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I. Introduction

This document presents the Technology Strategic Plan for The City College of New York (CCNY). The purpose of this plan is to provide a “roadmap” for the Office for Information Technology (OIT) to implement and deliver services that support the strategic mission and goals of The City College of New York.

This planning document is part of an overarching planning process that ensures the following:

- A shared vision for technology that is consistent with the College’s strategic vision, mission, and goals
- Alignment of technology initiatives with institutional priorities
- Dissemination of knowledge about technology needs, constraints, and planning
- Addressing institutional, academic, and administrative needs through the use of technology
- Identifying required funding levels for technology

This process assures that technology initiatives are selected, planned, and managed at an institutional level and are sustainable from a fiscal, people, and process perspective to ensure the ongoing delivery of services.

The intent of the plan is to focus on the integration of people, processes, products, and technology in order to deliver optimal value to the institution. Value translates into the efficient and effective use of technology, more streamlined processes, and timely access to accurate information to make better decisions. This will allow The City College of New York to subsequently deliver more value-added services to its students and improve its efforts in the recruitment, retention, and enrichment of its student body.

Strategic Planning must be an ongoing process. The specific outcomes and tactical steps set forth in this document will be periodically reviewed and assessed. The City College of New York’s Technology Advisory Committee (TAC) will assume subsequent responsibility for reviewing and updating these objectives annually against the goals established through the ongoing strategic planning process.
II. Executive Summary

Across higher education there is a major shift in the role of information technology—IT is no longer regarded as a tactical resource but as a strategic asset that can be leveraged to achieve transformational results. The President’s ongoing strategic planning process has articulated the future vision of The City College of New York and has created the opportunity to now strategically align IT, college-wide, with that vision. Through the collaborative effort and energy of the City College of New York community, we have developed a technology strategic plan that will guide the College in its strategic use of technology.

The technology strategic planning process represents a thoughtful approach to discover and address issues, while also identifying initiatives that have the potential to offer broad college-wide benefit. This effort, through consensus, was community driven and developed on an accelerated timeline. It provides insight for decision-making and prioritization and competitive alignment with peer institutions. It also recognizes resource constraints and the need for flexibility. This plan is designed to provide a foundation for granting opportunities, and to better leverage outside relationships such as donors, alumni, CUNY-CIS, key technology vendors and other partnerships.

Successful implementation of this plan will require embracing a new approach to technology and support for multi-year planning and funding. The City College of New York technology strategic planning effort represents an opportunity to align technology in support of The City College of New York’s overall mission for years to come.

Respectively submitted,

Praveen Panchal
Vice President and Chief Information Officer
Office of Information Technology
The City College of New York
III. Terminology

Since the terms involved in strategic planning are often interpreted differently, the following is a clarification of how strategic planning terms are used within this Technology Strategic Plan.

- **Technology Vision** – The desired "future state" for the use of technology across the College.

- **Technology Mission Statement** – OIT’s role within the College; the commonly held belief regarding how OIT aligns and supports the mission and goals of The City College of New York.

- **Technology Guiding Principles** – Key value statements that govern the decisions and actions of the OIT department with regard to the acquisition and use of Technology throughout the College.

- **Technology Goals** – Long-term, major targets or end results related to the value and growth of the College.

- **Technology Objectives** – The particular actions or means that will make it possible to achieve the goals.

- **Technology Tactical Proposals** – Short-term tasks/projects for which measurable results can be obtained toward the achievement of technology goals.
IV. A Vision for Technology at the City College of New York

All facets of the instructional and administrative missions of The City College of New York critically depend on a reliable, high-quality and pervasive technology infrastructure. This infrastructure encompasses network hardware, software, desktop technology, telecommunications systems, academic and instructional technology, and personnel. Technology is intimately woven into the fabric of essentially all programs on City College’s campus, thereby impacting virtually every student, faculty and staff member.

The City College of New York’s Office of Information Technology (OIT) envisions a "future state" where the use of technology permeates the entire College, providing for collaborative teaching and learning activities. Specifically, students, faculty and staff will have universal access to information and services using technology regardless of time of day or location. This desired future state includes a faculty that is well trained in the use of those technology tools that can be applied to their individual pedagogical approaches for improving teaching and learning both in their classrooms and in online environments. It also includes an administration and staff who use technology to operate the College more effectively and efficiently. It is a time when technology supports the need for those students, faculty and staff members with disabilities to access online information, data, and services comparable to that accorded individuals who do not have disabilities. Finally, this vision codifies the desire for an expanded learning environment, which extends the classroom beyond its physical boundaries. A vision that encourages and facilitates a learning community to provide for the development of ethical leaders and informed citizens who contribute to a more just community and world. The OIT’s vision for the use of technology at The City College of New York is:

“To fully support key college goals and strategic objectives and to be recognized as the leading division for innovative technological advancements in teaching, learning, research and administrative services within CUNY and beyond.”
V. The Mission of the Office for Information Technology (OIT)

OIT has the primary responsibility for ensuring that the College’s vision for the use of technology is achieved. It is therefore the role of this division to provide strong leadership, technical expertise, and effective and efficient support services for all academic and administrative areas within the College. In order to accomplish its goals, OIT must have a clearly written mission statement that is widely communicated to all stakeholders of the College (faculty, staff, students, alumni).

At The City College of New York, the mission of the Office for Information Technology is:

“To empower the user community to achieve the highest level of academic and administrative success through the effective use of technologies; facilitate academic innovations in teaching, learning, research and scholarship; and deliver excellent technology services in support of City College's mission.”

OIT is committed to collaborating with the college community to provide excellent technology products and services and recognizes that the college community has the best chance to succeed when we, within the OIT, strive for excellence and uphold high standards in our day-to-day operation.
VI. Information Technology Guiding Principles

If OIT is to be truly successful in achieving its vision and accomplishing its mission as identified above, it is not sufficient to simply do things right; the division must do the right things. Critical to this point is the need to establish a set of guiding principles, with "principles" being defined as "simple, direct statements that describe what is determined to be the best practice."

The following is a list of OIT’s Guiding Principles for Information Technology, which is based on the above vision for the use of technology at The City College of New York.

- Technology provides The City College of New York with a strategic advantage in achieving its vision of educational excellence within and beyond the classroom.

- All City College of New York students, faculty and staff will have appropriate access to a computing platform, supporting a basic collection of standard software, capable of being connected to the College’s network at any time and from anywhere.

- The College’s inventory of computers will be technically maintained at a level capable of supporting current releases of appropriate software, Web access, and other basic tasks for computation, administration, research, and communication.

- The College will always embrace the role of an early adopter of technology that supports teaching and learning, but will prefer to be a near follower in business and administrative systems, migrating to or adopting this technology early in its life cycle, but only after it has been proven viable by others.

- OIT will strive to resist following rising and falling trends by monitoring and effectively evaluating only those opportunities that improve current operations and add real value to CCNY’s needs.

- OIT’s technology strategy will be aligned with and support the overall strategies of the College and will be considered a critical component in the College’s ongoing strategic planning and budgeting processes.

- OIT will contain overall information technology support costs by centrally supporting only a specified selection of hardware and software resources that will be replaced/updated on a planned, technological life-cycle basis.
VII. Current state of IT at CCNY:

Over the past four years, the Office of Information Technology (OIT) has undergone a dramatic expansion and greatly improved its service offerings. Major changes have been implemented, notably in classroom delivery, via smart classrooms deployed in Shepard Hall, Marshak, Steinman, North Academic Center (NAC) and Harris Hall. In addition, the wireless coverage was enhanced in all libraries; the NAC computer lab was renovated to expand into the Tech Center (a state-of-the-art computing, learning and training resource center, located on the ground floor of the Cohen Library); and a brand new email system (CityMail) replaced the old Pelican system for students.

However, despite these improvements, exasperated users continue to ask: Why is connecting to the wireless network so infuriating? Why is the email system so lacking in basic features. Why is it so unreliable? Why can’t I easily utilize my digital address book to conveniently email my CCNY peers and make calendar appointments? Why am I so frequently hindered by the spinning wheel on my computer? Why classrooms have not been equipped with the state-of-the-art classroom technologies? How the college can jump into the online bandwagon - full force - when faculty cannot fully adopt Blackboard and other tools due to the Internet connection being so unreliable? Why doesn’t IT at CCNY run as a utility that is “always on”?

Correcting these and graver underlying shortcomings will require the OIT to address significant challenges in the following areas: **Staffing** - The legacy of decentralized staffing priorities has created a “silo mentality” which is prohibiting Central IT from effectively leveraging valuable human and technology resources deployed throughout the college. **Network** - The current infrastructure including core, distribution and access layer switching hardware and network cabling in all buildings – is perilously obsolete, without immediate planning and action, catastrophic network failures are inevitable. **Email** - We have too many decentralized servers and the Pelican system is unstable and lacking in critical features such as shared calendaring, messaging and storage space. **Security** - The current cyber-attacks are becoming more targeted and sophisticated than ever before. Obsolete technology and inadequate professional development are creating critical vulnerabilities. **Computer Equipment and Classroom Technology** – The technology in classrooms has not kept up with what is available. The faculty struggles with obsolete equipment that are not user friendly to make entire pedagogical experience convenient and satisfying. Also, desktops across campus are 6-7 years old and need to be replaced.

To address these issues the Office of Information Technology (OIT) requires:

- Strong executive and administrative support in developing and implementing policies, procedures and adapting new technologies.
- That the college community understands well enough the challenges confronted by OIT and has realistic expectations of what the OIT can and cannot deliver; whether the OIT has the ability to adapt and change to take on new initiatives; and whether the OIT has the depth and breadth to support changes without disrupting existing systems – without being reactive to a particular situation or short-term systems failure.
• Opportunities for professional advancement and promotion – many skilled full-time staff members have been working in the same job title for many years not only without a pay raise or promotion but also without any merit increase.
• Conversion of part-time hourly and college assistants to full-time positions to create a “sense of belonging” and professional advancement opportunities.
• Information Technology staff professional development to focus efforts on improving infrastructure design, customer service, and service delivery.
• Significant financial and other investments to modernize CCNY’s entire technology landscape – effective IT requires appropriate capital and operational allocations necessitating an investment of time, resources and people.
• Appropriate work space for OIT staff possibly under “one roof” - Scattered and unfit physical spaces occupied by the OIT staff are not conducive to collaboration and high level of productivity.
• Community engagement with and active participation from students, faculty, and staff to guide the prioritization and adoption of technology.
• Finally, patience from the college community while OIT builds a robust technology infrastructure, prepare ourselves to deliver the “five-nines” of reliability and builds a strong customer service-oriented workforce.
VIII. Technology Strategic Goals 2013-2016:

Based upon the priorities identified in the previous section along with an environmental scan and associated discussions with faculty, staff, and students, the following key Technology Strategic Goals have been identified. These goals are designed to be in alignment with the 2013 – 2016 City College of New York Strategic Plan (specific alignments to be identified later).

OIT Strategic Goals 2013-2016

**Strategic Goal 1: Implement and Maintain the City College of New York technology infrastructure to support the needs of faculty, staff, and students.**

Implement and maintain CCNY’s technology infrastructure that is robust, scalable, and secure to meet the needs of the College over the next three years and beyond. Ensure that the infrastructure is capable of growth and expansion, planned for adaptation of new technologies and applications, and accommodates specialized systems and software needed for instruction, administration, research, and assistive technologies.

**Strategic Goal 2: Encourage and Support the use of technology in teaching, learning and research.**

Ensure that teaching and learning resources are well equipped and supported in order to provide a capable learning environment for faculty and students. Collaborate with faculty to understand ongoing technology needs in teaching, learning and research. Establish collaborative processes with academic affairs and administration to identify funding sources and facilitate grant proposals.

**Strategic Goal 3: Encourage and Support the use of technology in administrative functions.**

Ensure that existing systems used for administrative functions are adequately maintained and productively utilized in support of staff, faculty and student needs. Facilitate new technological solutions for improved business processes to increase staff productivity and service level across campus.

**Strategic Goal 4: Provide effective, responsive, and efficient technology support to the campus community.**

Ensure that the customer service is the primary focus of OIT and that staffing and skill levels are adequate to address administrative and academic technological support needs. Establish and implement appropriate policies, operating procedures and best practices to support excellent service delivery.
IX. Objectives and Action Plans 2013-2016:

Strategic Goal 1: Implement and Maintain the City College of New York technology infrastructure to support the needs of faculty, staff, and students.

Objectives:

1. Build a robust and reliable technology infrastructure across campus:
   a. Provide a high-speed, high bandwidth, secure and reliable network that supports uninterrupted wireless access, instructional technology and administrative and research computing.
   b. Maintain desktop hardware and software for optimal performance.
   c. Replace existing faculty and staff email systems.
2. Provide anytime anywhere technology access for faculty, students, and staff.
3. Maintain an IT business continuity and disaster recovery plan to reflect increasing levels of recovery based on systems priorities.

Action Plans 2013-2016:

- Build and deliver a campus wide state-of-the-art robust, reliable and secure network infrastructure to replace existing obsolete hardware and cabling system. The new infrastructure will support high-speed and high-bandwidth needs of the campus in uninterrupted wireless access, instructional technology and administrative and research computing.

- Working with CUNY-CIS and several system vendors, explore the possibility of migrating from IPv4 to IPv6 protocol over next three years.

- Expand wireless deployment and improve wireless service. Develop and publish a Wireless Master Plan in order to communicate to the campus community the implementation schedule, timing, and location priorities for wireless upgrades and improvements.

- Develop a multi-year refresh plan for all network infrastructure hardware that are coming to an end-of-life.

- Develop a four-year refresh cycle for all desktop technology (faculty, staff, and labs) on a 1/4 per year rotation. Implement similar software upgrade cycles for faculty and staff desktops.
• Expand data and information storage capabilities with built-in security to address growing faculty, staff, and student storage demands and data warehousing needs.

• Deploy web application platform such as Microsoft SharePoint to provide intranet portals, document & file management, collaboration, social networks, extranets, websites, enterprise search, process integration, workflow management and business intelligence.

• Replace multiple existing faculty and staff email systems through consolidation into one state-of-the-art, reliable and function rich system such as Microsoft Exchange.

• Continue efforts to embrace the “virtualization” of all OIT physical servers and desktops in order to take advantage of technology advancements in this area for energy savings, efficient systems management and disaster recovery requirements.

• Explore opportunities to “outsource” technology infrastructure and services (such as cloud services, consulting services, etc.) where feasible.

• Evaluate current data backup strategies and investigate solutions to properly store and protect the College’s critical data. Ensure that all data is easily retrievable in the event of a system disruption in services.

• Develop and maintain a business continuity and disaster recovery plan to reflect increasing levels of recovery based on priorities for systems that are mission critical.

Strategic Goal 2: Encourage and Support the use of technology in teaching, learning and research.

Objectives:

1. Use technology where it enhances teaching and learning.
2. Support efforts to expand hybrid/online course offerings.
3. Work closely with faculty to develop a migration plan to add/upgrade appropriate technology in existing classrooms.
4. Provide support for research needs of the faculty through currently available OIT resources and seek new resources to strengthen these needs.

Action Plans 2013-2016:
• Have the Technology Advisory Committee (to be created - refer Strategic Goal 4, Objective 1) assign a subcommittee to work with Academic Affairs to review and recommend strategies to incorporate usage of technology into degree programs where appropriate.

• Promote Blackboard LMS across campus to increase adoption rate. Increase efforts for professional development and support for Blackboard for faculty and students.

• Provide full support for College’s hybrid/online course offerings through OIT resources.

• Work closely with Library administration to determine specific technology needs necessary to provide faculty and students with reliable, ready access to digital library services, collections, and tools as needed.

• Define the minimum baseline for technology in all classrooms. Determine the number of technology-equipped classrooms needed over the next three years to support instructional needs. Develop a conversion plan to increase the number of technology-equipped classrooms over the next three years. Determine annual costs to convert/retrofit and support.

• Have the Technology Advisory Committee (to be created - refer Strategic Goal 4, Objective 1) assign a subcommittee to work with faculty to recommend strategies to maintain and support classroom technology.

• Ensure that a consistent support is provided for faculty research through existing and emerging technologies and professional resources available externally and within OIT. Seek new resources whenever required to strengthen research efforts at CCNY.

• Facilitate IT operation of the state-of-the-art Science Research Facility (ASRC/CCNY) in south campus through available and new OIT resources.

**Strategic Goal 3: Encourage and Support the use of technology in administrative functions.**

**Objectives:**

1. Provide access to on-going training to end-users for all systems used for administrative purposes.
2. Maintain and support the College’s administrative information systems (CUNYfirst and other local systems).
3. Build capabilities for data-driven business decision-making and facilitate increase in efficiency and productivity through process improvements using electronic tools.
4. Facilitate backup and recovery capabilities for all administrative data.
5. Ensure integrity and security of non-public university data and maintain administrative systems with utmost security.
6. Test and evaluate, upgrades, patches and new software version releases before applying to production systems.

**Action Plans 2013-2016:**

- Address ongoing faculty, staff and student professional development needs – Conduct annual assessments to determine training needs. Based upon these results, establish the appropriate training using the preferred times and modalities identified by users for training. Annually assess the effectiveness of this training. Develop effective methods to market and communicate the availability of these offerings.

- Work with CUNYfirst and other administrative system’s users to identify ongoing issues and problems associated with using these applications. Maintain a User’s Group to address and resolve technical issues and training needs.

- Ensure that all key capabilities of the CUNYfirst system are being fully utilized by CCNY faculty and staff. Build capabilities for data-driven business decision-making using Business Intelligence (BI) tools and data dashboards.

- Replace existing paper-based administrative functions by implementing electronic workflow processes using latest tools to improve customer satisfaction and increase staff efficiency and productivity.

- Develop an administrative data backup and recovery plan for all mission critical applications. This also includes individual desktop file backups of designated employees with crucial responsibilities.

- Ensure that all administrative systems are fully secured and conduct a full security audit of these systems at least once a year as mandated by the CUNY Office of Chief Information Security Officer (CISO) under security attestation.

- Ensure that users are well aware of security requirements mandated by the CUNY Office of Chief Information Security Officer (CISO) under security attestation. Conduct regular security workshops for faculty and staff to raise awareness of IT security not only in dealing with non-public university information but also in their day-to-day operation.

- Ensure that all systems across campus are current with latest software updates and security patches. Develop technical capabilities to perform this function automatically on a regular basis.
Strategic Goal 4: Provide effective, responsive, and efficient technology support to the campus community.

Objectives:

1. Create and institutionalize a permanent Technology Advisory Committee (TAC) with representation from faculty, staff, and students.
2. Seek continuous improvements in user support, customer service, and pro-active initiatives to improve customer satisfaction.
3. Continually assess needed job skills and number of OIT staff and organizational structure required to support current and future levels of technology services.
4. Implement appropriate training, career progression, and professional development opportunities for current OIT personnel.
5. Improve interaction with academic departments to recruit students and interns in needed areas to assist in maintaining necessary staffing for technology services.
6. Establish and implement appropriate policies, operating procedures and best practices to support excellent service delivery.

Action Plans 2013-2016:

- Create and institutionalize a permanent Technology Advisory Committee (TAC) with representation from faculty, students and staff. Hold at least one meeting per semester to discuss current and future technology issues across campus. This will also allow OIT to be more transparent with user community.

- Consider “rebranding” the existing OIT organization by eliminating the word “information” to reflect its responsibilities beyond the informational aspects of technology. Consider “Division of Technology Services” (DoTS).

- Improve communications between OIT and users by participation in committees, attendance at faculty meetings, etc. Encourage open dialog to understand faculty, staff and student needs, expectations, and issues. Build and enhance these relationships in order to provide input for decisions to guarantee consistency with overall/long-term technology plans.

- Regularly assess and continuously improve OIT service desk operation to deliver an excellent customer service to CCNY users. Create service catalogs and service level agreements to ensure that users have better understanding of what service OIT can deliver with its constraint resources.
- Develop regular communications from OIT to all faculty, staff, and students that keep users abreast of any upcoming moves, additions and/or changes. Use this vehicle to also provide useful tips and information about computers and software (such as Microsoft Office), security alerts, and training schedules.

- Assess current organizational structure and support strategies and make modifications as needed to provide optimal user service. Explore needs/options for providing support coverage for evening and weekends not only for Tech Center and NAC lab but also for classrooms.

- Implement professional development and career advancement plan for OIT staff to ensure that they are current on the technological advancements, have growth opportunities and be productive within CCNY IT organizational structure. Seek opportunities to recruit CCNY students and interns to augment cost effective OIT staff needs.

- Review compensation levels for IT professionals at other peer institutions in surrounding communities and seek competitive compensation within the context of overall College salary guidelines for OIT staff.

- Implement real-time monitoring of IT systems and processes to constantly assess their “health” and collect key performance indicators (KPIs) to examine their availability (or up time). Use these KPIs to develop a plan to ensure that sufficient resources are allocated to achieve an uptime of 99.999%.

- Establish and implement appropriate policies, operating procedures and best practices to support not only excellent service delivery but also uphold regulatory and legal requirements.
**X - 3 -Year Technology Action Plans - Breakdown by Year:**

**Assumptions:**

Each of the Year-by-Year priorities below will require a detailed project plan specifying timelines, responsibilities, measurement criteria, hardware and software costs, etc.

**Strategic Goal 1: Implement and Maintain the City College of New York technology infrastructure to support the needs of faculty, staff, and students.**

<table>
<thead>
<tr>
<th>ACTION PLANS 2013-2016</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Build and deliver a campus wide state-of-the-art robust, reliable and secure network infrastructure to replace existing obsolete hardware and cabling system. The new infrastructure will support high-speed and high-bandwidth needs of the campus in uninterrupted wireless access, instructional technology and administrative and research computing.</td>
<td>X</td>
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<tr>
<td>2. Working with CUNY-CIS and several system vendors, explore the possibility of migrating from IPv4 to IPv6 protocol in next three years.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3. Expand wireless deployment and improve wireless service. Develop and publish a Wireless Master Plan in order to communicate to the campus community the implementation schedule, timing, and location priorities for wireless upgrades and improvements.</td>
<td>X</td>
<td>X</td>
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<tr>
<td>4. Develop a multi-year refresh plan for all network infrastructure hardware that are coming to an end-of-life.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>5. Develop a four-year refresh cycle for all desktop technology (faculty, staff, and labs) on a 1/4 per year rotation. Implement similar software upgrade cycles for faculty and staff desktops.</td>
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<tr>
<td>6.</td>
<td>Expand data and information storage capabilities with built-in security to address growing faculty, staff, and student storage demands and data warehousing needs.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>7.</td>
<td>Deploy web application platform such as Microsoft SharePoint to provide intranet portals, document &amp; file management, collaboration, social networks, extranets, websites, enterprise search, process integration, workflow management and business intelligence.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>8.</td>
<td>Replace multiple existing faculty and staff email systems through consolidation into one state-of-the-art, reliable and function rich system such as Microsoft Exchange.</td>
<td>X</td>
<td>X</td>
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<tr>
<td>9.</td>
<td>Continue efforts to embrace the “virtualization” of all OIT physical servers and desktops in order to take advantage of technology advancements in this area for energy savings, efficient systems management and disaster recovery requirements.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>10.</td>
<td>Explore opportunities to “outsource” technology infrastructure and services (such as cloud services, consulting services, etc.) where feasible.</td>
<td>X</td>
<td>X</td>
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<tr>
<td>11.</td>
<td>Evaluate current data backup strategies and investigate solutions to properly store and protect the College’s critical data. Ensure that all data is easily retrievable in the event of a system disruption in services.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Develop and maintain a business continuity and disaster recovery plan to reflect increasing levels of recovery based on priorities for systems that are mission critical.</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

**Strategic Goal 2: Encourage and Support the use of technology in teaching, learning and research.**

### ACTION PLANS 2013-2016

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1.</td>
<td>Have the Technology Advisory Committee (to be created - refer Strategic Goal 4, Objective 1) assign a subcommittee to work with Academic Affairs to review and recommend strategies to incorporate usage of technology into degree programs where appropriate.</td>
<td>X</td>
<td></td>
<td></td>
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<td></td>
<td>ACTION PLANS 2013-2016</td>
<td>YEAR 1</td>
<td>YEAR 2</td>
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<tr>
<td>2.</td>
<td>Promote Blackboard LMS across campus to increase adoption rate. Increase efforts for professional development and support for Blackboard for faculty and students.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.</td>
<td>Provide full support for College’s hybrid/online course offerings through OIT resources.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4.</td>
<td>Work closely with Library administration to determine specific technology needs necessary to provide faculty and students with reliable, ready access to digital library services, collections, and tools as needed.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Define the minimum baseline for technology in all classrooms. Determine the number of technology-equipped classrooms needed over the next three years to support instructional needs. Develop a conversion plan to increase the number of technology-equipped classrooms over the next three years. Determine annual costs to convert/retrofit and support.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6.</td>
<td>Have the Technology Advisory Committee (to be created - refer Strategic Goal 4, Objective 1) assign a subcommittee to work with faculty to recommend strategies to maintain and support classroom technology.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Ensure that a consistent support is provided for faculty research through existing and emerging technologies and professional resources available externally and within OIT. Seek new resources whenever required to strengthen research efforts at CCNY.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8.</td>
<td>Facilitate IT operation of the state-of-the-art Science Research Facility (ASRC/CCNY) in south campus through available and new OIT resources.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Strategic Goal 3: Encourage and Support the use of technology in administrative functions.**
to market and communicate the availability of these offerings.

2. Work with CUNYfirst and other administrative system’s users to identify ongoing issues and problems associated with using these applications. Maintain a User’s Group to address and resolve technical issues and training needs. | X | X | X |

3. Ensure that all key capabilities of the CUNYfirst system are being fully utilized by CCNY faculty and staff. Build capabilities for data-driven business decision-making using Business Intelligence (BI) tools and data dashboards. | X | X | X |

4. Replace existing paper-based administrative functions by implementing electronic workflow processes using latest tools to improve customer satisfaction and increase staff efficiency and productivity. | X | X |

5. Develop an administrative data backup and recovery plan for all mission critical applications. This also includes individual desktop file backups of designated employees with crucial responsibilities. | X |

6. Ensure that all administrative systems are fully secured and conduct a full security audit of these systems at least once a year as mandated by the CUNY Office of Chief Information Security Officer (CISO) under security attestation. | X | X | X |

7. Ensure that users are well aware of security requirements mandated by the CUNY Office of Chief Information Security Officer (CISO) under security attestation. Conduct regular security workshops for faculty and staff to raise awareness of IT security not only in dealing with non-public university information but also in their day-to-day operation. | X | X | X |

8. Ensure that all systems across campus are current with latest software updates and security patches. Develop technical capabilities to perform this function automatically on a regular basis. | X |

**Strategic Goal 4: Provide effective, responsive, and efficient technology support to the campus community**
1. Create and institutionalize a permanent Technology Advisory Committee (TAC) with representation from faculty, students and staff. Hold at least one meeting per semester to discuss current and future technology issues across campus. This will also allow OIT to be more transparent with user community. | X 

2. Consider “rebranding” the existing OIT organization by eliminating the word “information” to reflect its responsibilities beyond the informational aspects of technology. Consider “Division of Technology Services” (DoTS). | X 

3. Improve communications between OIT and users by participation in committees, attendance at faculty meetings, etc. Encourage open dialog to understand faculty, staff and student needs, expectations, and issues. Build and enhance these relationships in order to provide input for decisions to guarantee consistency with overall/long-term technology plans. | X X X 

4. Regularly assess and continuously improve OIT service desk operation to deliver an excellent customer service to CCNY users. Create service catalogs and service level agreements to ensure that users have better understanding of what service OIT can deliver with its constraint resources. | X X X 

5. Develop regular communications from OIT to all faculty, staff, and students that keep users abreast of any upcoming moves, additions and/or changes. Use this vehicle to also provide useful tips and information about computers and software (such as Microsoft Office), security alerts, and training schedules. | X X X 

6. Assess current organizational structure and support strategies and make modifications as needed to provide optimal user service. Explore needs/options for providing support coverage for evening and weekends not only for Tech Center and NAC lab but also for classrooms. | X 

7. Implement professional development and career advancement plan for OIT staff to ensure that they are current on the technological advancements, have growth opportunities and be productive within CCNY IT organizational structure. Seek opportunities to recruit CCNY | X X X
### XI. Plan Assessment and Monitoring

Monitoring, assessment, and ongoing management of this plan are necessary to take into account changes in agreed-upon strategies and to assess the performance of these strategies. Accordingly, the Technology Advisory Committee (TAC) will be responsible for a Periodic Review of progress against goals, and an Annual Assessment and update of the Technology Strategic plan.

#### A. Periodic Review of Plan

- Performed semi-annually
- An internal “score card” for TAC and Senior Leadership
- Used to benchmark and evaluate all activities scheduled during that period
- Specific tasks are categorized as Completed (C), Not Completed (NC), On Hold (H), Other (O) with appropriate explanation

#### B. Annual Assessment

<table>
<thead>
<tr>
<th>8. Review compensation levels for IT professionals at other peer institutions in surrounding communities and seek competitive compensation within the context of overall College salary guidelines for OIT staff.</th>
<th>X</th>
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<tbody>
<tr>
<td>9. Implement real-time monitoring of IT systems and processes to constantly assess their “health” and collect key performance indicators (KPIs) to examine their availability (or up time). Use these KPIs to develop a plan to ensure that sufficient resources are allocated to achieve an uptime of 99.999%.</td>
<td>X X X</td>
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<tr>
<td>10. Establish and implement appropriate policies, operating procedures and best practices to support not only excellent service delivery but also uphold regulatory and legal requirements.</td>
<td>X X X</td>
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</table>
• A report submitted at the end of each fiscal year (or beginning of the next)

• Report includes the following sections:

  I. Progress made this year
  II. Contributions made this year to the overall City College of New York Strategic Plan
  III. Notable changes in Challenges and/or Opportunities
  IV. Recommended adjustments to Current Initiatives or Goals

• This document is for Executive Staff and the College community and serves as a means for communicating the status of the plan to all.
XII. Summary

This Strategic Plan for Information Technology at the City College of New York represents a thoughtful approach for addressing existing and emerging technology needs and priorities, and aligns its initiatives with those of the overall City College of New York Strategic Plan 2013.

The potential initiatives highlighted throughout this document support four key outcomes:

- Addressing major infrastructure and legacy needs
- Aligning IT resources to best support the overall City College of New York strategic mission
- Focusing on secure and reliable access to technology for students, faculty, and staff regardless of time or location
- Seeking continuous improvements and cultivating continuous, two-way communications with the campus community

As the City College of New York competes for the best and brightest students and faculty in an increasingly digital world, its information technology environment will need to be competitive to achieve its stated goals. This, the City College of New York Information Technology strategic planning effort, represents a singular opportunity to realign information technology in support of the City College of New York’s mission for years to come.