Information Technology Strategic Plan
2021 – 2025

Information Technology Services (ITS) supports the College of Staten Island community in the use of technologies that will enhance and strengthen the teaching and learning process to foster student success, enhance support services, and provide for effective administrative systems. ITS supports current technology at CSI and plans for and implements the evolution of future technology.

Information Technology Services

Application and Web Development

This area supports the community by developing applications for both Academic and Administrative departments as well as developing and maintaining an ADA compliant website for the college.

Classroom Labs and Smart Classrooms

Information technology supports all technology in classroom labs and smart classroom to facilitate excellence in teaching and learning for students and faculty. These classrooms are equipped with technology and software that are maintained on regular basis following a lifecycle replacement strategy in addition to supporting faculty requests to advance their learning environment.

Collaborative Technology (CT)

The CT group supports Microsoft Exchange, the College's email for faculty and staff. Through a CUNY-wide partnership with Microsoft, students have access to email using Office365. Accounts to login to computers are also managed by the CT team. Telecommunications is part of CT as well, managing the campus wide telephone systems.

Helpdesk

The HelpDesk acts as a central point of contact for all technical support issues including hardware and software questions, consulting, installations, networking, and troubleshooting. The HelpDesk serves as CSI's first line of defense to address technology problems, questions, and concerns.

Media Services

Media Services provides a wide range of services, including Smart Classroom and traditional audio-visual support, video conferencing, digital video, and still image production.

Networking

Networking Services group provides the college community a reliable, secure and efficient network. We provide network connectivity to more than 15,000 users, using a wide range of computing devices utilizing wired and wireless connectivity.

Security

Information Technology Services ensures strict security protocols and conforms to CUNY guidelines. A security policy is necessary to maintain a protected network and prevent malicious attacks against software and hardware connected to CSI's network.

Smart Environment

The College community can take advantage of a variety of services that leverage cloud offerings and innovative technologies such as virtual reality, Microsoft applications, virtual labs, just to name a few.

Training and Operations

The College community receives training on supported technologies through a variety of training methods including Virtual and In-Person training.

Developing the Plan

The Information Technology Services leadership team together with the Information Technology Advisory Council (ITAC) and the Academic Technology Committee (ATC) developed the strategic plan for 2021 – 2025. In addition, input was gathered from students, faculty, and staff to determine the needs of the College. Research was also performed to understand the trends in technology in higher education through expert organizations such as Educause and Gartner. Finally, a **SWOT analysis** was conducted to evaluate strengths, weaknesses, opportunities, and threats facing CSI today and in the future.
ITAC coded the SWOT identifying commonalities and trends and subsequently used this information as the basis for the goals and objectives outlined in the ITSP.

SWOT Analysis

	Positive	Negative
Internal	**Strengths** (What does IT do well?) • Customer Service/Support • Flexibility • Out of the box thinking – do more with less • Dedicated staff • Incident response time • Innovative approaches to using technology • Teamwork • Ability to work with the CSI staff to develop proficiency in front line users for software products. • Thorough vetting process of new software to ensure functionality and compliance. • Dedicated staff. This has always been super good at CSI.	**Weaknesses** (What can IT do better?) • **Ins**ufficient staffing • Funding • College involvement with IT for new initiatives • Integration with CUNY • Log Management • Employee skills gap? • Outdated Equipment • Ability to be agile and provide and support new software based on changing needs of a department in a timely manner. • Budgetary constraints that limit ability upgrade hardware • Underfunded but I also do not see the Robot or Campus-wide screens with schedule of classes or computer availability so necessary. Most students have smart phones and can use that, if they want to. Another point for consideration: I have never understood why the Academic Schedule has not been downloadable directly into Apple's Calendar app. • College culture
External	**Opportunities** (How can IT grow?) • Cloud Computing • Leveraging CUNY • Improving Processes • Virtualization • IOT • Virtual reality • Unified communications • Training • Opportunity to leverage CUNY initiatives for grants and funding. • Unified communication (CUNY wide, and see Academic Schedule). Guest login on other campuses and at the GC	**Threats** (What can stop IT from succeeding?) • BCDR • Security/Phishing/Data Breach • Unfunded IT mandates • Outdated campus infrastructure • Procurement mandates • Deferred maintenance • Computer life cycle • Communication with campus?? • Prioritization of funding elsewhere • As constituencies need to find solutions for local issues alternative workflows/systems are being developed that may not be as efficient resulting in a drain on human resources. • Unfunded IT mandates

Information Technology Trends in Higher Education

This plan will address key priorities for CSI's use of technology over the next four years. Thus, it is important for the College to understand significant trends in higher education's use of information technologies and anticipate how to make purposeful and timely decisions to capitalize on these trends. Information Technology Services leverages Educause and Gartner in order to provide insights on these trends and strategies.

Educause

Educause has provided insight on how higher education leveraging technology will play in the recovery from the pandemic. "How can technology help our ecosystem emerge stronger and fitter for the future?" The below diagram shows the use of technology that will assist higher educational institutions in their approaches to restore, evolve, and transform.

Top IT Issues, 2021: Emerging from the Pandemic

RESTORE	EVOLVE	TRANSFORM
#1. Cost Management Reducing institutional costs and increasing workforce effciency	**#1. Student Success** Advancing student support services to help students attain academic and career goals	**#1. Institutional Culture** Contributing to a culture of transformation
#2. Online Learning Strengthening online and hybrid education	**#2. Equitable Access to Education** Providing technologies, support, and policies for diverse users	**#2. Technology Alignment** Identifying and applying sustainable digital strategies and innovations
#3. Financial Health Revising budget models and IT governance	**#3. Online Learning** Progressing from emergency remote teaching to online learning	**#3. Technology Strategy** Developing an enterprise architecture that keeps pace with strategic change
#4. Affordability & Digital Equity Providing increased support for students' technology needs and enabling technology availability	**#4. Information Security** Developing a cybersecurity operations strategy	**#4. Enrollment & Recruitment** Exploring and implementing creative holistic recruitment solutions
#5. Information Security Providing information security leadership	**#5. Financial Health** Partnering to develop new funding sources	**#5. Cost Management** Focusing on digital transformation

Source: https://er.educause.edu/articles/2020/11/top-it-issues-2021-emerging-from-the-pandemic

Gartner; Higher Education Institutions

Gartner provides insights on trends in higher education in relation to COVID-19's impact to organizations response to the crisis and the exploration of new ways to operate.

2021 Gartner Top 2021 Strategic Technology Trends

Trends fall along three themes: People centricity, location independence and resilient delivery:

- People centricity: Despite the pandemic changing how many people work and interact with organizations, people are still at the center of all business — and they need digitalized processes to function in today's environment.
- Location independence: COVID-19 has shifted where employees, customers, suppliers and organizational ecosystems physically exist. Location independence requires a technology shift to support this new version of business
- Resilient delivery: Whether a pandemic or a recession, volatility exists in the world.

Source: https://www.gartner.com/en/information-technology/trends/2021-top-strategic-technology-trends-gb-pd-brnd.html?utm_source=bing&utm_medium=cpc&utm_campaign=RM_NA_2020_ITTRND_CPC_LG1_2021-TSTT-GB-PD-BING&utm_adgroup=1145691839970872&utm_term=%2Bgartner%20%2Btechnology%20%2Btrends&ad=71605838049113&msclkid=44b37ca1960d100ffa7a2300faf21fd8

Reviewing initiatives from Universities and Colleges help provide further insight on developing the ITSP. For example, Arizona State University implemented a digital backpack as "an enduring part of the student learning experience." While CSI has similar technology offerings available to students, it is important to include in our strategic planning how to improve communication and methods of showcasing technology services.

Information Technology Strategic Plan 2021 – 2025

Values

The goals and objectives of the Information Technology Strategic Plan was developed using the **4M Principle** in order to **M**aximize strengths, **M**inimize weaknesses, **M**ultiply opportunities, and **M**itigate threats/risks.

Vision

Information Technology **STRIVES** to provide services in order to support the **Success** of the community we serve, foster the effective use of **Technology** ensuring that services offered are **Resourceful, Innovative, Visionary,** and **Empowering.**

Goal 1: Innovation

Provide for innovative technological solutions that foster teaching, learning, research, and operations.

Objectives

1. Provide technology solutions in support of flexible, collaborative, and inclusive learning environments for achieving educational goals.
2. Leverage technology, resources, and training opportunities in order to ensure improved services, support, and research.
3. Work with Academic and Student Affairs in order to support online initiatives and student services

Goal 2: Funding, Resources, and Budget

Continue to optimize resources and stay within budget constraints.

Objectives

1. Leverage training opportunities, repositories, and knowledgebase resources that are readily available to the college community.
2. Align projects with the capital improvement plan and utilize CUNY purchasing agreements.
3. Make data driven decisions in order to inform technology purchases and services through prioritization and optimization.
4. Streamline Information Technology and College processes in order to promote greater autonomy and improved use of resources

Goal 3: Communication; Transparency – Culture of Communication

Provide for tools and technology that support collaboration both physically and virtually in order to foster engagement.

Objectives

1. Expand on the IT Governance Structure through continued collaboration with Academic Divisions and Community of Users.
2. Enhance communication efforts evidenced by monthly newsletters, brown bags and workshops, and the IT Doctor.
3. Assist the community in researching alternative ways of conducting business processes that could leverage technology.

Goal 4: Reliability

Provide recommendations and solutions that will support a reliable infrastructure.

Objectives

1. Provide resources and a sustainable technology framework that will support faculty research and engaging learning environments both on campus and in distance education.
2. Leverage hosted solutions where feasible (CUNY; SaaS)
3. Ensure services are available and proper backup procedures are being followed

Assessment and Next Steps

An important culmination of this process is communicating the plan to the College community. This will ensure the vision for technology use is shared among all of the constituencies served. Future communication on both changes to and progress on the plan will also be conveyed on a continuing and timely basis. This plan will continue to evolve and align with the vision and mission of the College.

It is important to establish a mechanism for overseeing the implementation of strategic and tactical technology plans, as each of the objectives requires an owner who will be responsible for moving the individual objective forward. Furthermore, it is imperative that the plan be considered holistically. A review of all objectives, regardless of the goals they are intended to support, reveals patterns and identifies common activities that can be leveraged in support of these goals.

This plan should serve as a basis for the annual work plan process which outlines tactical action items that align to the goals and objectives. Additionally, as some goals are dependent on funding, the ITSP will feed into the budgeting process for technology for the coming three years. The implementation grid will be used to manage the progress of achieving the objectives outlined in the ITSP.

Implementation Grid Sample

Goal 1: Innovation Provide for innovative technological solutions that foster teaching, learning, research, and operations.							
			Fiscal Year				
Objective	Dependencies	Responsible Party	2021	2022	2023	2024	2025
Provide technology solutions in support of flexible, collaborative, and inclusive learning environments for achieving educational goals.	Faculty; staff; technology; budget	IT	List here what was done	List here what was done	List here what was done	List here what was done	List here what was done