

2017 Edition

Digital Education

Leading and Shaping

a digital world with open
knowledge sharing



Run Simple

A MESSAGE FROM MALCOLM



Transforming education for students as consumers and capitalizing on new opportunities depends on the capacity to see the future, and to identify and deliver value in real time and on-demand.

Malcolm Woodfield, Ph.D.
Global Vice President
Industry Head
Higher Education and Research
SAP

Dear customers and partners,

At SAP, we are fortunate to have great customers in education all over the world using our technology to run their enterprise, engage with their students, and drive high-velocity research.

Institutions of higher education and research are a diverse community, ranging from community colleges to medical schools, spanning the globe from Berlin to Boston to Bangkok. As diverse as they are, these schools, colleges, and universities are going through very similar growing pains as they emerge into the age of a fully digital world.

Experts identify technologies such as analytics, mobility, and virtual engagement as key to digitalization. A maturing digital enterprise is described as one using these technologies to transform interactions, processes, workforce management, and business models.

In this sense, digitalization will affect every activity, interaction, transaction, and outcome at higher education institutions. Like any enterprise, they have a complex workforce, demanding stakeholders, asset-intense campuses, and suppliers they rely on for products and services. These four domains, regardless of what type of company or industry an organization is in, all require significant resources to manage.

In your role as an executive at an institution of learning, I see the deepest impact digitalization can make on your institution is assisting you to address the increasingly urgent need to adapt and evolve for rapidly changing business and user requirements. I believe there are four strategic priorities where digitization can help you reimagine the way you do business:

- **Student engagement and learning models.** Designing software and embracing intelligence for curriculum content to reimagine learning.
- **Management models.** Redefining operations with centralized data-driven insight and oversight for balanced decision making.
- **Institution operations.** Integrating and realigning the digital core to fundamentally restructure support.
- **Work and working at institutions.** Initiating new flexible staffing models, with real-time insight and virtual support structures.

An institution is not an ivory tower, it is a platform for leadership, student and faculty engagement, and high-velocity research. And today, this platform must be digital. Digitalization is changing the very boundaries of the user experience, blurring the lines between where the user ends and the technology starts. Data driven insights are not a nice-to-have addition or optional support; they are the fundamental core of future operational environments.

Digitalization can revolutionize teaching and research, and the institutions that embrace it can own the future of education.

SAP looks forward to partnering with the higher education and research industry to help navigate the digitalization experience and drive prosperity for institutions that are leading the way in the future of the digital world.

Malcolm Woodfield

Malcolm Woodfield, Ph. D.
SAP Global Vice President for Higher Education and Research

TABLE OF CONTENTS

The Digital Economy	4
Reimagining	6
Learning Models	7
Management Models	8
Institution Operations	9
University Work and Working at Institutions	10
SAP Digital Transformation Framework	11
Five Pillars of a Digital Strategy	12
Digital Strategy – The Digital Core	13
Portfolio of Solutions for Higher Education and Research	14
Reimagine Student Engagement	15
From Your Current State to Digital	16
The Keys to Success	17
SAP Digital Business Services for Institutions	18
Comprehensive SAP Ecosystem and Partners	19
Why SAP?	20
SAP Is Committed to Innovation	21
Appendix	22



THE DIGITAL ECONOMY

Big picture: Digital transformation is the catalyst for change

Technology is the key enabler

Navigation of the new learner environment

What does this mean for an educator? It means you have to virtually automate empathy by implementing technologies which provide deep insight into student behavior at an individual level. To do so, successful institutions must leverage advanced learning and engagement models. At a macro level, this includes borderless coursework or real-time engagement through the Internet of Things (IoT), which can help institutions gain and act on insights through new channels and opportunities. At a micro level, this means personal engagement with students through a new type of experience that is intuitive and frictionless, and where technology is mobile and invisible. It's an experience students can personalize, make their own, and even make wearable.

Harnessing the power of data

The recent increase in failing institutions of higher education is not an anomaly. The traditional on-campus four-year university business model has been challenged to the point of extinction. Predictive insight into every aspect of an institution's operations and daily life – from the business data and systems that run them to the people who use them – is essential to improved management and planning of the entire educational enterprise. The microscopic student insight and its connection to future student success is as important as are insights into the business side of an institution.

Business and workforce transformation

The new insights into an institution's business are not without consequence. They are disruptive, especially with tenured workforces. Schools, colleges, and universities that want to compete and thrive in the future can use insights and map them onto their strategic plans. They can leverage new staffing and workforce support models with advanced analytics and artificial intelligence to implement digital solutions that fundamentally change how they manage their students, employees, finances, and campuses.

Transformation will not result from doing things incrementally better, but by doing things fundamentally differently.

Access more information
on the latest technology
trends here:



Digital models are disruptive. The rules have changed.

- **Academia** is the Uber or Airbnb of academia, creating a forum for sharing teaching skills.
- **Facebook** is not just a social network; it is one of the largest media companies, even though it doesn't create content.
- **On LinkedIn**, the world's largest professional network, there are over 40 million students and recent college graduates.¹
- **Google** is not just a search engine with cloud apps; it is also a platform for student and teacher friendly apps.
- **Cisco** is not just a networking device company; it also enables learners with a context-aware, personalized learning experience with data taken from the university network.

WHAT DOES THIS TELL US?

The educational experience is the new definition of relevance, powered by digitally enabled processes and people.

Every institution is now a technology institution.

THE DIGITAL ECONOMY

The Future: To manage increasing education and research needs in a digital environment, institutions are fundamentally reimagining and transforming all aspects of engagement.

Strategic Priorities for Higher Education and Research Institutions

Institutions are complex organizations that require agility and balance across numerous competing and integrated functional areas so they can successfully operate much like a small city. This agility translates to investments and focus around four strategic priorities:

1. Student engagement and learning models



Tailoring curriculum and interactive models is critical to understanding changing student needs, adapting knowledge models with faster learning cycles, advancing interactive open communication models, and leveraging digital platforms to enable mass access to knowledge.

2. Management models



Putting the executive at the center of every decision is a key prerequisite for success in the digital age. Institutional administrators demand simple, seamless, and intelligent solutions that are integrated across any channel, anytime, anywhere to enable the most significant and balanced decision making.

3. Institution operations



Fully connecting the end-to-end digital network of institutions offers new opportunities for consolidating department-by-department support, removing traditional tenured operating islands, and leveraging shared business models across schools and colleges.

4. Work and working at institutions

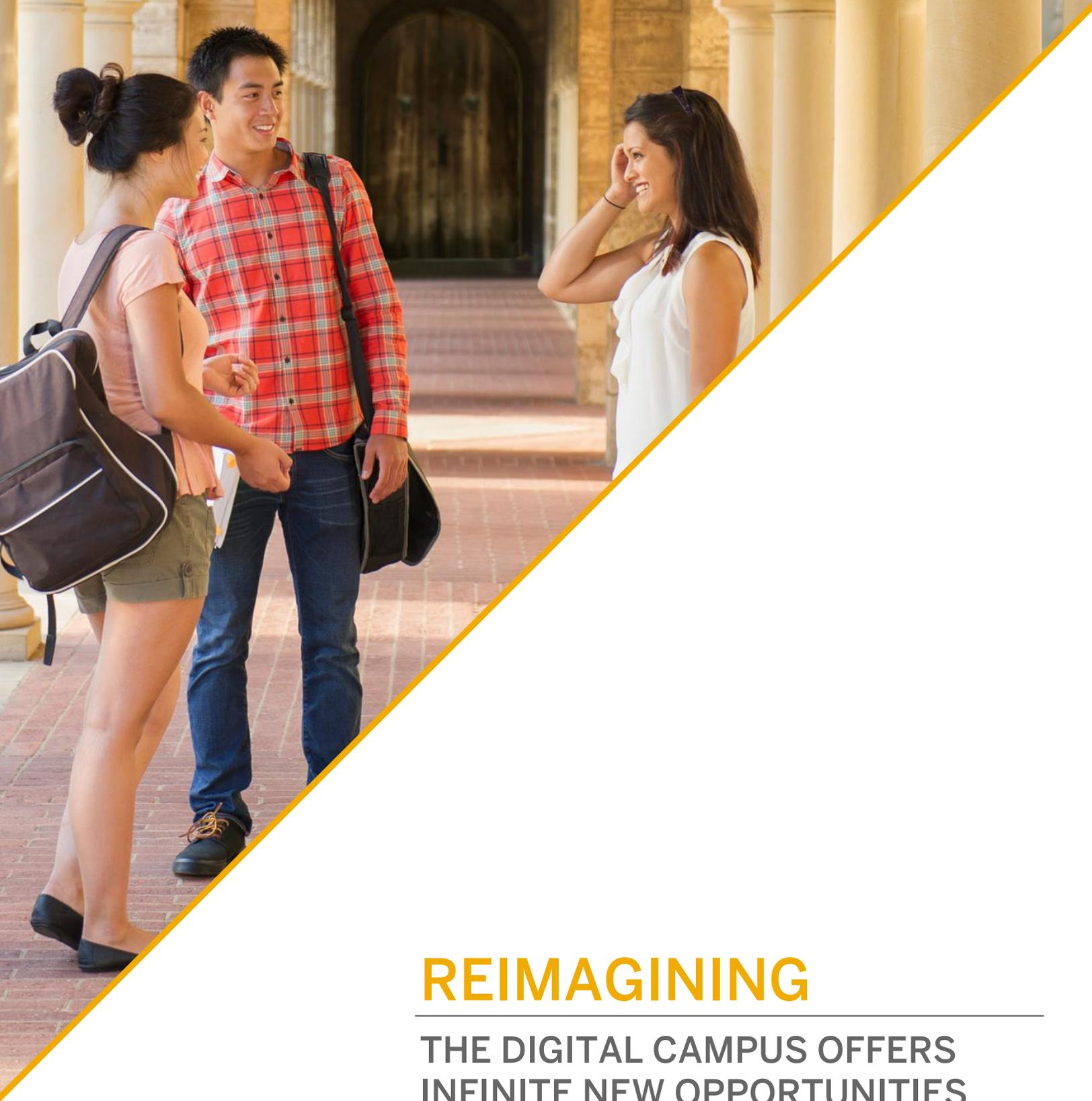


Moving staffing models at institutions toward increasingly hiring adjunct faculty can be an economically wise move, as is expanding temporary staffing models and shared support staff and automating support processes wherever possible.

Successfully embracing the opportunities from new technologies and consequently addressing these four strategic priorities can be the foundation of successful digitalization and staying ahead of the innovation curve.

REIMAGINING

How do institutions achieve these strategic priorities? The starting point of the digital journey is the ability to reimagine everything. That means reimagining your business models, your business processes, and your work. The potential for institutions is considerable. However, this sort of transformation requires a reimagining that includes a unity of purpose, improved models across traditional boundaries and silos, the simplification of the provision of education, and a digital mindset focused on measurable outcomes.



REIMAGINING

THE DIGITAL CAMPUS OFFERS INFINITE NEW OPPORTUNITIES

In a connected world where every institution is becoming a technology organization, smarter products and services can refocus operations on performance outcomes, blur industry lines, and integrate physical and virtual value networks.



REIMAGINE STUDENT ENGAGEMENT AND LEARNING MODELS

Create new academic offerings, learning models, and environments to enter new education and research markets, rebuilding the institution brand in the digital world.

Outcome-based teaching and research

The availability of real-time student data opens up a world of possibilities when it comes to student engagement. Key data, for example, from student information, learning management, and student recruitment systems provide a wealth of rich information. With this data, teachers, professors, and advisors can access real-time information on engagement to ensure the students stay on track.

The explosive growth of learners and their production of structured and unstructured learning data can be analyzed via advanced in-memory platforms and artificial intelligence while cognitive can enable decision support for educators.

Teaching and research network orchestration

Institutions can become platforms to connect students to the right learning offerings and job opportunities, evolving from a place to a network. They can also reach new global distance learners through network orchestration.

Research data analysis

Project lifecycles, like those in clinical trials, can shorten dramatically, changing the research funding and income model. Networks can amortize research costs among institutions without degrading outcomes. Institutions can increase equity investments in Big Data-driven start-ups in research, and those with a major research focus can increasingly become centers of for-profit entrepreneurship and innovation.

Institution fundraising

Institutions can leverage increased student retention and loyalty, taking advantage of crowdsourcing and social media channels to build brands in an increasingly competitive market of providers and learners. This business model can grow beyond its current focus in North America as a way of building a revenue stream and a loyal client base.



Learners spend more than **3.5 hours** per day using their mobile phones on campus.²



1.9 million organizations are connected to the Ariba Network.³



40 million students and recent graduates are on LinkedIn.⁴



250 million+ learners will be enrolled in higher education by 2025.⁵



REIMAGINE MANAGEMENT MODELS

Build oversight and management models directly onto intelligent digital platforms that provide an integrated, 360-degree view of the entire educational community and support structure.

Digital executive boardroom

Institutions can integrate all aspects of their operations into a single source of truth to balance decision-making, effectively weighing needs against available resources for the best outcomes. They can combine balance sheets, operating statements, staffing models, enterprise controls, and environmental management into an integrated and personalized dashboard.

To speed analysis and decision execution, institutions can tailor working models for individual user preferences and working environments. They can also enable the separation of functional boardroom environments, when and where delegation and cross-management support warrants.



Integrated platform

Institutions can remove traditional departmental teaching and operating walls where faculty and staff operate in isolated autocratic environments. They can implement a truly cross-departmental and cross-functional integrated platform with comprehensive visibility and transparency to centrally manage operating expense, procurement, and supply management.

They can also embed advanced analytics for real-time asset monitoring to enable resource balancing and departmental sharing, extend value, and avoid downtime.

Alumni relations

For better support of alumni constituencies, institutions can utilize real-time communication channels to strengthen outreach, balance alumni interactions, and enhance proactive support. They can more closely manage fundraising campaign management to build upon success, and focus resources on the best return on investment.



\$6 billion savings in U.S. higher education institutions by reducing organizational complexity.⁶

\$12 million savings at University of North Carolina, Chapel Hill, by reducing organizational complexity. Estimated by Bain & Co.⁷



REIMAGINE INSTITUTION OPERATIONS

Create innovative business models that serve the digital learner, with new and different ways of managing and working.

Optimized engagement

Institutions can use predictive analytics and real-time data from student information, learning management, and recruiting systems, as well as the students themselves, to help student advisors drive student success.

Online shopping approaches to education, such as social interaction, gamification, online payment, can be applied, along with online and classroom learning, to modernize student engagement.

Data-driven institutions

Real-time data can inform everything from designing flexible teaching loads to fundraising. Analytics can focus not on reporting but on prediction and optimization.



Optimized financial streams

Addressing a new generation of global learners is both a challenge and an opportunity. Addressing both aspects gives institutions the chance to build new revenue streams, expand course offerings, and focus on their core mission of delivering high-quality education and research. However, to ensure constant growth and innovation, institutions must recognize that a digitalization strategy is also required on the enterprise side of the institution too, especially on the finance side.

Redesigning financial processes can support instant financial insight across devices to help an institution drive value and leverage instant planning, analysis, prediction, and simulation across financial and operational processes. At the same time, these new processes can significantly simplify the IT landscape and architecture.

IoT-enabled campus

Sensors and hyperconnectivity can simplify the management of buildings, including student housing, creating a safer and more attractive living environment for residential campuses.

TODAY'S REALITY

- Peter Nikolettatos, CIO LaTrobe University "We spent **too many years** dragging our data into a warehouse and then producing reports."⁸
- Students waiting more than **40 hours** on calculation of exam results.⁹

TOMORROW'S SOLUTION

- Process **8,000** grades per second
- **420x faster** student data reporting
- Up to **80%** of data updated in real time
- Return on investment (ROI) on SAP HANA® for University of Kentucky of **509%**.¹⁰

MAKING IT INTELLIGENT

The University of Kentucky uses SAP HANA to create **actionable, real-time information**, while at the same time "information is put into action," which means applying analytics to **foster student success**.¹¹



REIMAGINE WORK AND WORKING AT INSTITUTIONS

Recognize the importance of the workforce of the future by addressing the key role of staff, changing demographics, and evolving definitions of work at an institution.

The millennial workforce

Millennial workers and students have common expectations, and they especially look for:

- Real-time feedback on performance
- Personalized performance expectations
- Achievable career paths

The workforce of the future can use interactive technologies that improve user experiences, including voice recognition, visualization, and gaming. These technologies have the potential to break down boundaries and campus silos and redefine social collaboration among staff. With the back office of an institution becoming more digitized, collaborative work can naturally take advantage of digital and interactive technologies.

Teaching and research network orchestration

Institutions can become platforms to connect students to the right learning offerings and job opportunities, evolving from a place to a network. They can also reach new global distance learners.



Cambridge Assessments manages the workforce of 30,000, many temporary, to perform examinations for 8M students in 170 countries.¹²



Workforce technology skills development will continue to lag. The need for technology skills will grow over the next three years, especially in analytics and programming/development. 48% of employees surveyed say analytics skills will be needed by employees in three years, and 59% say programming/development skills will be needed.¹³

Refocusing work

With rapidly evolving technologies, the digitization of the workplace and academic processes can refocus and even eliminate some work. However, staffs at institutions can continue to be a valuable asset if they are managed and engaged to ensure talent is retained.

Institutions attract and require a specific workforce that is passionate about education and committed to their mission. Digital tools can help them identify, recruit, retain, educate, and promote the most engaged staff, teachers, and researchers. They can refocus on employing the best contractors for temporary work and teaching on primary, satellite, domestic, and international campuses.

A new generation of professional leaders

CIOs from manufacturing, financial services, the military, and the public sector to institutions, can bring rich experience to institutions that is not overshadowed by preconceptions regarding how institutions work. Line-of-business owners from finance, HR, and registrar disciplines can bring expertise from their roles and professional organizations, such as the National Association of College and University Business Officers. Other leaders can bring insights learned from the College and University Professional Association for Human Resources and the American Association of Collegiate Registrars and Admissions Officers. Teaching faculty can not be shielded from outcome-driven assessment as workers are treated as talent to be developed rather than capital to be managed.

Changing work models mean lifelong learning

As permanent, full-time jobs are replaced by more flexible models of employment, workers can be encouraged to constantly update and expand their skills.



DIGITAL INSTITUTION FRAMEWORK

A SIMPLE AND PROVEN APPROACH TO VALUE CREATION THROUGH DIGITALIZATION

Every organization – in almost every industry – requires a simple digital approach to build a pragmatic and executable vision of its digital strategy.

SAP DIGITAL TRANSFORMATION FRAMEWORK

Every institution needs to think about the five pillars of a digital strategy

We have looked at the strategic priorities that higher education and research institutions are pursuing and how they have to reimagine their operating models, services, processes, and work to advance education and learning.

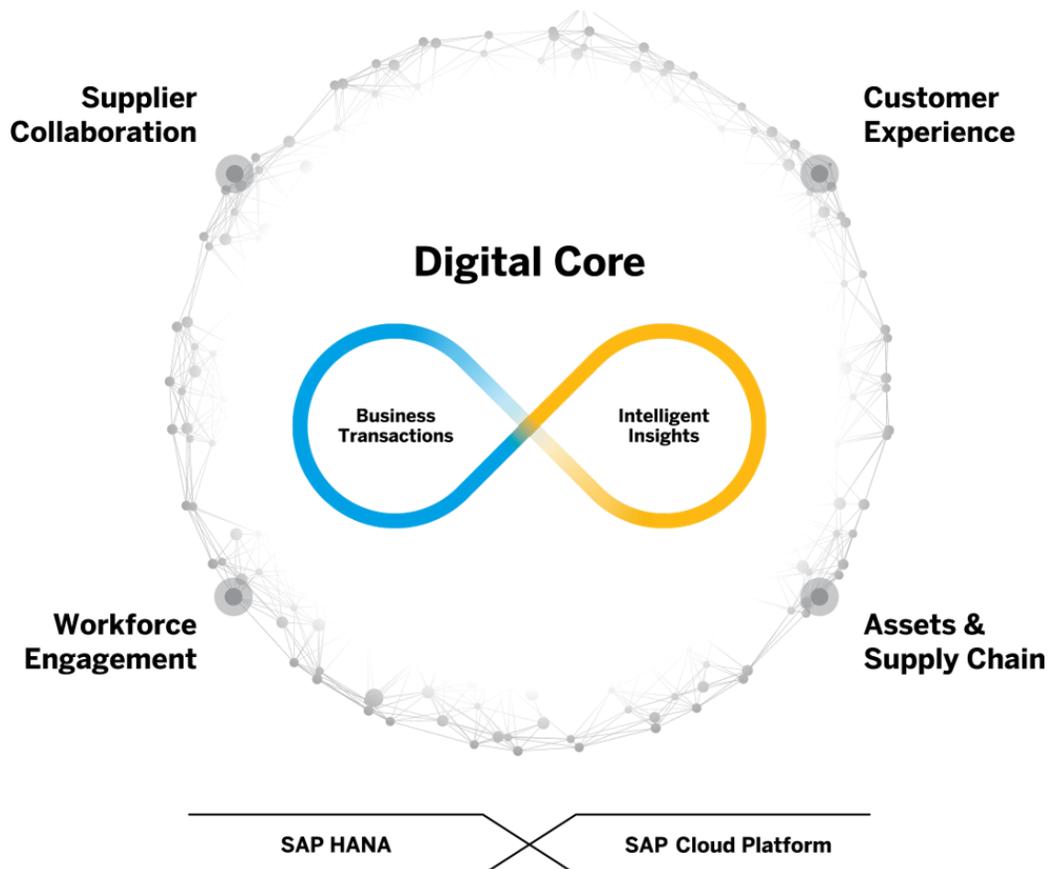
Let's now look at how SAP can help enable them do this by providing the following architecture.

As institutions are reimagining their entire portfolio of services, they need an IT architecture that provides both stability and long-term reliability for their core enterprise processes. At the same time, they want an architecture that allows for flexibility in areas where change is happening on a constant basis.

This concept, which is often referred to as bimodal IT, is brought to life through the SAP Digital Transformation Framework methodology that SAP provides, pictured below.

- The **digital core** is the foundation for mission-critical enterprise processes which need to run consistently and uninterrupted. It provides real-time transactions and analytics, the ability to work with Big Data, and connectivity to the outside pillars of the framework.

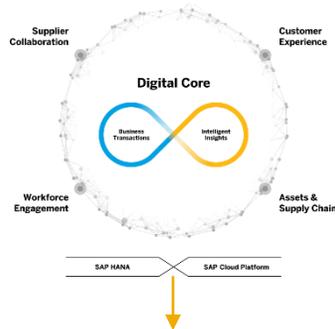
- The **digital assets** are the knowledge and talent held by an institution's staff and faculty that are imparted and shared across the student body and society at large. With access and connectivity to the digital core, there is the flexibility needed to service an institution's diverse ecosystem on a constant basis.
- Faculty, staff, and students require this flexibility as they interact with an institution through its multiple channels.
- Flexibility and adaptability is also key when working with **suppliers and partners**, so they can get onboard quickly and so institutions can shift supply to alternates when needed.
- These capabilities are also required when building and maintaining an agile **workforce**.



SAP PORTFOLIO WITH SAP S/4HANA AND SAP LEONARDO

To execute on their digital strategy, higher education and research institutions will not only need to reengineer their operations and processes – they will also have to evaluate if they have the right technology platform that can deliver on the vision. The winning platform will require an IT architecture that provides both stability and long-term reliability for core enterprise processes, while allowing for flexibility in areas of frequent change. With a digital core as the foundation, critical enterprise processes can become consistent and flexible. This kind of platform provides uninterrupted, real-time transactions and analytics, the ability to work with Big Data, and connectivity to line-of-business extensions that enable supporting processes such as talent sourcing and networks.

SAP S/4HANA® was specifically developed to represent the digital core in this bimodal IT architecture. It provides institutions of higher education and research with a proven framework to adopt industry best practices while attaining operational excellence – specifically but not exclusively across core industry capabilities such as real-time supply chain and digitalized procurement.



Digital Innovation SAP Leonardo	<ul style="list-style-type: none"> Digital marketing Constituent management Case management Student lifecycle management 	<ul style="list-style-type: none"> Project management 	<ul style="list-style-type: none"> Fundraising campaign management
Extensions	STUDENTS, TEACHING AND LEARNING <ul style="list-style-type: none"> Jam collaboration platform Commercial project management Constituent engagement 	ACADEMIC AND COMMERCIAL RESEARCH <ul style="list-style-type: none"> Visual enterprise Governance, risk, and compliance 	EDUCATION AND RESEARCH FUNDING <ul style="list-style-type: none"> Integrated business planning Governance, risk, and compliance for finance Grants management
Digital core	SAP S/4HANA Enterprise Management		
Extensions	<ul style="list-style-type: none"> Solution billing Bid management 	<ul style="list-style-type: none"> Solution billing Bid management 	<ul style="list-style-type: none"> Solution billing Bid management
Digital core	<ul style="list-style-type: none"> Time recording 	<ul style="list-style-type: none"> Accounting and closing operations 	<ul style="list-style-type: none"> Operational purchasing Supplier management
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Digital Innovation SAP Leonardo	<ul style="list-style-type: none"> Core human resources and payroll Talent management Workforce planning HUMAN RESOURCES	<ul style="list-style-type: none"> Governance, risk, and compliance Business planning and consolidation Digital executive boardroom BUDGET AND FINANCE	<ul style="list-style-type: none"> Supplier collaboration External workforce PROCUREMENT
Digital Innovation SAP Leonardo	<ul style="list-style-type: none"> Resume matching Job matching 	<ul style="list-style-type: none"> Invoice matching 	

SAP Cloud Platform
Customize applications | Integrate apps, data and processes | Build new apps

- Digital core: Core solution capabilities delivered as part of SAP S/4HANA Enterprise Management
- Digital Core: Solution capabilities that are also part of SAP S/4HANA Enterprise Management, but added/purchased as needed.
- Extensions: Cloud-based (LoB) solution extensions that are *fully integrated* with SAP S/4HANA Enterprise Management, but added/purchased as needed.
- Leonardo: Solution capabilities that are powered by a Leonardo technology and included in the Leonardo suite and how to add/purchase is not shown on this diagram.

Learn more about SAP solutions today and discover planned innovations by accessing the SAP road map for higher education and research here:



Higher education and research institutions are transforming to meet the vision and mission of better education for all

They pursue **four key initiatives** that require **new capabilities** along the value chain.

1. They need to put in place a coherent vision with a clearly articulated road map for their digital transformation.

2. They must develop an IT architecture integrated for long-term core process stability while providing flexibility to adapt for change.

- Reimagine models for student engagement and learning
- Reimagine management models
- Reimagine institutional operations
- Reimagine work and working at institutions

	Students, Teaching and Learning	Academic and Commercial Research	Education and Research Funding	Human Resources	Budget and Finance	Procurement
	<ul style="list-style-type: none"> Compete for the best new students using omni channel communication 	<ul style="list-style-type: none"> Provide opportunities for students to participate in research and innovation 	<ul style="list-style-type: none"> Collect student fees: offer competitive financial aid package Integrate new recruitment and customer response models 	<ul style="list-style-type: none"> Knowledge sharing and community building 	<ul style="list-style-type: none"> Modernize student accounting to keep pace with changes in fees and financial aid. 	<ul style="list-style-type: none"> Consolidated and coordinated departmental spending
	<ul style="list-style-type: none"> Manage student information based on 360-degree student profiles 	<ul style="list-style-type: none"> Analyze success of grant proposal submission and execution Productize and commercialize research output, build intellectual property 	<ul style="list-style-type: none"> Maximize income from student fees and research grants Uncover new revenue sources 	<ul style="list-style-type: none"> Employees digitally empowered to make decisions in real-time and mobile Integrate ongoing advanced learning modules into standing HR structures 	<ul style="list-style-type: none"> Use simulation and analysis to evaluate financial implications of strategic business choices Financial controlling of performance based service contracts 	<ul style="list-style-type: none"> Strategic and agile supplier network Real-time warehousing and supply oversight
	<ul style="list-style-type: none"> Optimize the operational environment with intelligent insights Integrate real-time student account management into overall treasury support 	<ul style="list-style-type: none"> Integrate end-to-end research management from proposal to commercialization. 	<ul style="list-style-type: none"> Integrate student account management into overall support frameworks Optimize the use of space and facilities Improve environmental footprint 	<ul style="list-style-type: none"> Manage external contractors in a flexible way Establish load sharing staffing across departments 	<ul style="list-style-type: none"> Improve performance and reduce waste and abuse with performance management Compliance management Optimize financial resources to achieve transparency and compliance 	<ul style="list-style-type: none"> Flexible on-boarding of alternative suppliers Improved real-time transactional procurement and order processing Consolidated and coordinated departmental spending Real-time supply and warehouse updating for inventory control
	<ul style="list-style-type: none"> Recruit, retain, and measure the performance of teachers 	<ul style="list-style-type: none"> Recruit, retain, and measure the performance of researchers 	<ul style="list-style-type: none"> Increase the use of contract labor for teaching and research 	<ul style="list-style-type: none"> Efficient integration of contingent workforce to augment own workforce Refocusing work enabled social collaboration working teams Identify, forecast and address skill gaps 	<ul style="list-style-type: none"> Greater control over travel and discretionary spending by staff and faculty 	<ul style="list-style-type: none"> Strategic and agile supplier network Integrated cross-functional work support structures

Typical business benefits*

- On-time delivery: +10-20%
- Inventory levels: -25-30%
- Customer satisfaction: +10-20%

- Improve offer win rate and end-to-end process efficiency by 10%
- Increase utilization by 2%

- Time and attendance function cost down
- HR FTEs: -44%

- 20%-40% reduction in audit cost
- 40%-50% reduction in days to
- 5%-10% reduction in business and staff support

- Proc. function cost: -5-20%
- Worker acquisition time: -30-40%
- DPO on targeted spend: -2-5 days

- Proc. function cost: -15-0%
- Worker acquisition time: -30-40%
- DPO on targeted spend: -2-5 days

	Internet of Things	Machine Learning	Analytics	Blockchain	Big Data	
	SAP Cloud Platform	Analytics Services	UX Services	Mobile Services	Security Services	Collaboration Services
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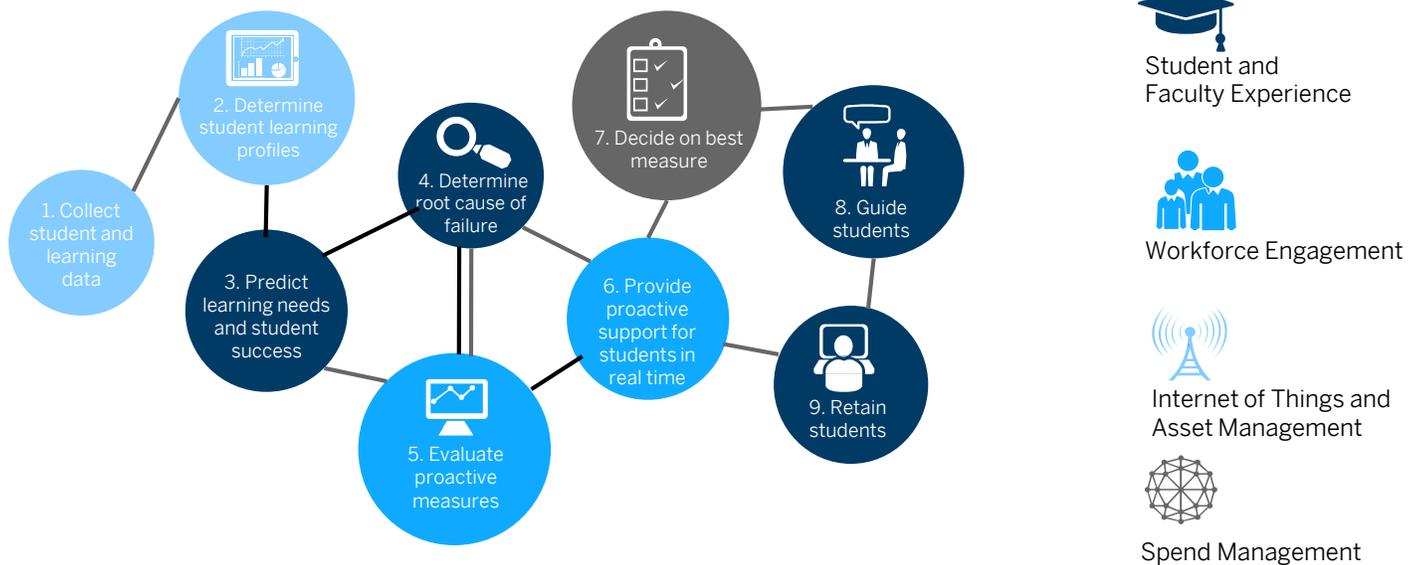
HOW DOES IT ALL COME TOGETHER?

Reimagine student engagement

While the five digital pillars deliver significant value as stand-alone capabilities, the ultimate goal is to design the next generation of processes that will span across each pillar, as the user experience spans across each one. Campus objects, learning technologies, and classrooms have to meet and exceed user expectations.

USE SENSOR AND METER DATA TO PROACTIVELY SUPPORT STUDENTS IN REAL TIME FOR BETTER LEARNING AND RETENTION FROM ADMISSION THROUGH GRADUATION

Continual and Circular Student Engagement



Leaders in higher education and research institutions are integrating technologies to improve student success and retention while driving adaptive learning. The above process flow portrays an IoT and in-memory data platform scenario that supports students in real time during learning.

- Students carry devices on campus and use them in classrooms, sending signals to the campus network.
- The signals are combined with student profiles, such as learning management system data, and predicts learning needs.
- The system can push learning information predictively to student devices and maintain measurement.
- Students can ask questions in a learning management system forum. The system proactively provides suggestions in real time via push messages on the learning management system screen, or schedules a tutor to call students directly.

In the new digital era, delivering this value to students – the customers of institutions – can drive their success.

The scenario above also shows how sensors and Big Data can be leveraged by institutions to drive next-generation best practices in hyperconnectivity. The predictive nature of these new solutions can change how students learn and how learners are guided, while student success can be managed with a data-driven approach. The benefits of this scenario are significant:

- Greater student success
- Higher student retention
- Faster learning
- Higher staff productivity
- Expanding academic advisory services
- Greater consolidation of support
- Increased cost efficiencies



FROM YOUR CURRENT STATE TO DIGITAL

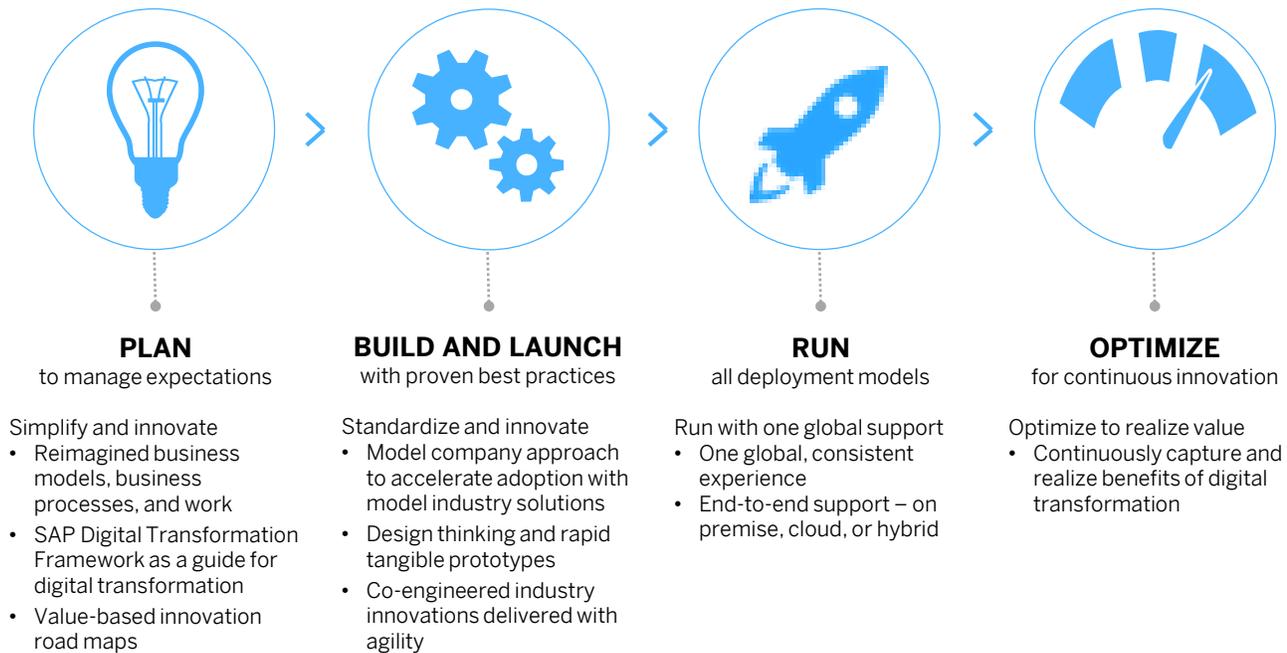
THE JOURNEY TO BECOMING A
DIGITAL INSTITUTION BEGINS
WITH PLANNING A DIGITAL
TRANSFORMATION ROAD MAP

TRANSFORMING FROM YOUR CURRENT STATE TO DIGITAL

The keys to success

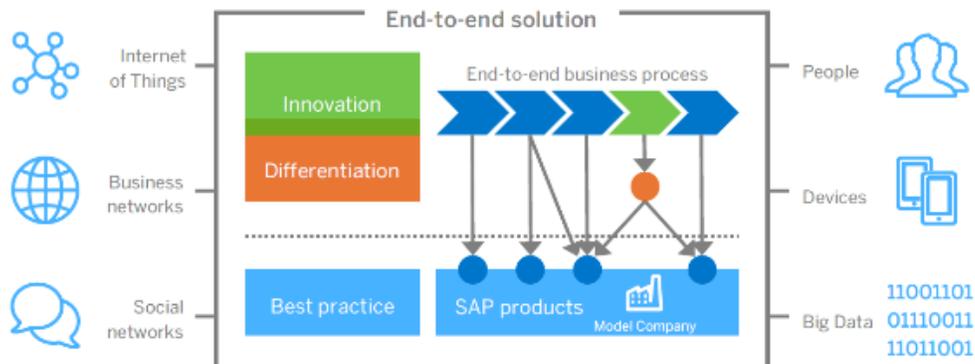
In the digital economy, simplification and innovation matter more than ever. To do this effectively, it's important for an institution to cover the end-to-end digital transformation journey. This includes planning a digital innovation road map and implementation plan with proven best practices; evaluating all deployment options; and ultimately optimizing for continuous innovation with a focus on outcomes.

The end-to-end digital transformation journey



To move forward with speed and agility, it helps to focus on live digital data, instead of Big Data, and combine solution know-how and industry-specific process expertise with data analytics so that the right digital reference architecture is defined and delivered. In that context, a model company approach can enable institutions to transition from their current state to digital. Model companies represent the ideal form of standardization for a specific line of business or industry. They are built on existing SAP® solutions using best-practice content, rapid prototyping solution packages, and additional content from customer projects. They provide a comprehensive baseline for rapid, customer-specific prototypes, cloud demos, and quick-start implementations.

Model Company Approach



SAP DIGITAL BUSINESS SERVICES FOR INSTITUTIONS

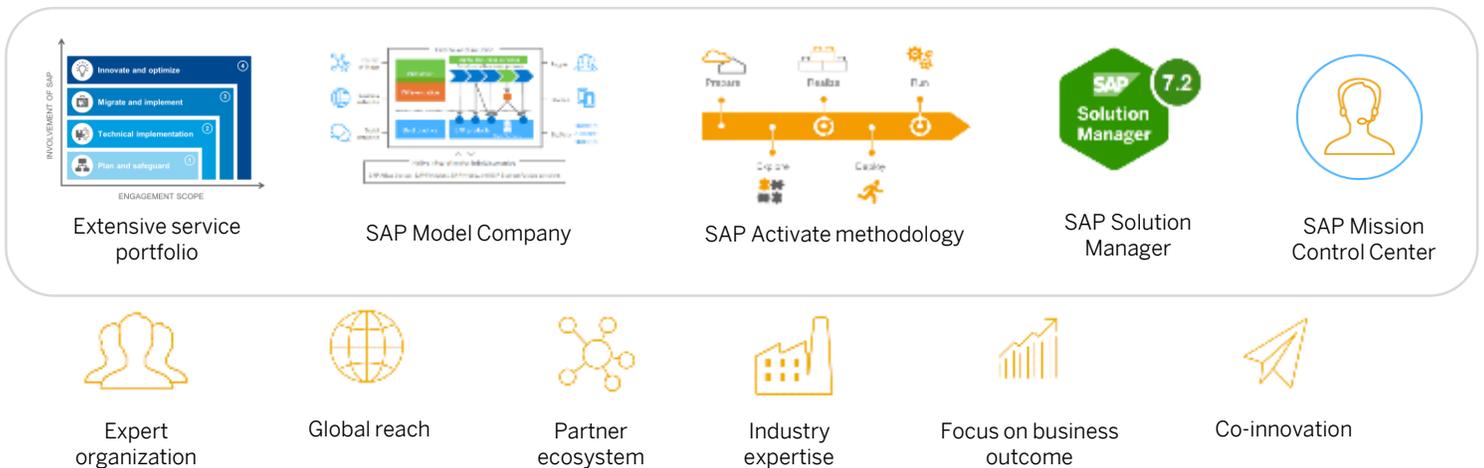
Enabling success in digital transformation

SAP has a broad range of services to cover the end-to-end digital transformation journey in institutions of higher education and research. These range from advising on a digital innovation road map and implementation plan with proven best practices to the ability to run all deployment options, and ultimately optimize for continuous innovation. SAP provides both choice and value within our service offerings, allowing institutions to tailor the proper approach based on their specific expectations and industry requirements.

- 25,000 professionals in 70 countries
- Serving customers in 130 countries
- Outcomes delivered as one team in one contract
- Projects connected in real time to global network of support functions through SAP Mission Control Center
- SAP MaxAttention™ and SAP ActiveEmbedded services to safeguard investment
- Consistent experience – on premise, cloud, or hybrid
- Standardized adoption of processes and tools
- Streamlined on-boarding and ramp-up of stakeholders

From proposing a comprehensive digitization proposal to realizing and running it, SAP delivers on the digital transformation promise to its customers, on time, on budget, and on value.

The value delivery of the SAP Digital Business Service organization relies on unique differentiating assets:



SAP Digital Business Services delivers digital innovation with simplification and accelerated implementation, which is key to adoption and value realization. Continuous improvement is supported through ongoing assessment of real-life data insights and joint governance with customers.

The value delivery of SAP focuses on the following deliverables:



COMPREHENSIVE SAP ECOSYSTEM AND PARTNERS

Orchestrating the world to deliver faster value

SAP has a comprehensive ecosystem for higher education and research which offers:

- Integration into a wide range of organization services (such as suppliers, treasury, key vendors, and travel)
- Open architecture, with the choice of hardware and software
- Complementary and innovative third-party solutions
- Extensive reach, with partners to serve the operations of any size institution, anywhere in the world
- A forum for influence and knowledge
- A large pool of industry experts with broad and deep skill sets

The SAP ecosystem and partners include, among others:



BUSINESS NETWORK

- 2.1 million suppliers
- 200 major travel partners (air, hotel, and car)
- 50,000 service and contingent labor providers

INFLUENCE FORUMS AND EDUCATION

- 32 user groups across all regions
- 40+ industry councils
- SAP community with >24 million unique visitors per year
- 2,650 members of SAP University Alliances

INNOVATION

- 1,900+ OEM solution partners to extend SAP solutions
- 3,200 startups developing SAP HANA applications



IMPLEMENTATION SERVICES

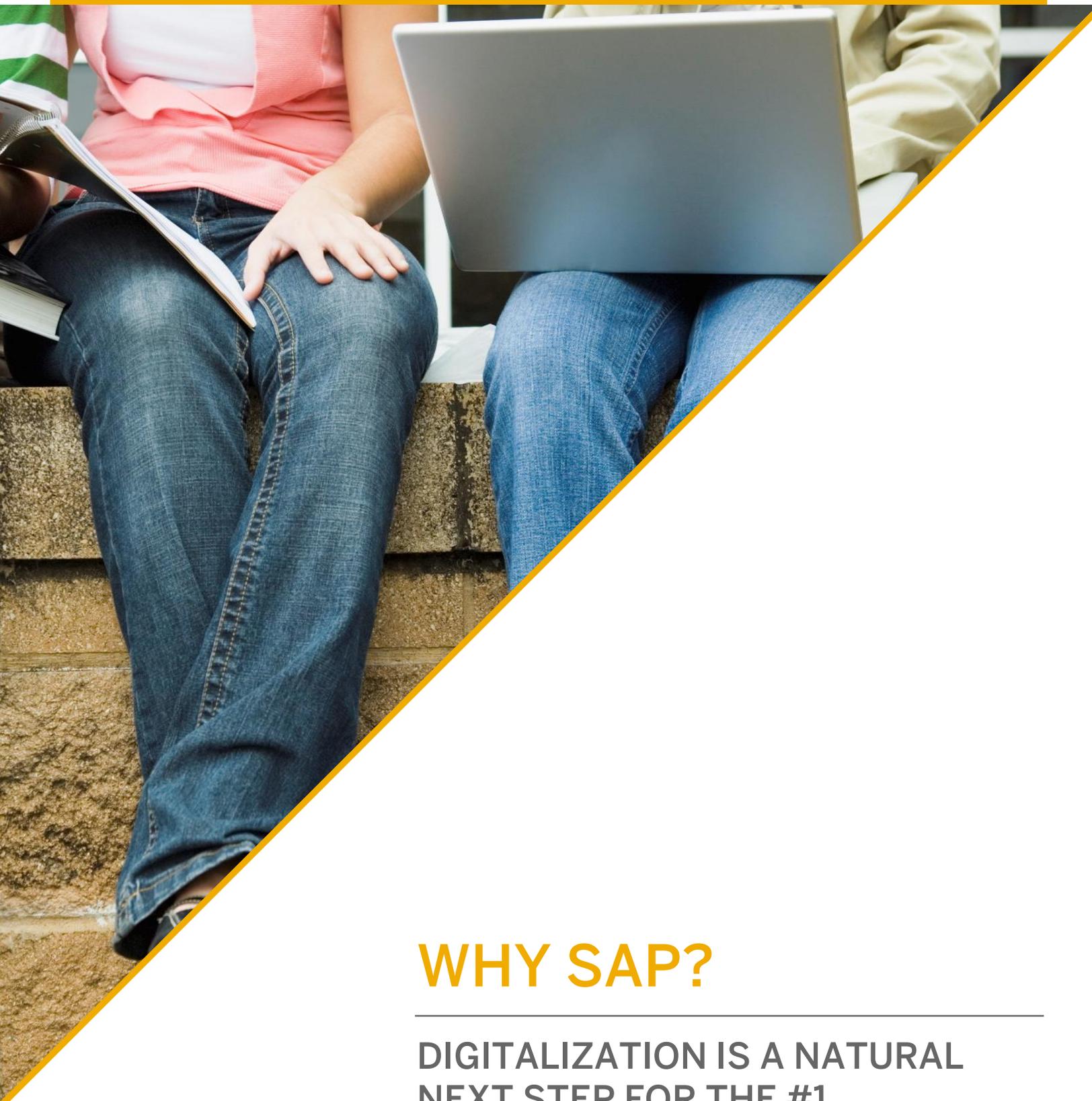
- 3,200 services partners overall
- Delivering industry specific solutions and services

PLATFORM AND INFRASTRUCTURE

- 1,400 cloud partners overall
- 30+ platform partners

CHANNEL AND SME

- 4,800 overall channel partners



WHY SAP?

DIGITALIZATION IS A NATURAL NEXT STEP FOR THE #1 PERFORMANCE DRIVEN INSTITUTION

It took years of innovation, strategic investment, and the forging of new, strategic relationships to build an end-to-end digital business platform.

SAP IS COMMITTED TO INNOVATION

- Vision** Help the world run better and improve people's lives
- Mission** Help faculty and students run at their best
- Strategy** Become the cloud institution powered by the SAP HANA platform



- **82K employees** representing 130 nationalities
- 335K customers
- In **190 countries**



- Solutions for **25 industries and 12 LoBs**
- **98% of most valued brands** are SAP customers
- **76% of the world's transactions** managed on SAP software



- **120 million** business cloud users
- **1.9 million connected** businesses
- **>\$800 billion+** in B2B commerce
- **99%+ of mobile devices** connected with SAP messaging



- 2011 **SAP HANA** launched
- 2012 **cloud solutions** launched
- 2014 **SAP business networks** are the largest marketplace in the world
- 2015 **SAP HANA Cloud Platform**
- 2016 **SAP S/4HANA** introduced as the next-generation business suite



- **30+ years higher education** industry expertise
- **The top 20** universities with the largest endowments run SAP solutions
- **The top 10** best online universities are SAP customers



One-day financial close

With the SAP HANA platform, Unilever has accelerated financial close processes, **reducing month-end close cycles to just one day using half the staff.**¹⁸



End-to-end channel visibility

With the SAP Fashion Management application and the SAP HANA platform, the adidas Group has **complete visibility from the factory to e-commerce channels** with point-of-sale data analysis that provides a better understanding of consumers, **helping replenishment with the best-selling products.**¹⁹



Global market share analysis

With the SAP Demand Signal Management application powered by SAP HANA, Beiersdorf can analyze various product attributes and **collect intelligence to gain extensive insight into local and global market share** development, brand health, and overall market competition.²⁰

RESOURCES

Listed below is research that was used as supporting material for this white paper.

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19. "Seamless Shopping for the Sporting Life," SAP, www.sap.com/about/customer-testimonials/consumer/adidas-group.html#
20. "Taking Care of the Business of Caring for Your Skin," SAP customer snapshot, <http://www.sap.com/about/customer-testimonials/consumer/beiersdorf.html>

Note: All sources cited as "SAP" or "SAP benchmarking" are based on our research with customers through our benchmarking program and/or other direct interactions with customers

Note: Some images used under license from Shutterstock.com

A group of graduates in black gowns and white shirts are celebrating on a set of stone steps. They have their arms raised in the air, and one graduate in the foreground is holding a rolled-up diploma. The background shows a building with large white columns and a window with a diamond pattern.

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Run Simple