
- ☐ Leaders willing to consider new strategic directions
- ☐ Reliance on data and analytics to adjust institutional course
- ☐ Shift from risk aversion to risk management
- ☐ Institutional flexibility and agility

Workforce Shifts

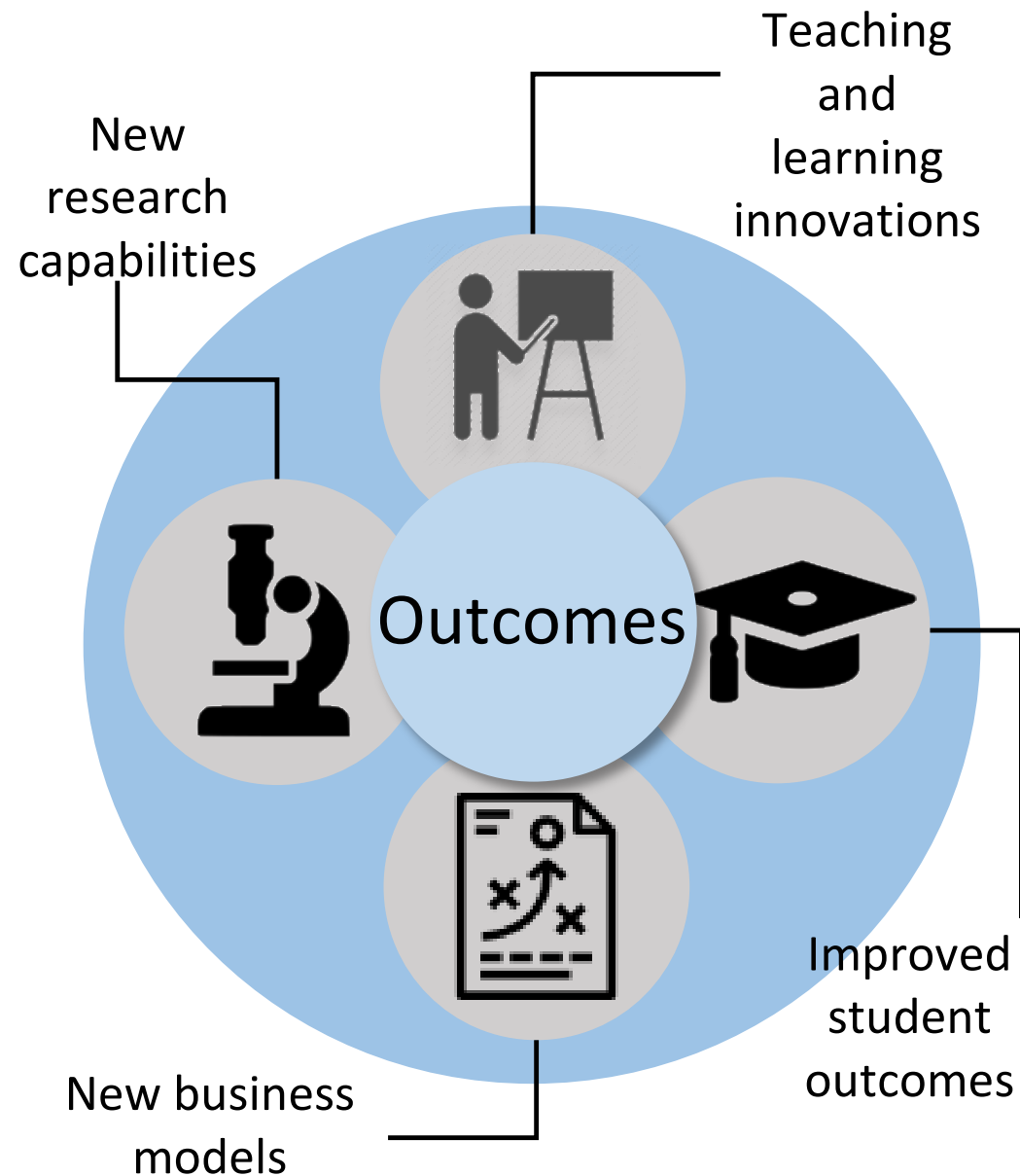
Changes related to Dx not only are having an inexorable impact on the day-to-day work of higher education professionals but also are creating a need for new skills and competencies across the institutional community. These changes are creating new opportunities and threats and demanding a reinvention of human resource management.

Is there evidence of these shifts in workforce?

- ☐ New jobs and roles (e.g., chief data officer, chief innovation officer, vendor management, business relationship management)
- ☐ Familiarity across roles with the "business" of higher education
- ☐ Increasing importance of enterprise architecture
- ☐ Expanding IT liaison roles that align with institutional strategy
- ☐ Roles that cross boundaries (e.g., positions residing in an academic department with close ties to the IT organization)
- ☐ Agility involving new and shifting competencies across many roles
- ☐ Increasing importance of skills such as teamwork, collaboration, and

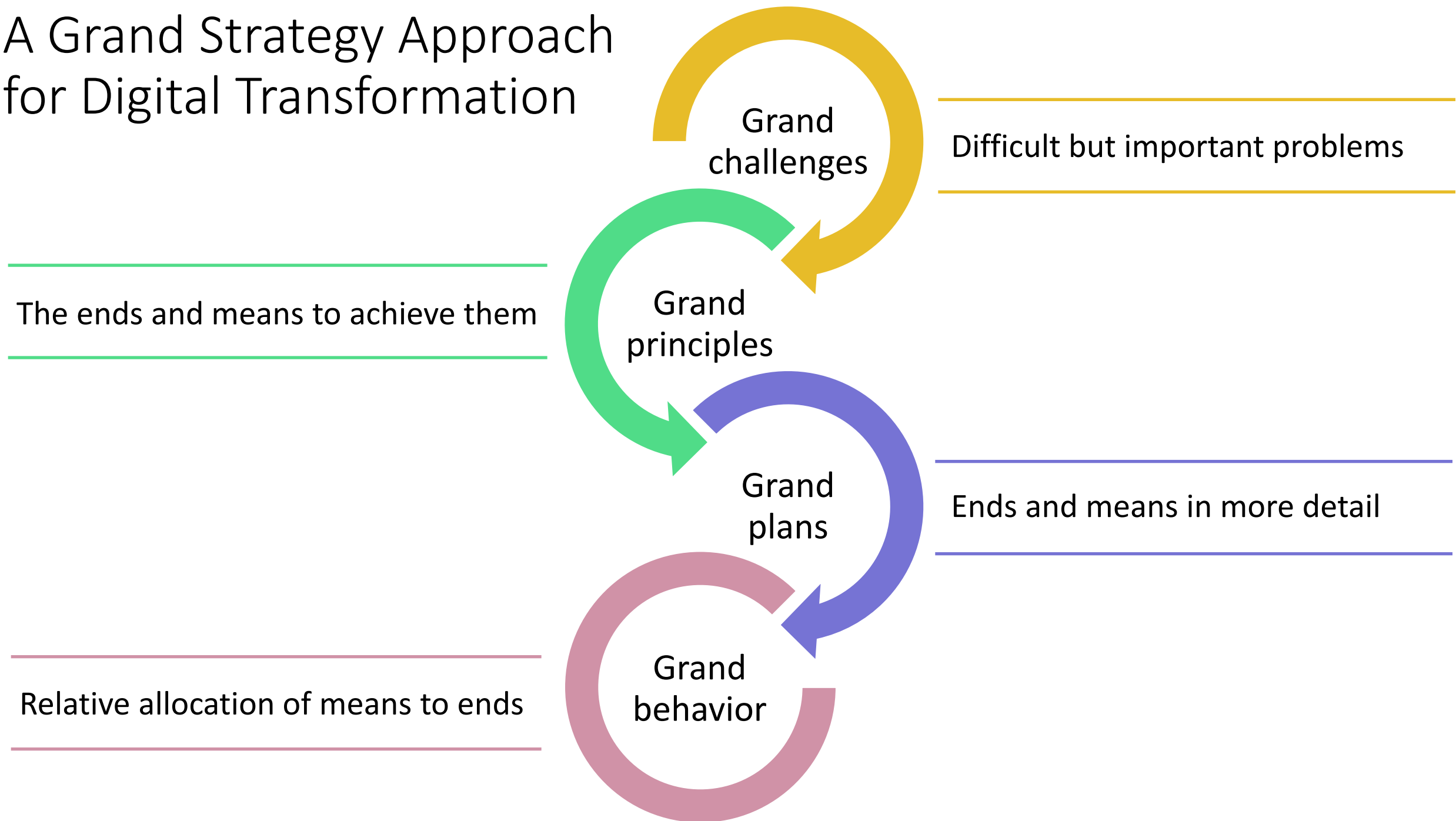
Is Your Institution Driving to Digital Transformation?

How will
you
achieve
your Dx
outcomes?

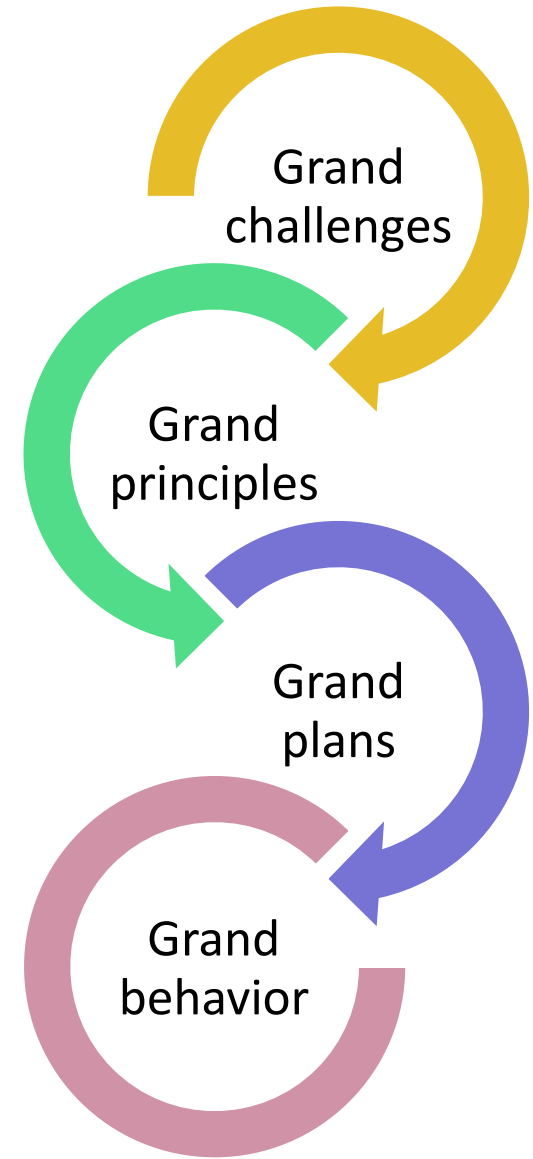


Do you
have a
Grand
Strategy?

A Grand Strategy Approach for Digital Transformation



Grand Strategy



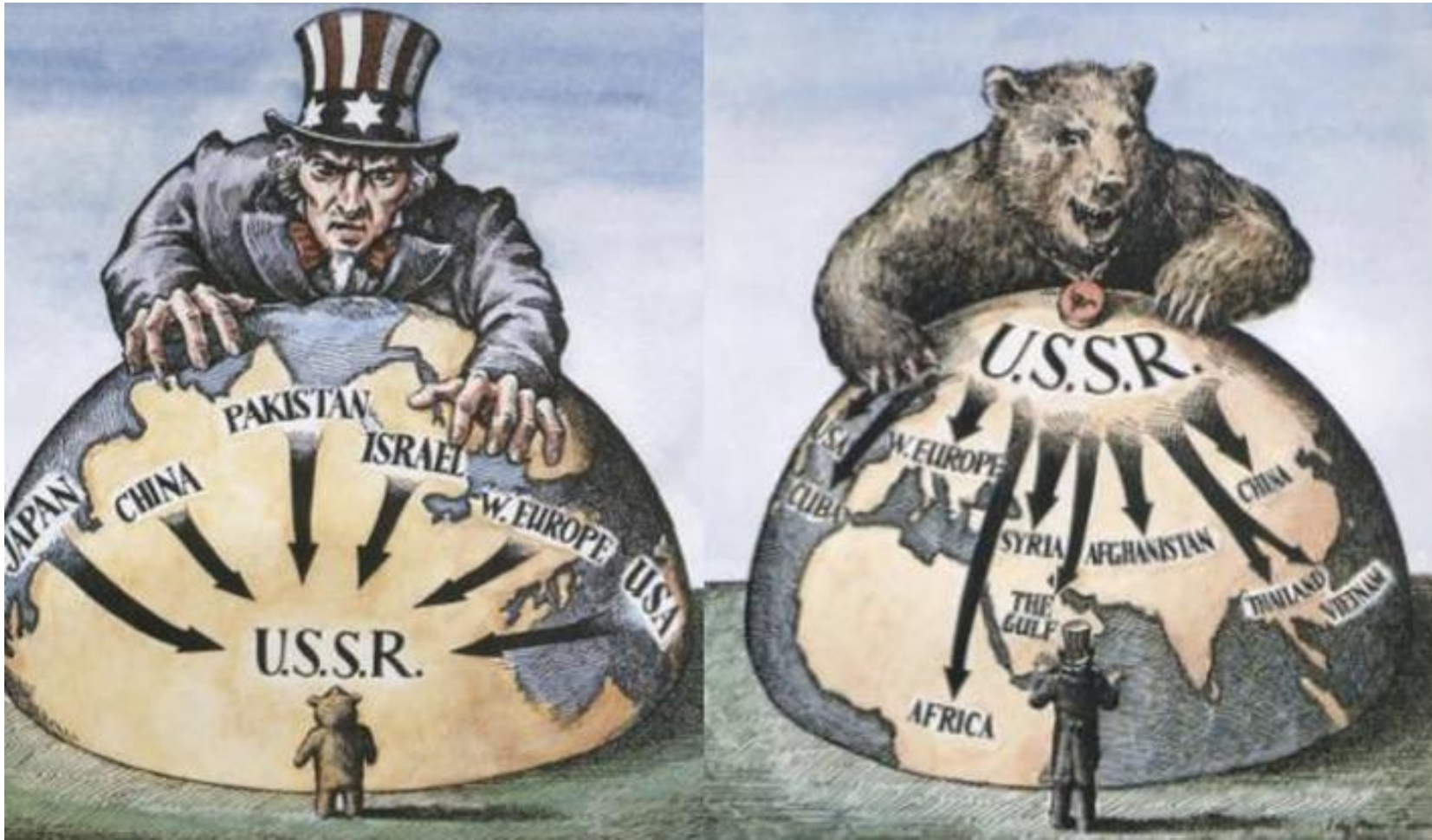
What is Grand Strategy?

- An integrated scheme of interests, threats, resources, and policies
- The theory, or logic, that guides leaders seeking security in a complex and insecure world
- Long term in its vision, holistic in its treatment of all instruments of national power, and important in its focus on the most consequential interests



Elements
of grand
strategy:
US Cold
War



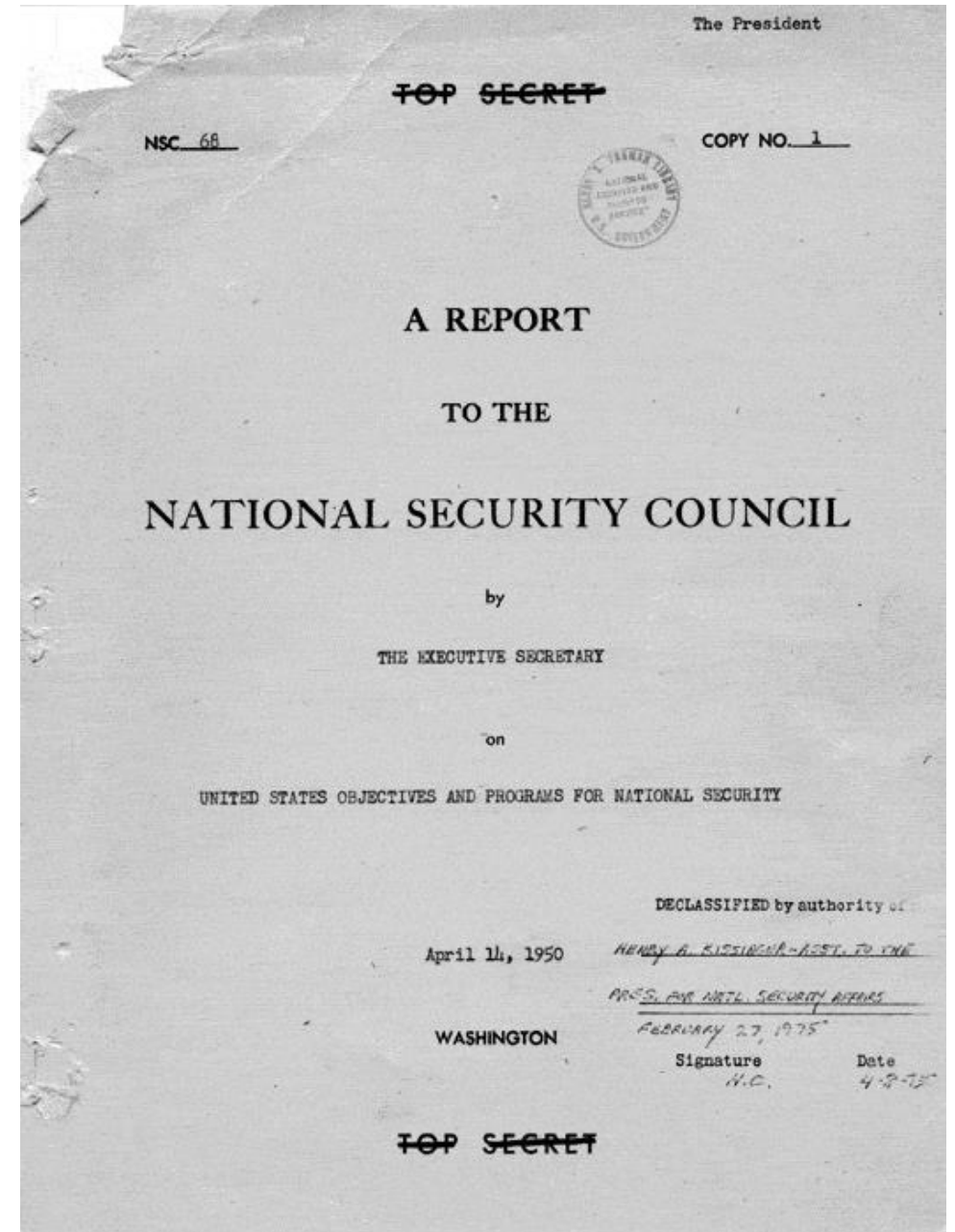


Grand principles generally describe ends, and the means by which to achieve them

Grand Principle: Containment

Grand plans is do the same but in detail

Grand Plans: NSC-68





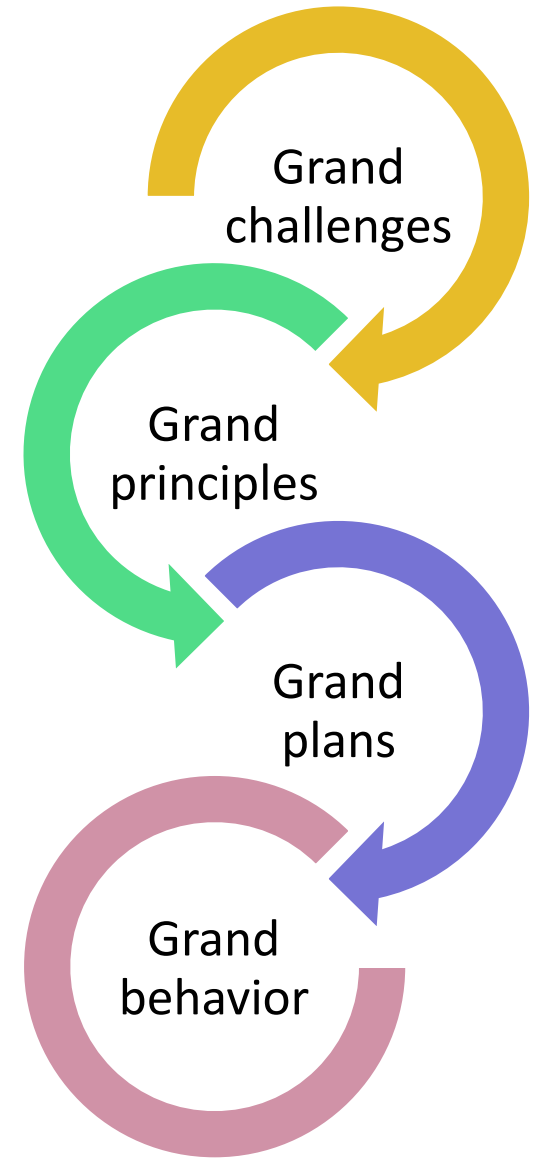
Grand behavior is a pattern in the relative allocation of means to certain ends

Grand Behavior: Korean War

“ Without a clear strategy statement, the next president will fail to set a foreign policy course for his/her new administration that leverages U.S. resources and allies, escaping **the damaging tendency to do a little everywhere and seek to stamp out fires wherever they burn.** ¹

¹ James Goldgeier and Jeremi Suri, “Revitalizing the U.S. National Security Strategy,” *Washington Quarterly* 38, no. 4 (2015): 35–55, <https://doi.org/10.1080/0163660X.2015.1125828>.

Grand Strategy in Higher Education

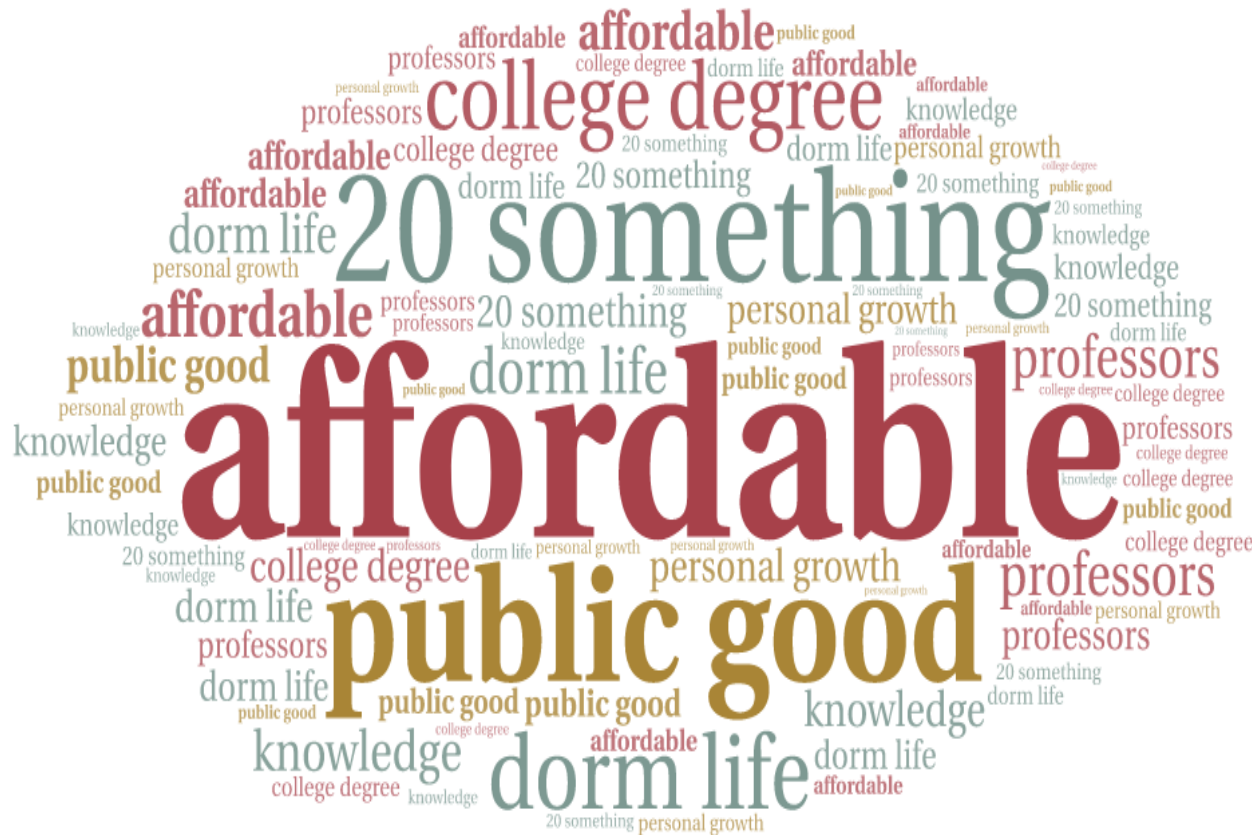


“**Grand strategy is thus much closer to a vision statement...than a blueprint or action plan for short-term policy priorities...**A real effort at developing a grand strategy requires thinking about the kind of world that is most conducive to American interests and how to set a course that, over several decades and multiple administrations, stands a good chance of helping to bring such a world about.¹

²Flournoy, Michele A., and Shawn Brimley (eds.), Finding Our Way: Debating American Grand Strategy, Washington, DC: Center for a New American Security, 2008.


Grand strategy applied to higher education

Higher education's ecosystem is changing and expanding




Grand strategy changes when the system changes

Grand strategy takes an ecosystem, not solely institutional, viewpoint



National and
international
circumstances

How will the institution
advance the higher education
ecosystem, not just itself?

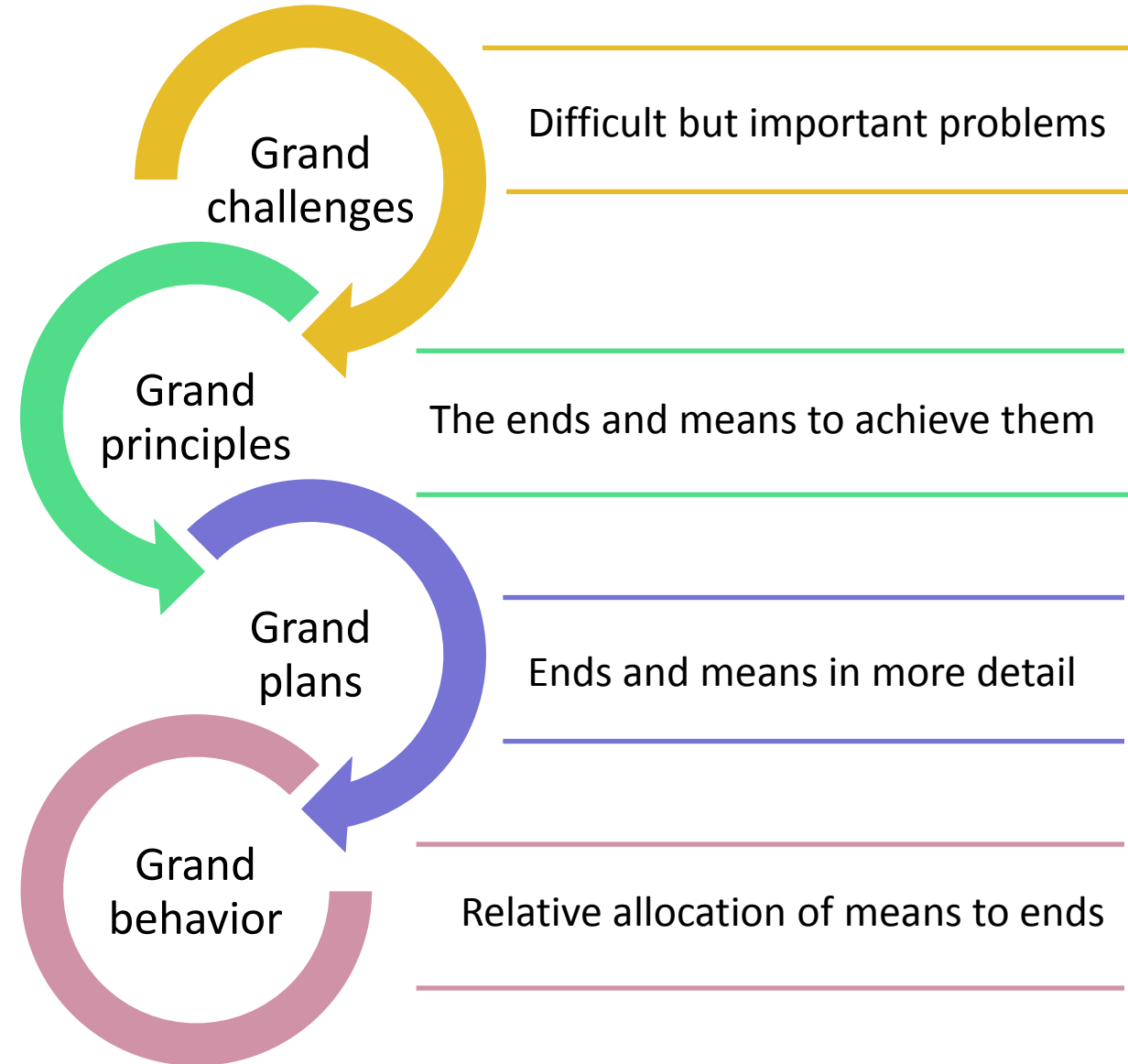


Institutional
circumstances,
culture,
priorities

How will institution thrive in
relation to and within the larger
higher education ecosystem?

Grand Strategy is long-term

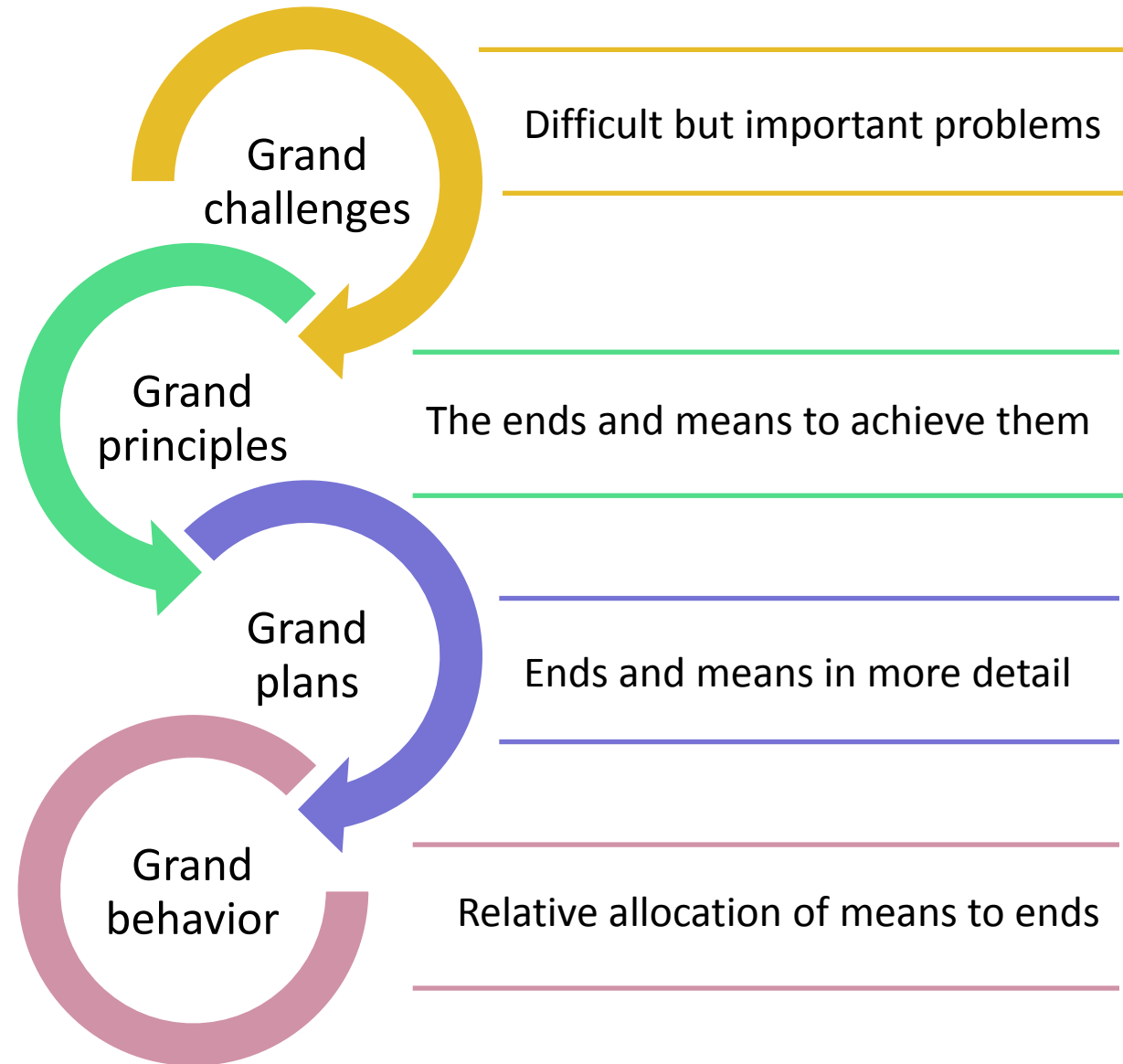
Grand strategy is anchored in long-term institutional mission and vision rather than any particular's year's or short term's strategic plan



Grand Strategy is a guiding intellectual framework

An ecological worldview formed from a mix of different influences — experience, study, values, ideology

Helps leaders make sense of complexity and bring resources and commitments into alignment

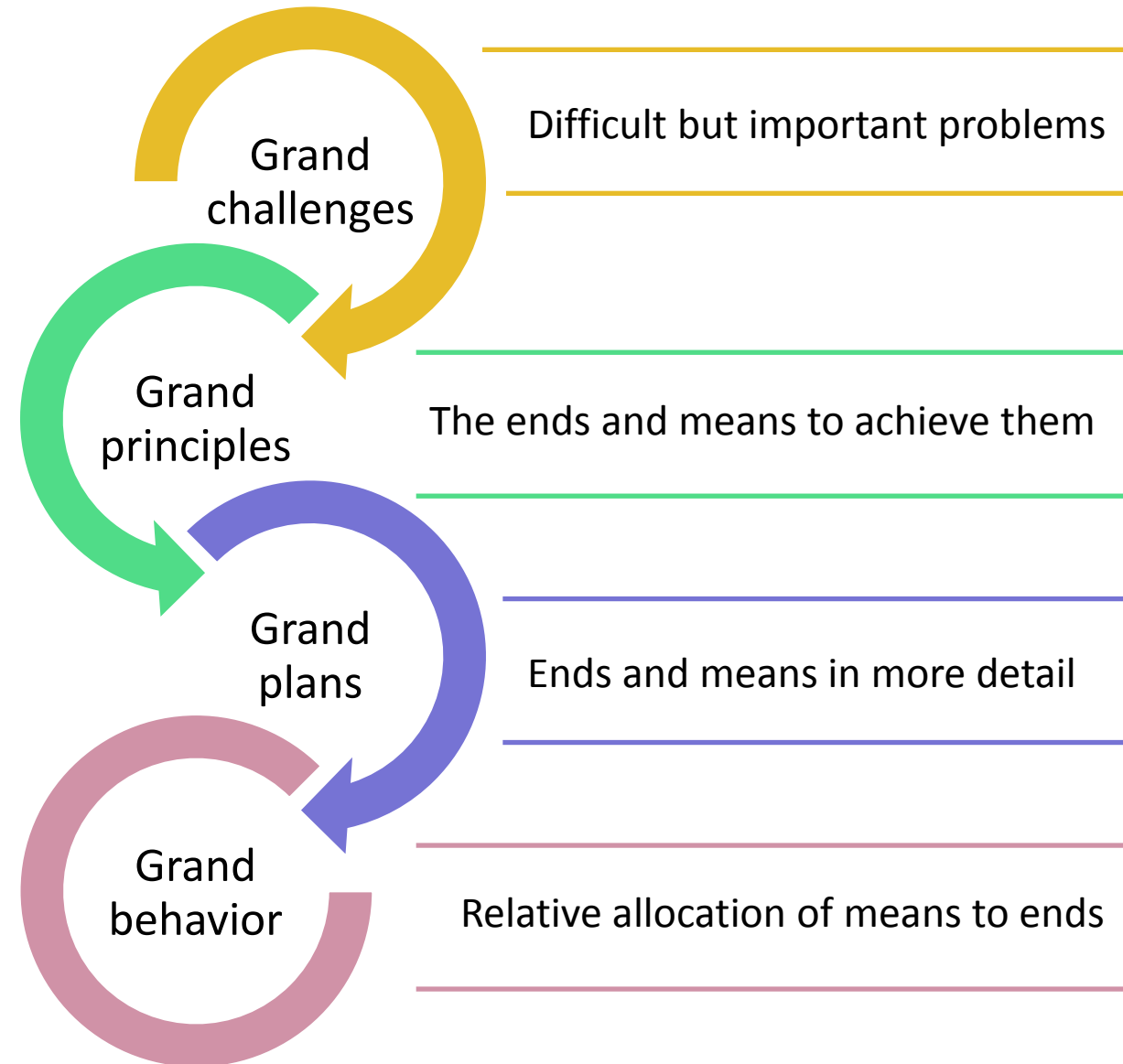


Grand Strategy can guide strategic planning

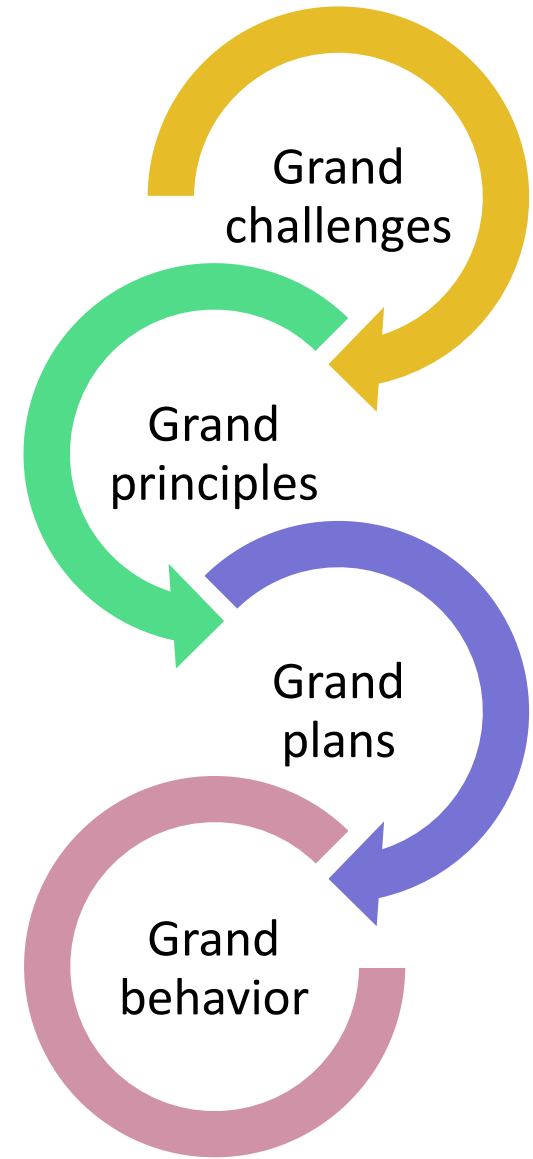
Lean into difficult trade-offs

Make priorities explicit

Translate objectives into clear implementation guidance and budgetary requirements



Grand Challenges



Grand Challenges are Difficult but Important Problems

Grand Challenges

- describe end results or outcomes
- are global in scale
- are very difficult but not impossible to accomplish
- require extensive ongoing experimentation and documentation
- energize the public, politicians, and funders



The community works to develop

- a sense of the possibilities
- an appreciation of the risks
- an urgent commitment to accelerate progress

Grand Challenges in Computing

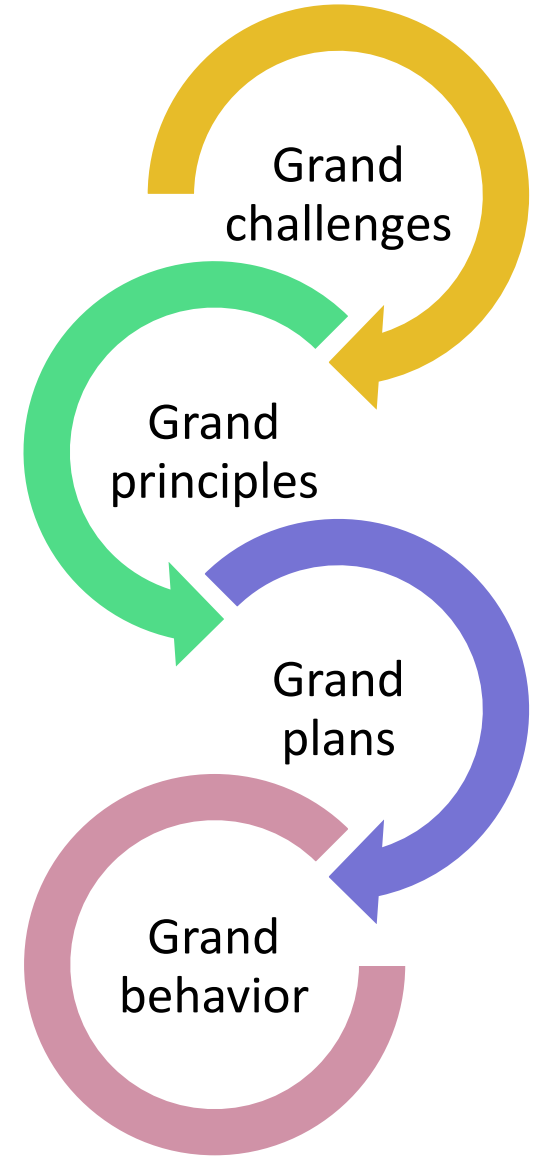
- Office of Science and Technology Policy introduced in the late 1980s
- A fundamental problem in science or engineering, with broad applications, whose solution would be enabled by the application of high performance computing resources that could become available in the near future

NSF'S 10 BIG IDEAS



- Future of Work
- Growing Convergence Research
- Harnessing the Data Revolution
- Mid-scale Research Infrastructure
- Navigating the New Arctic
- NSF INCLUDES
- Quantum Leap
- Understanding the Rules of Life
- Windows on the Universe
- Vector Technology Infographic

Grand Challenges for Higher Education



Grand Challenges for Higher Education



Student success

- Persistence, retention, completion
- Engagement
- Outcomes



Financial health

- Enrollment
- Costs
- Funding
- Natural disasters



Reputation and relevance

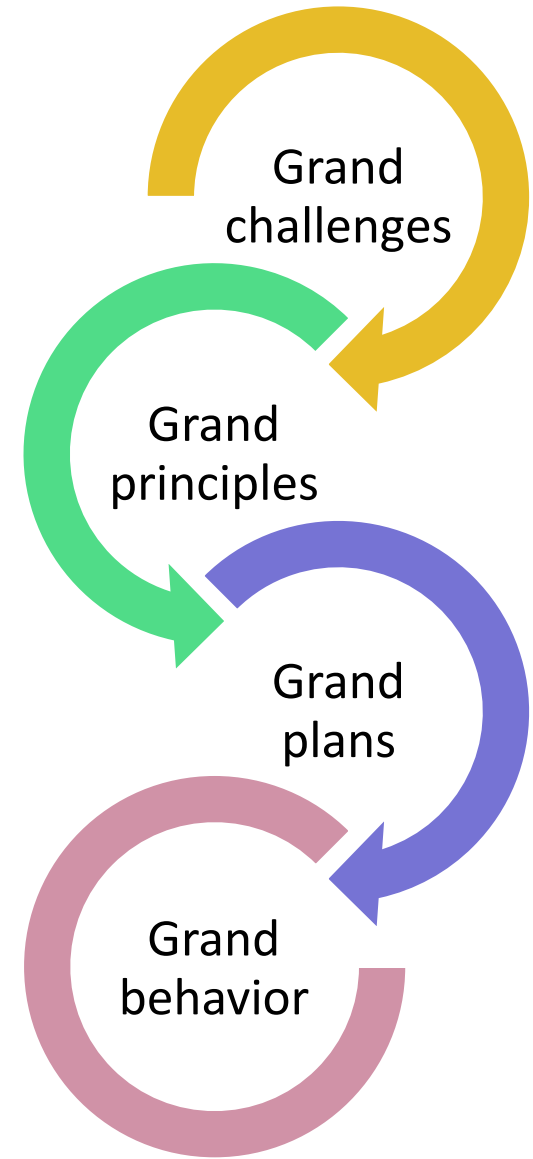
- Affordability
- Political climate
- Teaching
- Academic programs
- Research



External competition

- Alternative credentials
- Employer-based learning
- Talent
- Global HE

Grand Strategies for Higher Education



Grand Challenges for Higher Education



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Which of these are yours?



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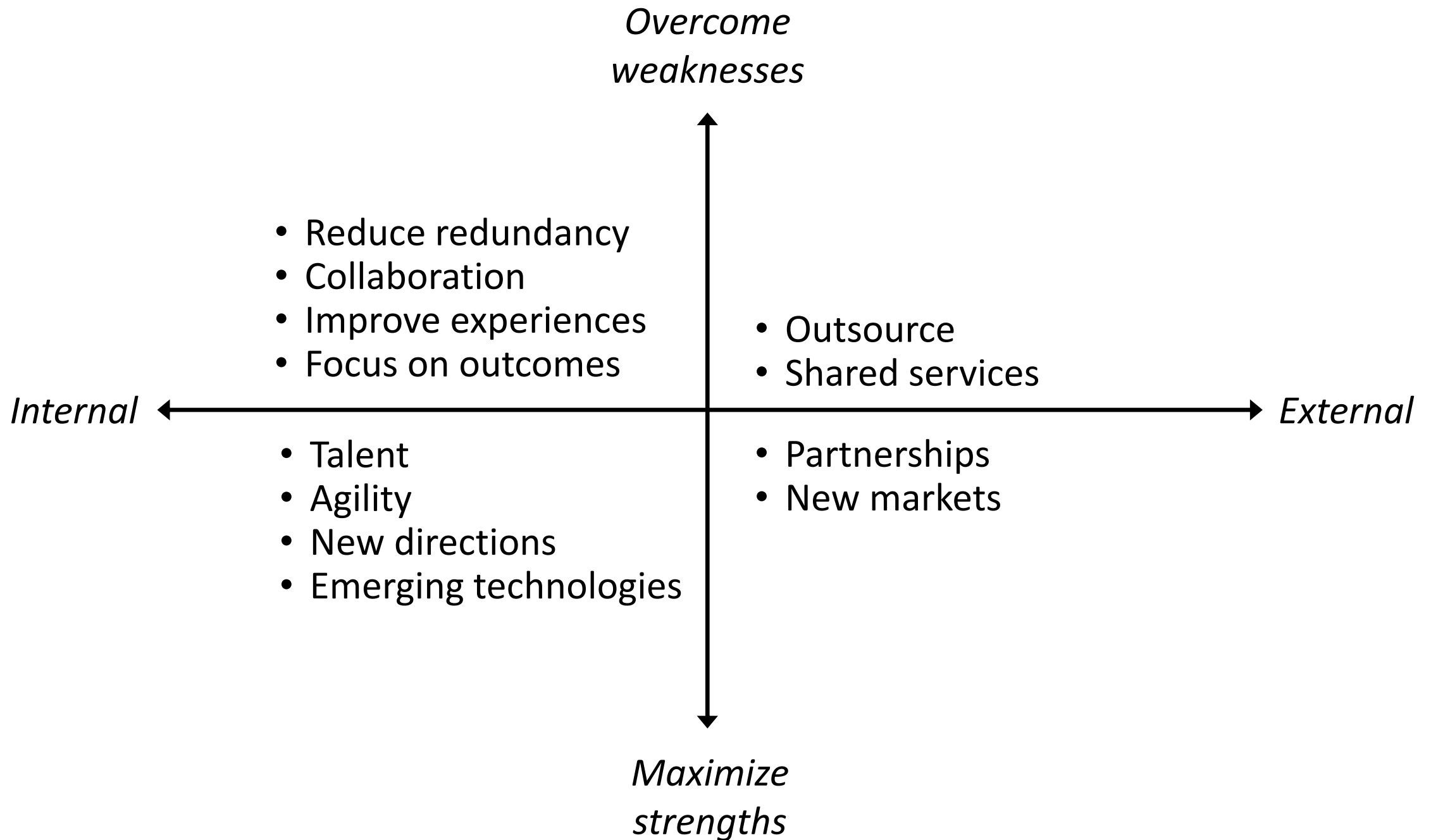
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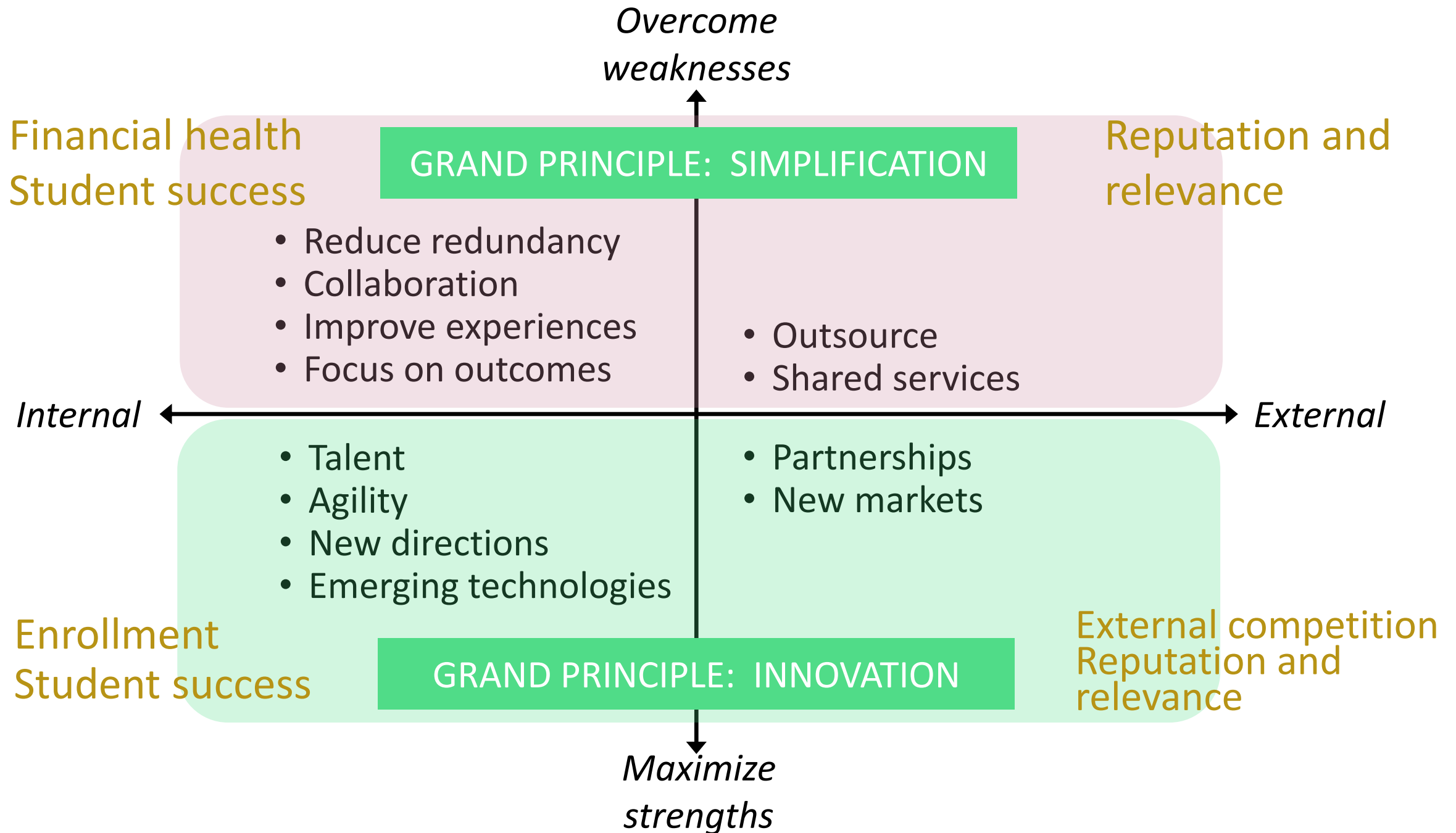
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Grand strategy for higher education: Simplification

GRAND CHALLENGES

FINANCIAL HEALTH

STUDENT SUCCESS

REPUTATION

GRAND PRINCIPLE: SIMPLIFICATION

GRAND PLANS

Greater emphasis on coordination, collaboration, and shared goals

Digital strategies to simplify operations and the user experience

Sharper focus on institutional and student outcomes and a seamless student experience

Do less: reduce redundancy, outsource commodity operations

GRAND BEHAVIOR

Enterprise architecture

Process redesign and management

Product management

Service management

User-centered design

Institution-wide strategic planning, procurement, IT and data governance

Personalization

Cloud and shared services

Vendor management

AI and IoT to automate manual operations

Continuous improvement

Use of data and analytics for making decisions

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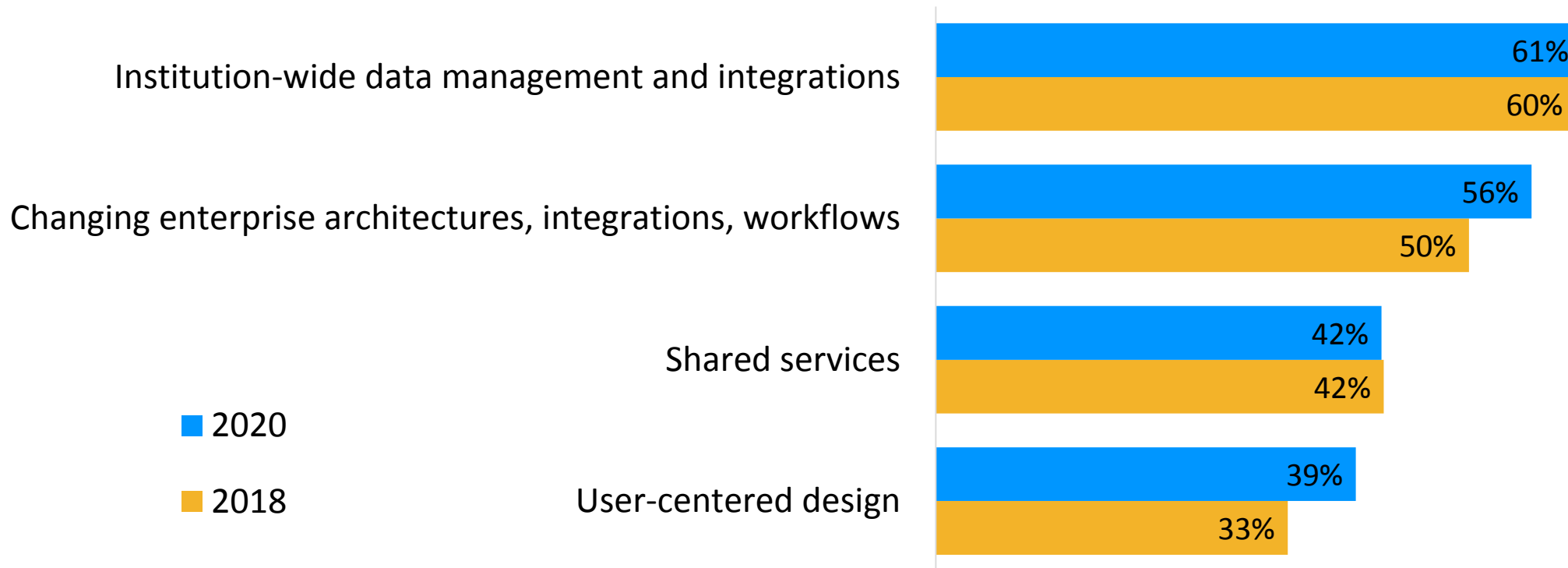
Vendor management

AI and IoT to automate
manual operations

Continuous
improvement

Data and analytics for
making decisions

Simplify: Two-Year Change in Related Trends Incorporated into IT Strategy



Grand strategy for higher education: Innovation

GRAND CHALLENGES

ENROLLMENT

STUDENT SUCCESS

COMPETITION

REPUTATION

GRAND PRINCIPLE: INNOVATION

GRAND PLANS

New strategic directions to meet 21st-century challenges, ambitions, and opportunities

Greater emphasis on flexibility, agility, anticipation and responding to ongoing change

New creative strategies inspired by new technologies & greater use of data

More emphasis on change and risk management, with a shift away from risk aversion.

GRAND BEHAVIOR

Use of data and analytics for making decisions

Clearly defined transformation goals

Use of emerging technologies -
- extended reality (XR),
robotics, blockchain, IoT

New leadership roles in new areas

Faculty roles change to support student success and new technologies.

Researchers apply new digital research methods and collaborate more

Institutional research services are integrated, at point of need, and widely available

Rich AI, data and interface platforms for student success and administration

Innovation in Higher Education today

Mixed, innovation begins strongly, but struggle to sustain it: how to continue the lifecycle so the initial innovations doesn't stagnate:

History of chasing shiny objects, hasn't had a focused approach.

We are an institution of great ideas and thinkers, with a mixed track record of successful implementation.



Moving from non-deliberate, relying on creative people to intentionally creating an environment to support and foster innovation



Leveraging support and expertise of a very successful alumni business leader



Excellent track record, in our DNA. Has a philosophy.

Intentional approach to and focus on innovation, infusing across the campus, deep focus with the Board to get support and funding. Innovation governance. Has a philosophy.

Good record of success, disciplined approach: pilot, scale, repeat. Changing culture as well as practice. Has a philosophy.

Grand strategy for higher education: Innovation

GRAND CHALLENGES

ENROLLMENT

STUDENT SUCCESS

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New creative strategies inspired by new technologies & greater use of data

More emphasis on change and risk management, less on risk aversion.

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ENROLLMENT

STUDENT SUCCESS

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REPUTATION

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INNOVATION

GRAND BEHAVIOR

Use of data and analytics for making decisions

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Use of emerging tech -- XR, robotics, blockchain, IoT

New leadership roles in new areas

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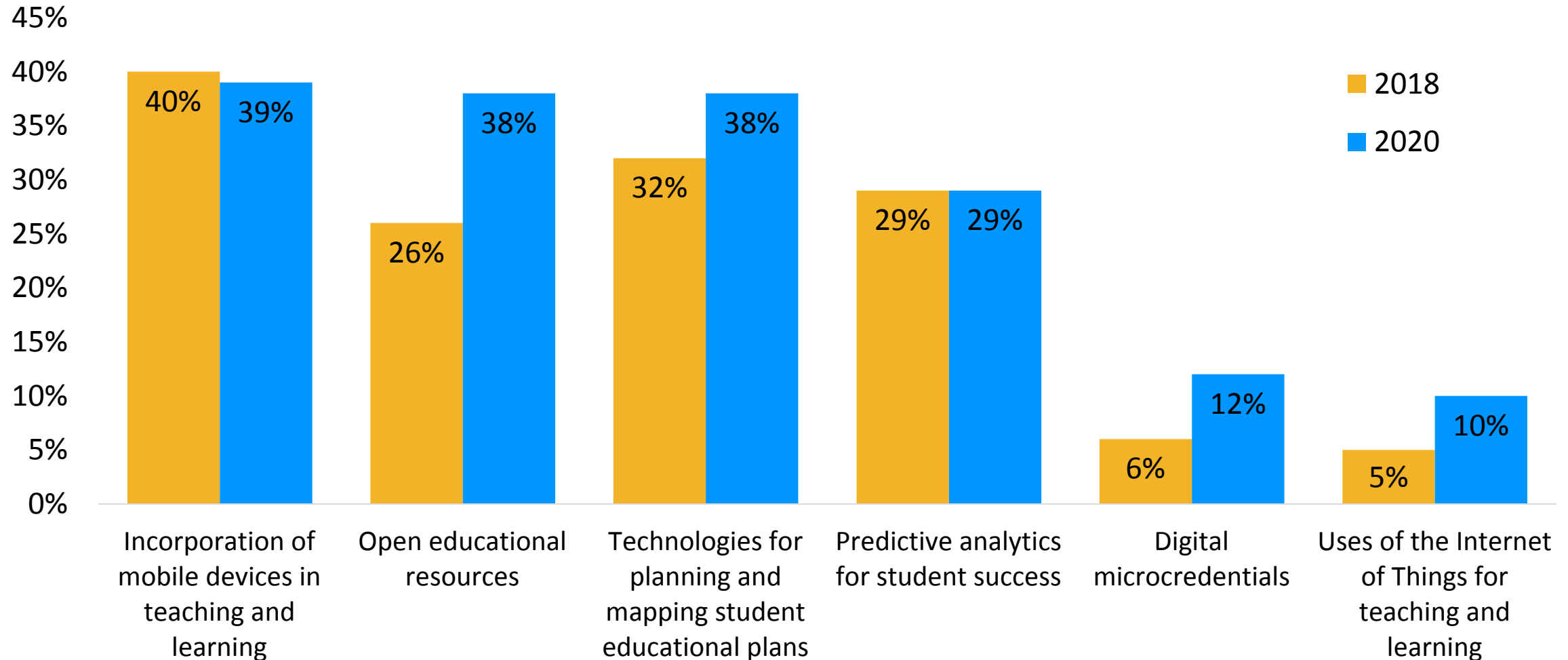
Research: new digital methods and more collaboration

Research services: integrated and widely available

AI/data platforms for student success and administration

Two-Year Change in Related Technologies

Percentage of US institutions that have implemented technology



Dx in the Context of Grand Strategy



Grand Challenges for Higher Education



Student success

- Persistence, retention, completion
- Engagement
- Outcomes



Financial health

- Enrollment
- Costs
- Funding
- Natural disasters



Reputation and relevance

- Affordability
- Political climate
- Teaching
- Academic programs
- Research



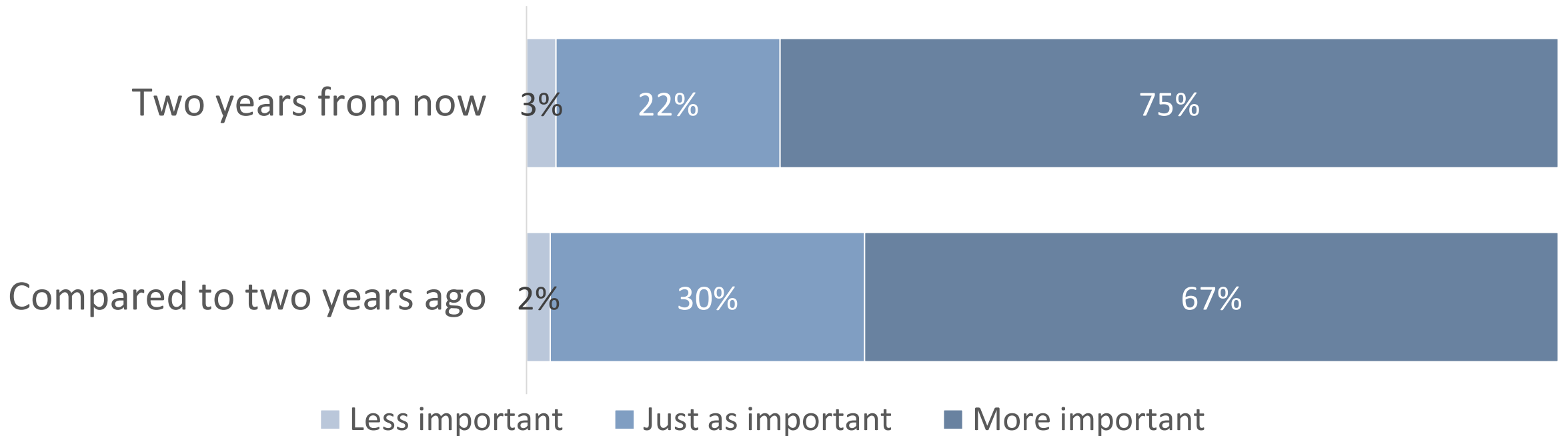
External competition

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Dx can
address
Grand
Challenges

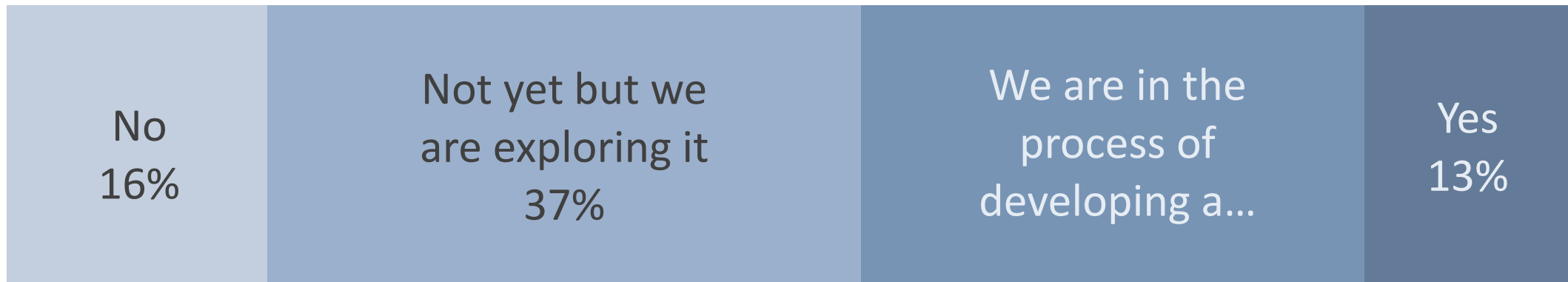
Major Potential Benefit of Digital Transformation	Student success	Financial	Reputation	Competition
Improving the student experience	84%			
Improving faculty teaching and advising	65%		65%	
Decreasing student dropout rate or improving retention	64%			
Improving student course-level performance	57%			
Reducing students' time to degree	54%			
Ensuring institutional survival		60%	60%	60%
Expanding research			55%	
Improving the institution's reputation and standing			55%	
Outdoing or keeping up with peer institutions			51%	
Outdoing or keeping up with new, nontraditional competitors			50%	
Expanding the types of credentials we award			39%	
Attracting more students		61%		
Reaching a different or broader segment of students		57%		
Containing or reducing costs		49%		
Containing or reducing expenditures		47%		
Attracting donors and funders		42%		
Generating new sources of income		42%		
Generating revenue		38%		

Dx is real and predicted to grow in importance for higher education's success



Few are engaging in Dx but many are preparing to

Remembering that digital transformation is a series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution's operations, strategic directions, and value proposition, would you say your institution is engaging in digital transformation today?



*Dx is
addressing
Grand
Challenges*

Focus Areas of Today's Digital Transformation Pioneers	Student success	Financial	Reputation	Competition
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Improving faculty teaching and advising	65%		65%	
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GRAND CHALLENGES

FINANCIAL HEALTH

STUDENT SUCCESS

REPUTATION

GRAND PRINCIPLE:
SIMPLIFICATION

*Today's Dx
pioneers are
focused on
simplification*

GRAND PLANS

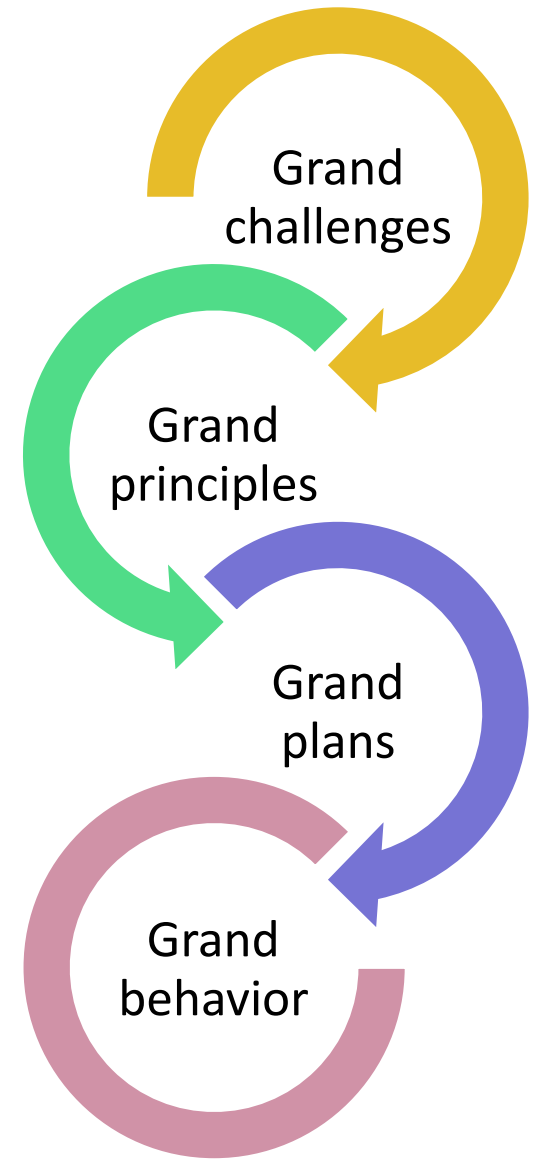
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Do less: reduce
redundancy,
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operations

Final Thoughts



A Grand Strategy can facilitate the kind of coordinated action that today's Grand Challenges require

A focus on grand strategy can help leaders think, plan, and act in an integrative and collaborative way

53% of CIOs describe insufficient cross-institutional planning or coordination as a major barrier to Dx

Simplification: CIOs' Hopes in 3-5 Years



- We develop standards and tools to simplify out of the box integrations and facilitate better analytics
- Institutional services are as easy to use as consumer apps
- Institutions direct more of their efforts toward students' needs, from student mental health, to retention, to recruitment, to debt avoidance, to job placement.



Simplification: Takeaways

- Break down the silos
- If the whole is more than the sum of the parts, there needs to be a whole in the first place.



Innovation: CIOs' Hopes in 3-5 Years



- Institutions begin to see how many of their credentials, or “products,” need to be refactored, why, and how
- Different institutions focus on different types of students and thereby differentiate their offerings
- Today’s rudimentary success metrics give way to measures that capture the contribution of HE to people’s ability to thrive in life, however they define it



Innovation: Takeaways

- Beware of Innovation Theater
- Innovation activities that energize constituents without producing significant results



Photo by William Minke.



Innovation: Takeaways

- People, process, technology, product
- From doing things differently to doing different things



Where to start? Simplification or Innovation?

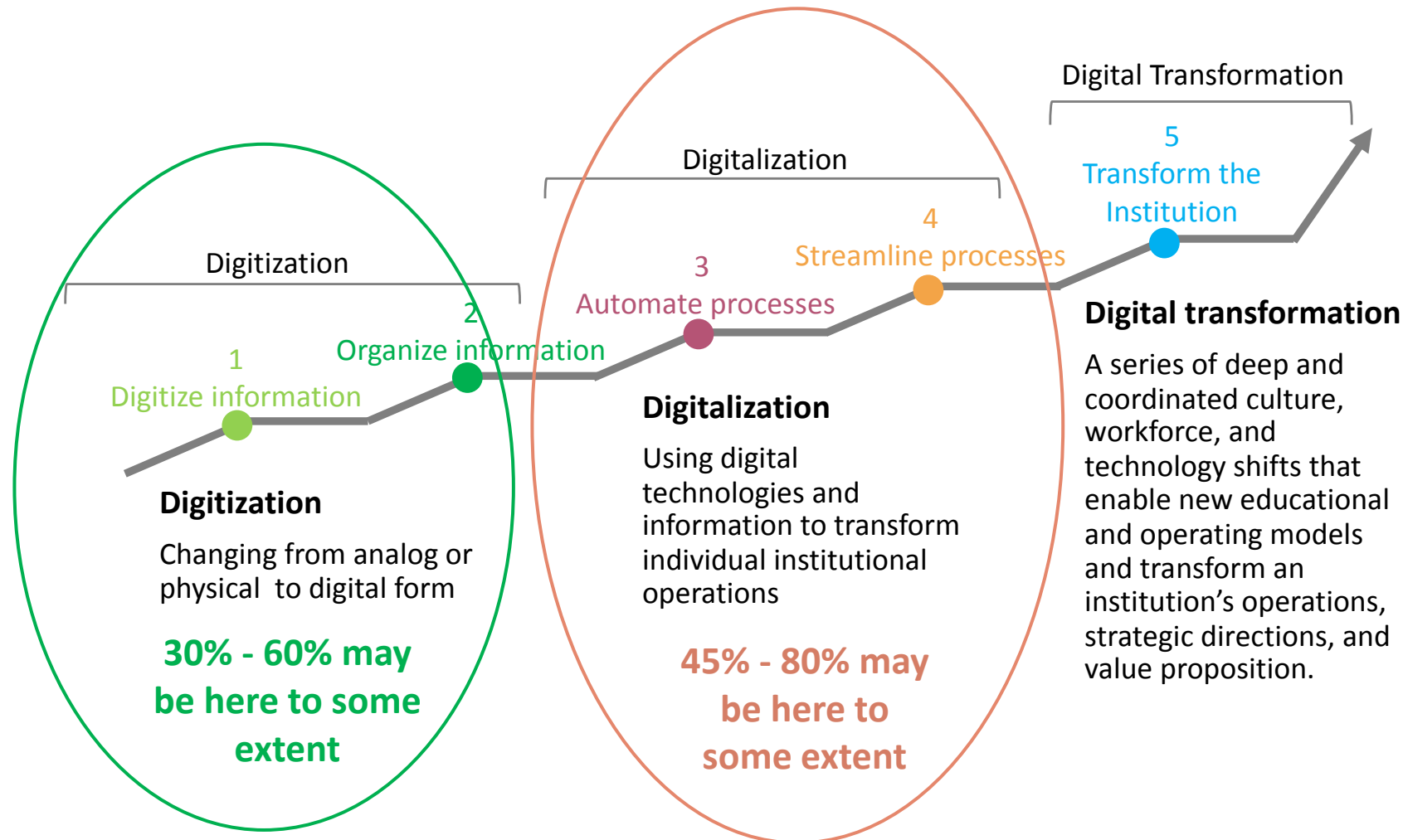
YOU MUST CHOOSE

...BUT CHOOSE WISELY



Most institutions will want to start with Simplification

Simplification paves the way for innovation



“This effort simplified the company’s systems and processes to reduce costs and risks. Without a powerful operational backbone, Philips’ leaders would be consumed with executing and maintaining core processes instead of imaging, developing, and commercialized digital offering that help people live healthier lives.”

Source: Five building blocks of digital transformation. Jeanne Ross, Martin Mocker, Cynthia Beath. MIT CSR, June 6, 2018

California Community Colleges Course Exchange

1. Simplification:
Consolidated online course systems
 - Moved from multiple online course systems to a single one for California community colleges – 114 campuses serving 2.1 million students
 - Started with identifying common business processes for financial aid, admissions, etc.
 - Ground rules first

2. Innovation:
Enabled students to find and take any online course, no matter which campus provided it

cvc.edu



CVC Exchange: Finish Faster Online!

It's easy to search and filter thousands of currently available online courses at California's community colleges. The more classes you take, the faster you'll finish.

The CVC-OEI does not charge a fee for using CVC Exchange; Finish Faster Online or applying to a California Community College. If you believe you have been charged a fee in error, please contact support@cvc.edu.

SEARCH BY ☒ **GEN ED REQUIREMENTS** ☐ SUBSTITUTE COURSE ☐ KEYWORD SEARCH

YOUR SCHOOL
Enter your college

REQUIREMENT YOU WISH TO FULFILL
Select requirement you need to fulfill

Find Classes



Online Certificates of Achievement

Certificates of Achievement (COAs) prepare students for a career or upgrade job skills for those already in the workforce. Courses often count toward a degree.



ExCEL

ExCEL gives you greater access to online courses by allowing you to register in online classes at another California community college without filling out a separate application!



Online Transfer Degrees

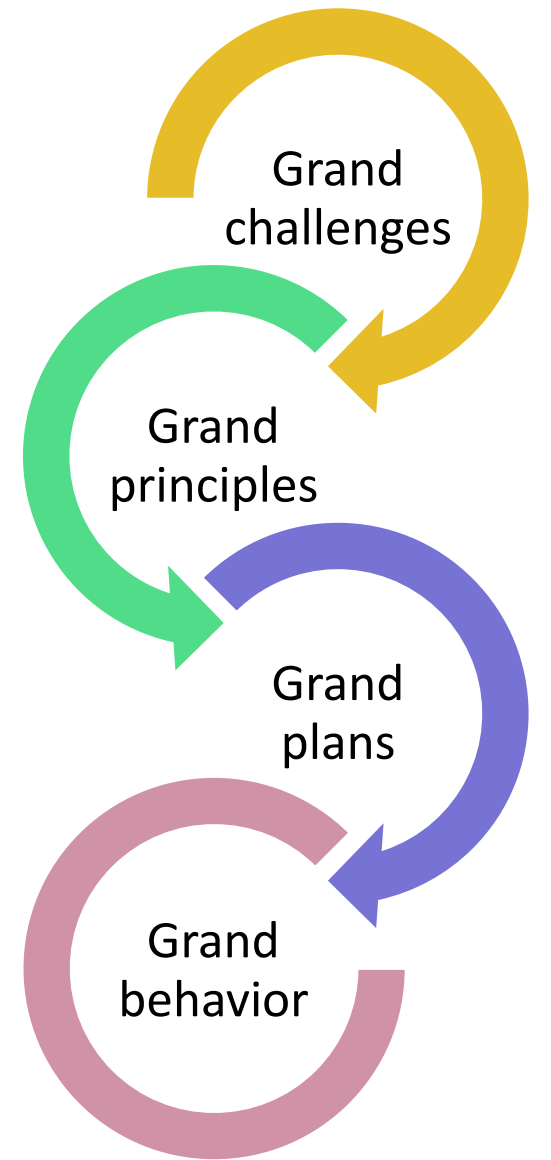
An Associate Degree for Transfer (ADT) makes it easy for California community college students to transfer to the California State University or San Jose State University.



Student Resources

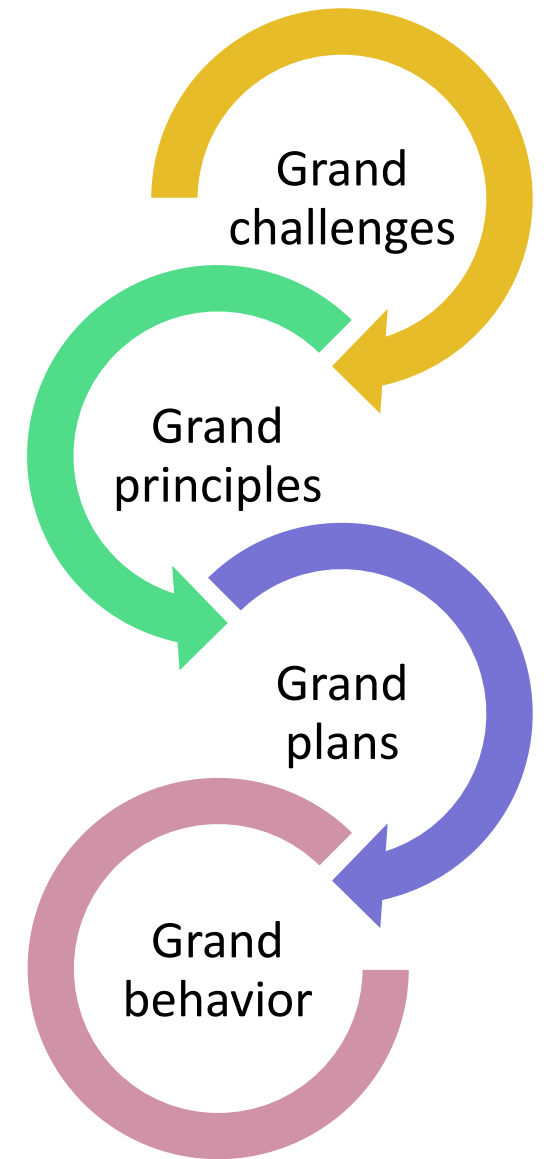
Online courses require a skill set that is different from the traditional classroom experience. Our online resources will help you be successful.

Wrap up



Summary

- Higher education must address its Grand Challenges
- A Grand Strategy approach can help
 - Integrate interests, threats, resources, and policies.
 - Provide a grand principle to guide the institution seeking a way forward in a complex and changing ecosystem
 - Provide a long-term vision that treats institutional resources holistically and focuses on the most consequential priorities
- Start with a Grand Principle that best fits ends and means: Simplification or Innovation are good choices
- Digital transformation can supply a set of Grand Plans and Behaviors to fuel your Grand Strategy



Thank you!

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