OFFICE OF INFORMATION TECHNOLOGY STRATEGIC PLAN 2015-2018



LETTER FROM LARRY LEVINE

It's my pleasure to share with you the Office of Information Technology's 2015-2018 Strategic Plan. Thanks to the efforts of OIT leadership and staff, and the Office of Performance Improvement, OIT has compiled an ambitious yet exciting plan for the next three years. I encourage you to read through our Strategic Plan and learn more about who we are at OIT, what we do, and most importantly, **how we may serve and add value to you**. That is the crux of our plan—a consideration of the campus mission and the role all of us, whether we be students, faculty, researchers, administration, or staff play in that mission, and how OIT may best help in our shared success.

To that end, OIT's first strategic goal is to achieve significant improvement in effectively enabling campus priorities. In other words, **we want to be your partner** and serve you in reaching your goals and advancing the campus mission.

We also want to continue to operate as efficiently as possible as an organization (OIT strategic plan goal #2) by providing the service you've come to expect in campus technology and increasing efficiencies where possible. **As your foundation**, OIT will maintain and improve efficiencies allowing for the smooth operation of processes, services, and tools you may not think about, but that make your life easier, such as networking services, email and calendaring services, IT security, and data management and storage.

Our third goal is to serve **as your IT perspective**—your source for information, additional expertise, and resources by cultivating engaged and empowered OIT employees who represent the most current and reliable IT information and can share that information with you relevant to your needs.

Finally, **OIT is your ROI.** Our fourth goal centers on providing you with the best possible return on investment by identifying and increasing the value of OIT's services.

I speak for the entire Office of Information Technology when I say we are excited about where this plan will lead, and what we can do together, in partnership with you, to not only achieve our intentions, but advance the mission of the university.

Inferie

LARRY LEVINE, AVC FOR IT & CIO

WERE **LISTENING**

At OIT, our goal is to help all of our stakeholders—students, faculty, staff, administration, and researchers—fulfill their personal, professional, and organizational missions. Doing so means listening to you and learning what you want from your Office of Informational Technology.

A few things we've learned from you:

You want to understand OIT. OIT is a lot of things to a lot of people, and does more than simply help troubleshoot computing problems or make sure you never have to worry about connecting to campus resources. What are those things and what exactly does OIT do? Your question has spurred a consideration of how we message and communicate with people across campus. This Strategic Plan is an effort to help you understand OIT and the many ways we are working for you and is an invitation to continue to talk to OIT. We welcome and need your feedback, good or bad.

You want to work with OIT. You told us you value partnering with OIT and working together to help solve problems and make the work of being you—whether it be as a student, faculty, researcher, or director of a campus organization—run smoothly. Those of you who worked with us before have said we become a valuable member of your team and represent the technology perspective. For those of you we haven't

worked with, we can't wait to get started! Often, the difference between good and great is the effective integration of technology with teamwork. Let's collaborate and see what we come up with together.

You want little pain and lots of gain. So do we! Technology should make our lives better, help us work more efficiently, and improve our capabilities. We want to share with you the latest and greatest tools, and introduce them to you in ways that will enhance your experience on campus.

You want IT experts. And you want to see that expertise help you navigate the great expanse of technology tools and resources available to you as a student, researcher, or campus business. We understand you have a lot of choices when it comes to those resources and we want to pair our expertise with your experiences and knowledge to help equip and empower you to make the best IT choice possible

Thanks for sharing. We've heard and are looking forward to working with you.

Let's work together.

UNIVERSITY **DIRECTION**



OIT will be recognized as a leader in leveraging technology for learning and discovery in order to enable CU Boulder to be a premier public university.



The University of Colorado Boulder will become a leading model of the "new flagship university" of the 21st century by redefining learning and discovery in a global context and setting new standards in education, research, scholarship, and creative work that will benefit Colorado and the world.



OIT will increase the value of IT to the University by achieving significant breakthroughs in efficiency, employee engagement, and effectiveness in enabling campus priorities, while maintaining or improving customer satisfaction and employee empowerment.



The University of Colorado will be a premier, accessible and transformative public university that provides a quality and affordable education with outstanding teaching, learning, research, service, and health care. Through collaboration, innovation, technology and entrepreneurship, CU will expand student success, diversity and the economic foundation of the State of Colorado.



GOAL: ACHIEVE IMPROVEMENT IN EFFECTIVELY ENABLING CAMPUS PRIORITIES

SUCCESS STORY

Working closely with the New Student & Family Programs and other key campus constituents, OIT successfully launched the New Student Welcome Experience (NSWE) to all incoming students. NSWE radically re-envisioned student orientation by providing incoming students with a personalized online experience, access to academic advising, and other timely information throughout the summer before their arrival on campus. This online environment was complemented by optional on-campus New Student Welcome Days to offer flexibility to our students.

Provost Moore has stated that it will likely be this project that initiates large-scale positive change in the campus' retention effort, for both international and domestic students. Additionally, this initiative won a national award from a leading learning management company, Desire2Learn — the Brightspace Excellence award for its ability to creatively use technology.

As **your partner**, we hope this project is just the beginning of key collaborations that will help us achieve CU Boulder's strategic priorities *We share the same goals and commitments.* We are dedicated to enabling initiatives that support the Chancellor's key priorities to increase student retention, revenue diversification, and reputation, as well as new campus priorities, as they arise. As your partner, an ideal meeting with you might be to brainstorm how OIT and our services can help you launch initiatives that serve the university's mission.



We will foster student success through supporting campus-wide student retention efforts. Here's how we're going to do it:

- In partnership with Academic Advising, we are designing and building a student success advising system (MyCUHub.colorado.edu) that meets the requirements and expectations of the Provost, the Vice Provost for Undergraduate Education, and the Vice Chancellor for Student Affairs.
- In partnership with the Office of New Student Welcome, Admissions and Strategic Relations, we utilized the flipped classroom model to revamp new student orientation, designing an engaging online course that proactively pushes administrative and registration information to students; enabling them to have more substantive interactions upon arrival to our campus. We anticipate more opportunities ahead to partner with these departments on student retentionrelated initiatives for new students.
- Our Learning eXperience Designers, in partnership with school and colleges, will be assisting with the redesign of selected large gateway courses, such as PSYCH 1001 and EBIO 1210, to ensure that the courses tap into the best uses of technology in support of pedagogy.

 In partnership with various schools and colleges, our Learning eXperience Designers are designing and implementing dynamic first-year experience programs to support student retention efforts.

For example, we partnered with the College of Engineering on their "Introduction to Engineering 1500" course in order to transform it from a large lecture course to a flipped classroom that resonated well with our students. Our Academic Technology Design Team works with all Schools and Colleges to support innovation and design learning through the effective use of technology as part of our service to the campus.

• We are working with the Vice Provost for Undergraduate Education, the Vice Chancellor for Student Affairs, the Associate Vice Chancellor for Enrollment Management, and the Dean of the Graduate School to modify existing IT services (MyCUBoulder, MyCUInfo and various portals) to create a unified one-portal experience for our students, and to align services in support of any need a student encounters in their CU Boulder experience.

GOAL: ACHIEVE IMPROVEMENT IN EFFECTIVELY ENABLING CAMPUS PRIORITIES, CONTINUED



We will support increasing revenue diversification and cost reduction. Here's how we're going to do it:

- In partnership with Be Boulder Anywhere, the Graduate School, and the Provost Office, we will help to meet the goal set forth by the Provost by providing the infrastructure and staffing to support both synchronous and asynchronous delivery of new and innovative professional graduate education and on-demand courses.
- We will tap into our knowledge as a national leader and develop professional Master's programs in Cybersecurity, Data Science and Computational Science, generating direct new revenue for the campus.
- We will foster efficiency and cost reduction of at least \$100,000 on the Boulder campus through targeted enterprise risk management decisions.
- We will present a plan for the monetization of campus IT assets of at least \$250,000 over the next three years.
- We will seek to leverage our Educational Broadband Spectrum to secure a lease that provides direct significant revenue to the campus.



We will assess and increase OIT's ability to nimbly respond to new priorities from university leadership. Here's how we're going to do it:

- Create mechanisms to measure OIT's effectiveness in responding to campus requests and provide transparency and proactive communication both internally and externally regarding the initiatives, projects, and efforts.
- Build a process and staffing model (including resource reallocation and temporary staffing) that can be responsive to changing priorities from university leadership.



We will support campus-wide efforts focused on increasing CU Boulder's reputation. Here's how we're going to do it:

- Be a national leader in higher education as it relates to accessibility and usability in Information and Communication Technology (ICT) to support the Chancellor's goal of creating an environment of inclusive excellence for all.
- Be transparent and provide support mechanisms for faculty, students and staff as they continue to integrate accessibility and usability into the campus culture.
- Be nationally recognized as a central IT organization that effectively and efficiently leverages technology for learning and discovery in order to enable the university to be a premier institution.
- Ensure our reputation is protected by systematically reducing cyber threats and security breaches through increasing the security of our campus web environment through remediation of all critical vulnerabilities.
- We will create an integrated computational and data infrastructure to support the research goals of the University by:
 - Growing the current computational capabilities to double the amount of grant funding currently supported.
 - Facilitating the creation of a long term data strategy to support the research goals of the University (creating of joint center between Libraries and Research Computing focused on research data and digital scholarship); and

1. THE

• Increase the national visibility of the Rocky Mountain Advanced Computing Consortium.



In July 2015, OIT partnered with Senior Vice Chancellor Kelly Fox to bring comprehensive computer management and support through OIT's Dedicated Desktop Support (DDS) service to previously under served academic and administrative units. The recognition that our world-class faculty and staff need personal computing tools that are reliable, secure and fast, was a key driver pushing for this campus-wide initiative.

Debby Weiss, Director of Libraries IT told us, "With DDS taking responsibility for Libraries' desktop support operation, the library IT department is able to focus its energies on library-unique software applications and technology that add tangible value for users. For us, a move to DDS is a total win opportunity — our faculty and staff benefit from OIT's technical expertise and desktop support that is not only fast but friendly, allowing Libraries IT staff to be more fully involved with the exciting tech developments that continue to emerge in the library world."

As **your foundation**, OIT assures efficient, consistent and professional IT services and support, so you can focus on what really matters.

FOUNDATION Creating an Efficient IT Organization for your Success

Ensuring that you have access to a robust catalog of IT services and a cadre of IT experts to help drive *improvements in your own organization is one of our main priorities.* Sure, you may not think about how efficiently your software and programs are running on a daily basis, or how seamless access to resources from off campus allows you to work from anywhere, but that is our goal. Not only do we think about it so you don't have to, we think about how to make it even better—for you!

GOAL: ASSESS AND IMPROVE OIT EFFICIENCY AS AN ORGANIZATION



We will achieve significant improvement in our ability to assess and direct process efficiencies. Here's how:

- Implement daily management across the organization.
- Implement organizational semester reviews of strategic intents and key service areas.
- Tap into industry-standard best practices (ITIL and Prosci) to create efficiencies.



We will achieve a significant improvement in our ability to assess the efficiency of and direct our human capital. In other words, foster organizational efficiency by tapping into skills, dedication and talent of the OIT staff. Here's how:

- Identify, track and support basic organizational competencies that create a culture of excellence.
- Celebrate successes in a transparent manner that builds upon a history of excellence.
- Recruit and retain excellent talent utilizing the most current practices.
- Implement new modes of operating that create efficiencies and cost savings that can be demonstrated back to campus leadership.

Guiding your IT Experience by a Fully Engaged Organization

Think of us as your window to the world of technology. We are eager to help you see the world through the perspective of IT, including how IT resources and tools may address a challenge and provide a solution, or make your life and business run more smoothly. OIT's teams and personnel are experienced, knowledgeable, and approachable, and OIT is committed to empowering them as they further develop their knowledge and skills. We look forward to offering you a more in-depth peek into the power of IT!

GOAL: ASSESS AND IMPROVE ORGANIZATIONAL HEALTH



We will assess and improve our organizational alignment with the campus culture of transparency, data-driven decisions, inclusive excellence and ethical behavior. Here's how:

- Create a method to assess OIT's cultural alignment with campus values.
- Assess and improve the health of the organization by building upon employee empowerment (e.g. do employees have the appropriate tools, responsibility, accountability, authority and knowledge to do their jobs) to the next level of employee engagement through creating, tracking and supporting an engagement metric and organizational health scorecard.
- Maintain or improve current rates of employee empowerment and the rate that our employees respond to empowerment surveys.



We will assess and improve employee engagement. Here's how:

• Launch employee engagement team and create a method to assess OIT employee engagement levels.

SUCCESS STORY

OIT is committed to fostering a culture that goes beyond simply empowering employees to do their jobs. Its vision is to connect employees to a deeper sense of purpose with regard to their work that drives enthusiasm and passion — a state we call engagement. We believe this level of engagement allows our staff to continuously learn, grow, and develop rich expertise and then share that perspective and knowledge with the campus community.

A shining example is OIT's own Shelley Knuth in Research Computing. Shelley helps scientists optimize their research through knowledge of high performance computing techniques and effective data management skills. She facilitates a program where she, and other research computing professionals, teach workshops that are tailored to high performance computing topics of interest to our users.

"It always excites me when I find out I've helped someone better understand a technical topic that they need to be able to complete their research quicker or more efficiently. I understand the struggles some of our users face, and make it a top priority to help them achieve their goals in any way I can!"

As your *IT perspective*, OIT is continuously growing and improving so that we can better serve you.

YOUR ROI

Identify the Value of OIT Services for Transparency

At OIT, your return on investment is something we think about and make good on. We get to know you, your needs, your challenges, and how best to help you accomplish your objectives. We spend a lot of time thinking about value and how to deliver it to you. That means working toward improvements in cost, services, and client satisfaction. We invest in improving our services now, to help guarantee your investment in the future.

GOAL: IDENTIFY AND INCREASE THE VALUE OF OIT'S SERVICES



We will achieve breakthrough cost reductions in targeted services while maintaining current client satisfaction rates across our services. Here's how:

- Achieve cost reductions in targeted services while maintaining current client satisfaction rates for those services.
- We will identify cost-per-delivered-unit-of-service utilizing a robust cost accounting methodology.
- Identify the alignment between consumption and funding sources of OIT's services.
- We will develop a benchmarking system to compare OIT's value to competing alternatives and in the context of our peer institutions.
- Develop continuous improvement and automation in billing.



SUCCESS STORY

OIT is strongly committed to supporting research enterprise. The Office of the Vice Chancellor for Research and Innovation (RIO) is the core engine in driving that enterprise. Historically, RIO confronted a series of challenges in trying to implement electronic research administration tools (InfoEd and a new Competition tool, among others) that adequately serve Principal Investigators' research needs. RIO partnered with OIT to bring on new expertise capable of assessing the business requirements of the research enterprise, providing the bridge between the business and the technology solutions, and ultimately ensuring implementation of the much-needed IT tools. This work is now serving as a model for similar efforts in other campus areas, which will then provide a base to coordinate such efforts into a campus administrative strategy.

This partnership illustrates how OIT business analysts can work with you to assess and address your business needs, develop technological solutions that work for you, and get you to the achievement of your strategic goals and priorities faster.

As *your ROI*, OIT is dedicated to delivering high-value solutions to accomplish your goals.

We will achieve improvements in sustainability and supportability of targeted services while not significantly increasing costs and maintaining or increasing current client satisfaction rates for those services. Here's how:

- Replace legacy phone system with new VoIP platform.
- Retire services appropriately, e.g., unix mail servers and Internet kiosk computers.
- We will be transparent about our progress in an annual campus report.

www.colorado.edu/oit 000

Be Boulder.



Contraction Technology UNIVERSITY OF COLORADO BOULDER

The University of Colorado Boulder does not discriminate on the basis of race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy in admission and access to, and treatment and employment in, its educational programs and activities.