



OFFICE OF ONEIT

Shaping What's **NEXT**



Strategic Plan '23-'27

Published June 2022

Contents

| | |
|---|----|
| Vice Chancellor & CIO Introduction | 3 |
| External & Internal Trends | 4 |
| Strategic Goals | 5 |
| Cyber Security, Physical & Virtual Infrastructure | 6 |
| Teaching, Learning & Student Success | 7 |
| Research | 8 |
| Data Accessibility, Connections & Standardization | 9 |
| Administrative Effectiveness & Student Experience | 10 |
| Diversity, Equity & Inclusion | 11 |
| Metrics | 12 |
| Overall Progress | 13 |
| Resources | 14 |



Vice Chancellor & CIO Introduction

During the spring of 2022, OneIT developed its strategic plan for 2023-2027 by meeting with stakeholder groups, analyzing impacts of external and internal trends impacting the information technology field, and reviewing strategic project initiatives currently underway. We heard repeatedly:

- Create flexible and scalable systems, frameworks and infrastructure so we can respond to rapidly changing environments.
- Break down silos and reduce barriers whether related to people, systems, process or data.
- Focus on data.
- These “meta-goals” are reflected in all of our key objectives. Since the detailed divisional plans are still being developed, it is expected that this plan will evolve over time as other initiatives are identified.

What does success look like?

- Funding for infrastructure keeps pace with inflation and performance meets customer expectations
 - Wireless can support 12 devices per person
 - Students know how to use technology and take advantage of all the opportunities provided to them
 - We are able to effectively support growing research needs
 - Community members don't have to work so hard to get usable institutional data
 - Project assessment and implementation times are reduced, fewer projects are on hold because we have accurately forecasted capacity
 - Knowledge is readily available through multiple channels
- 24/7

External Trends

Information technology changes rapidly and often. After reviewing external sources including [Educause Top 10 IT Issues](#) and the [2022 Horizon Report](#), we believe these external forces will impact our future:

Cyber threats are everywhere; it's not a matter of if, it's a matter of when and what is the response. Preparation is key.

Hybrid teaching, learning, and work will continue to complicate the environment. The demand for affordable higher education will increase pressure to maintain costs and efficiency.

Changing student demographics reinforces the need for flexible systems available 24/7 from any location.

The pervasiveness of technology (IoT) where everything is connected all the time, will continue to impact technical infrastructure design and risk.

The digital divide will continue to negatively impact students and the workforce; institutions should be prepared to offer technology, training, and support services to minimize the gaps.

The demand for non-traditional education continues to increase, driving the need for online, flexible, and agile systems and services.

Internal Trends

Internal trends unique to UNC Charlotte have also been factored into this plan:

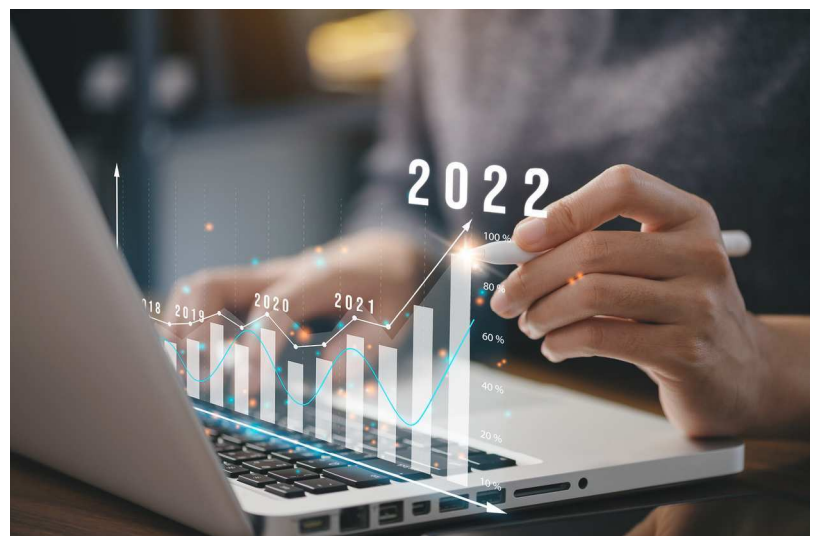
The ongoing benefits from the formation of OneIT will continue to be achieved including risk reduction, streamlining of systems and processes, and enhanced services.

As the University drives to become a leading research institution, the technical infrastructure that supports research, including support staff and processes, will evolve and grow.

In order to grow as an institution, we must develop a shared vision, improve communication, and reduce silos.

The community needs access to good data to make good decisions; data silos create work and overhead.

We need to mature IT procurement, budgeting, and project prioritization processes.



Strategic Goals



Cyber Security, Physical & Virtual Infrastructure

Provide a robust, flexible, secure infrastructure that meets current and evolving needs.

- A1: Continue to invest in wireless infrastructure
- A2: Develop strategies to effectively manage, support, and secure university-owned devices both on and off-campus
- A3: Continue to invest in state-of-the-art security systems for detection and monitoring
- A4: Develop sustainable funding model for physical and virtual environments



Teaching, Learning, & Student Success

Provide an innovative, accessible, and agile teaching and learning environment to enable student success.

- B1: Develop internship opportunities within the Office of OneIT
- B2: Reduce institutional reliance on aging desktops and laptops
- B3: Develop a cohesive computer lab strategy that accounts for the student laptop requirement, virtualization, and curricular specialization



Research

Support faculty's research needs by providing a flexible, secure research environment designed for growth.

- C1: Identify grant opportunities that will allow us to enhance and grow our high-performance computing infrastructure
- C2: Develop sustainable funding model for the High Performance Computing cluster
- C3: Develop guidelines for research data governance
- C4: Standardize process for identifying technical needs early in the grant process



Data Accessibility, Connections & Standardization

Develop a shared resource for institutional and unit data that provides the framework for data-informed decisions.

- D1: Define data guidelines
- D2: Identify data repositories, create data marts, and reduce silos
- D3: Empower community users to use and report on University data
- D4: Provide leading-edge reporting tools that make access and analysis simpler



Administrative Effectiveness & Student Experience

Partner with colleges and units to reduce redundant systems that create data silos, leverage enterprise solutions whenever possible, improve and streamline business processes, and make good decisions for the University.

- E1: Promote use of Salesforce; reduce reliance on other CRMs
- E2: Reduce paper workflows by leveraging enterprise workflow systems
- E3: Optimize mobile experience for systems
- E4: Mature IT governance decision-making, forecasting, and communication capabilities



Diversity, Equity, & Inclusion

Retain, develop, and attract diverse talent

- F1: Empower our team to grow their skills
- F2: Assure the growth and development of a diverse team
- F3: Identify methods for re-skilling IT staff to meet emerging needs

Cybersecurity, Physical & Virtual Infrastructure

To meet University needs, the Office of OneIT must provide a secure and stable infrastructure. Cybersecurity is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. Physical infrastructure includes hardware, cabling, routers, switches, data closets, and data centers; virtual infrastructure includes the servers that run the virtual environments. Consumer demands related to performance and access continue to increase and evolve. People expect speed and the ability to access university systems anywhere, anytime with limited downtime.

| Goal: Provide a robust, flexible, secure infrastructure that meets current and evolving needs. | Target Date | Status |
|---|-------------|--------|
| A1: Continue to Invest in wireless infrastructure | FY '24 | ➔ |
| A2: Develop strategies to effectively manage, support, and secure university-owned devices both on and off-campus | FY '25 | ★ |
| A3: Continue to invest in state-of-the-art cybersecurity systems for detection and monitoring. | FY '27 | ➔ |
| A4: Develop sustainable funding model for physical and virtual environments | FY '26 | ➔ |


Not Started


In Progress


Partially Complete


Completed

Alignment

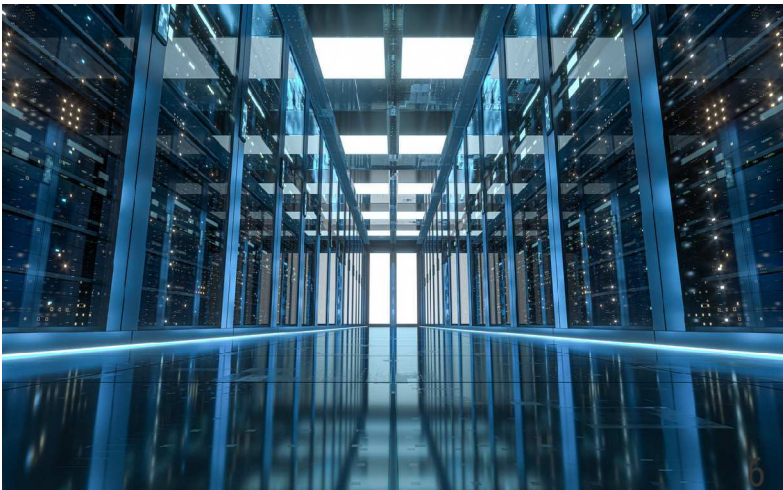
All aspects of the Shaping What's Next Plan rely on a robust, flexible, secure infrastructure.

Strategic Partnerships

Materials Management, Purchasing,
College Deans, Facilities Management

Accountable Leader

AVC Infrastructure, AVC Client
Engagement



Teaching, Learning, & Student Success

Supporting the academic mission of the University is the single most important work we do. Students and faculty expect systems that are easy to use, mobile-friendly, and meet their needs. Trying to find a balance between innovative and supportive can be challenging. It is important we continue to find that balance so that we can attract and retain students, faculty, and staff. Although focused on faculty and students, all employees performing academic and administrative work are included in this objective.

| Goal: Provide an innovative, accessible, and agile teaching and learning environment to enable student success | Target Date | Status |
|--|-------------|--------|
| B1: Develop internship opportunities within the Office of OneIT | FY '24 | ➔ |
| B2: Reduce institutional reliance on aging desktops and laptops | FY '27 | ➔ |
| B3: Develop a cohesive computer lab strategy that accounts for the student laptop requirement, virtualization, and curricular specialization | FY '26 | ⌚ |

⌚
Not Started

➔
In Progress

★
Partially Complete

★
Completed

Alignment

This objective aligns with Transform Students' Lives Through Educational Opportunity and Excellence.

Strategic Partnerships

Center for Teaching and Learning, School of Professional Studies, Library, Student Affairs, Enrollment Management

Accountable Leaders

AVC Client Engagement, AVC Enterprise Applications, Executive Director College Support, Executive Director Academic Affairs Support, Executive Director Student Affairs Support



Research

Research is an important part of UNC Charlotte’s future. Research happens all over campus. Some research relies on sophisticated systems like the High Performance Computing Center; other research is taking place in private labs and offices using both standard and high-end computers. The technology used for research must be reliable and secure. Additionally, data, data governance, data storage, and the sharing of data are critical for a successful research environment.

| Goal: Support faculty's research needs by providing a flexible, secure research environment designed for growth. | Target Date | Status |
|---|-------------|--------|
| C1: Identify grant opportunities that will allow us to enhance and grow our high-performance computing infrastructure | FY '24 | ➔ |
| C2: Develop a sustainable funding model for the High Performance Computing cluster | FY '24 | ➔ |
| C3: Develop guidelines for research data governance | FY '26 | ⌚ |
| C4: Standardize the process for identifying technical needs early in the grant process | FY '25 | ⌚ |

⌚
Not Started

➔
In Progress

★
Partially Complete

★
Completed



Alignment
This objective aligns with Power the Future Through Inquiry, Research and Creative Discovery.

Strategic Partnerships
Research and Economic Development, College Deans, HPC Advisory Committee

Accountable Leaders
AVC Infrastructure, AVC Enterprise Applications, Executive Director College Support

Data Accessibility, Connections & Standardization



Data, and the ability to understand where we've been, where we are now, and where we are going, is the cornerstone of most measurements throughout Shaping What's Next Strategic Plan. As departments attempt to align their operations, initiatives, and outcomes with the Plan, they will need the ability to report on data. OneIT will provide leadership in locating, collecting, organizing, securing, disseminating, cataloging, and provisioning data to the organizations that need it. Data quality and security are crucial to this process as well. Harnessing this wealth of information while also addressing campus-wide data security, commonality, and provisioning is critically important to the University's future success. We must reduce data silos and collaboratively agree on how to manage data.

| Goal: Develop a shared resource for institutional and unit data that provides the framework for data-informed decisions. | Target Date | Status |
|--|-------------|--------|
| D1: Define data guidelines | FY '24 | ➔ |
| D2: Identify data repositories, create data marts, and reduce silos | FY '25 | ➔ |
| D3: Empower community users to use and report on University data | FY '25 | ➔ |
| D4: Provide leading-edge reporting tools that make access and analysis simpler | FY '26 | ➔ |

⌛
Not Started

➔
In Progress

★
Partially Complete

★
Completed

Alignment

This objective aligns with Transform Students' Lives Through Educational Opportunity and Excellence, Power the Future Through Inquiry, Research and Creative Discovery, Drive Progress for North Carolina and Beyond

Strategic Partnerships

Institutional Research, Enrollment Management, Research and Economic Development, Finance/Human Resources, Student Affairs, University Advancement

Accountable Leader

AVC Enterprise Applications

Administrative Effectiveness & Student Experience

In order to grow and be effective and efficient, we need to simplify experiences by using fewer systems, reducing redundancy and embracing standardization. This goal can be accomplished by looking at system compatibility, integration capability, automation and electronic workflows. This commitment starts with the procurement process. As the IT governance process continues to mature, a primary goal will be effective prioritization. Human resource capacity planning is also part of this equation.

| Goal: Partner with colleges and units to reduce redundant systems that create data silos, leverage enterprise solutions whenever possible, improve and streamline business processes, and make good decisions for the University. | Target Date | Status |
|---|-------------|--------|
| E1: Promote use of Salesforce; reduce reliance on other CRMs | FY '27 | ➔ |
| E2: Reduce paper workflows by leveraging enterprise workflow systems | FY '26 | ➔ |
| E3: Optimize mobile experience for systems | FY '25 | ➔ |
| E4: Mature IT governance decision-making, forecasting, and communication capabilities | FY '24 | ➔ |

⌚
Not Started

➔
In Progress

★
Partially Complete

★
Completed

Alignment

This objective aligns with Transform Students' Lives Through Educational Opportunity and Excellence, Power the Future Through Inquiry, Research and Creative Discovery, Drive Progress for North Carolina and Beyond

Strategic Partnerships

Divisional leads for Academic Affairs, Business Affairs, Student Affairs, Athletics, Research and Economic Development, Institutional Integrity, University Advancement, College Deans, Procurement Department, Human Resources



Accountable Leaders

AVC Enterprise Applications, AVC Client Engagement, AVC Planning and Projects, Executive Director Business Affairs Support, Executive Director College Support, Executive Director Academic Affairs Support, Executive Director Student Affairs Support

Diversity, Equity & Inclusion

Talent issues are one of the top challenges facing all IT organizations. OnelT is committed to investing in our staff, embracing equitable hiring practices and continuing to develop an inclusive environment for our staff.

| Goal: Retain, develop and attract diverse talent. | Target Date | Status |
|--|-------------|--------|
| G1: Empower our team to grow their skills | FY '24 | ➔ |
| G2: Assure the growth and development of a diverse team | FY '25 | ➔ |
| G3: Identify methods for re-skilling IT staff to meet emerging needs | FY '26 | ⌛ |

⌛
Not Started

➔
In Progress

★
Partially Complete

★
Completed

Alignment

This objective aligns with Live Our Guiding Commitments by Leading in Equity and Engagement

Strategic Partners

Student Affairs, Human Resources, Library, College Deans

Accountable Leaders

Deputy CIO, AVC Client Engagement



Metrics



Cybersecurity & Infrastructure

128 Billion

Annual Blocked Malicious Attacks



Cybersecurity & Infrastructure

3300

Wireless Access Points



Teaching, Learning, Student Success

2.91

Ticket Resolution Satisfaction Rate



Teaching, Learning, Student Success

3.6 Days

Mean Time to Resolve



Teaching, Learning, Student Success

13K

Managed Endpoints



Teaching, Learning, Student Success

114

Students Trained by OneIT Annually



Research

169

Researchers Using the HPC in Last Year



Research

116

Active Data Security Plans



Administrative Effectiveness &
Student Experience

260

Completed Projects



Diversity, Equity & Inclusion

120+

Virtual Trainings

Overall Progress

Not Started

In Progress

Partially Complete

Completed

| GOALS | FY '23 | FY '24 | FY '25 | FY '26 | FY '27 | Status |
|--|--------|--------|--------|--------|--------|--------|
| Cyber Security, Physical & Virtual Infrastructure | | | | | | |
| A1: Continue to invest in wireless infrastructure | | X | | | | ➔ |
| A2: Develop strategies to effectively manage, support, and secure university-owned devices both on and off-campus | | | X | | | ★ |
| A3: Continue to invest in state-of-the-art security systems for detection & monitoring | | | | | X | ➔ |
| A4: Develop sustainable funding model for physical and virtual environments | | | | X | | ➔ |
| Teaching, Learning, & Student Success | | | | | | |
| B1: Develop internship opportunities within the Office of OneIT | | X | | | | ➔ |
| B2: Reduce institutional reliance on aging desktops and laptops | | | | | X | ➔ |
| B3: Develop a cohesive computer lab strategy that accounts for the student laptop requirement, virtualization, and curricular specialization | | | | X | | ⌚ |
| Research | | | | | | |
| C1: Identify grant opportunities that will allow us to enhance and grow our high-performance computing infrastructure | | X | | | | ➔ |
| C2: Develop sustainable funding model for the High Performance Computing cluster | | X | | | | ➔ |
| C3: Develop guidelines for research data governance | | | | X | | ⌚ |
| C4: Standardize process for identifying technical needs early in the grant process | | | X | | | ⌚ |
| Data Accessibility, Connections & Standardization | | | | | | |
| D1: Define data guidelines | | X | | | | ➔ |
| D2: Identify data repositories, create data marts, and reduce silos | | | X | | | ➔ |
| D3: Empower community users to use and report on University data | | | X | | | ➔ |
| D4: Provide leading-edge reporting tools that make access and analysis simpler | | | | X | | ➔ |
| Administrative Effectiveness & Student Experience | | | | | | |
| E1: Promote use of Salesforce; reduce reliance on other CRMs | | | | | X | ➔ |
| E2: Reduce paper workflows by leveraging enterprise workflow systems | | | | X | | ➔ |
| E3: Optimize mobile experience for system | | | X | | | ➔ |
| E4: Mature IT governance decision-making, forecasting, and communication capabilities | | X | | | | ➔ |
| Diversity, Equity, & Inclusion | | | | | | |
| F1: Empower our team to grow their skills | | X | | | | ➔ |
| F2: Assure the growth and development of a diverse team | | | X | | | ➔ |
| F3: Identify methods for re-skilling IT staff to meet emerging needs | | | | X | | ⌚ |

Resources

The following inputs were used to form this plan:

- Five focus group listening sessions were held that involved the OneIT Executive team, faculty and staff members of the Technology Portfolio Committee, students and OneIT staff. A total of ~200 people provided input.
- Educause Top 10 Issues for '22: <https://www.educause.edu/research-and-publications/research/top-10-it-issues-technologies-and-trends/2022>
- 2022 Horizon Report: <https://library.educause.edu/resources/2022/4/2022-educause-horizon-report-teaching-and-learning-edition>
- Student Affairs Student Survey Regarding Technology Questions; this survey is administered to graduating seniors annually and provides a general sense of their satisfaction with technology:

<https://docs.google.com/spreadsheets/d/1q5th2WxajbWr0oXdeo0dM0K2ErJA44Cv/edit?usp=sharing&oid=104918100613580024441&rtpof=true&sd=true>

