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Information Technology Strategic Planning Process

In early 2012 the Carson-Newman Information Technology Department (IT) recognized the need to tie its priorities to institutional priorities as well as technology trends which help Carson-Newman achieve her mission. It was decided then to purposefully make a short-term technology plan that would help the IT department clarify what the department’s purpose was and what it should become.

The use of the 2012-2013 Strategic Plan was successful in helping guiding the decisions made throughout daily tasks and long-term projects. By having a clarity of purpose and definitive goals the people in the department were able to work more efficiently and effectively to reach those goals.

Beginning in fall of 2013 all members of the department began to review and revise the Strategic Plan. From the analysis and using the mission, vision, and core values, IT developed its goals and strategic objectives for the next two academic years. 2014-2015 and 2015-2016.

Foundation for Setting Strategic Priorities

Information technology ceased to be optional several years ago. IT is the foundation for all business and academic processes throughout the University. Zero tolerance for technology downtime of any kind is pervasive throughout the employee and student body.

The demand for omnipresent multiple wireless connection has grown exponentially with no end in sight. While our current wireless and wired access points were designed with the future in mind no one could have predicted the wireless requirements today. Five years ago our bandwidth was 45MB. Today it is 500MB. Although it has grown by 1,111% the demand makes it a challenge to provide network speeds at satisfactory levels.

Information Technology as a department has evolved into Management Information Systems team. Instead of being support centric we have become data centric. Our systems are used to not only facilitate academic activities but also as support for business analysis and management decision making actions.

One of Information Technology’s greatest concern is the increasing organizational risk due to possible technology security breaches and/or data loss through natural or man-made disasters. We must consider Information security in our day-to-day operations and long-term plans. A great challenge when making information security decisions is the need to balance the need for security with the realities of budget limitations.

Last we look at the technology environments in businesses and other academic institutions with a “crystal ball” lens. Mindful of today’s and future budgets we try to predict how the technology we acquire today will fit the institution’s needs long-term. We have done this by talking informally with various departments on campus, reading expert predictions, and being a part of many technology groups.
C-N Information Technology Department

Mission and Vision

Mission
Embrace the mission of Carson-Newman by providing the University with high quality service and support of integrated and safe Information Technologies.

Vision
To be the leader in the South East for innovative technology supporting world-wide teaching and learning, enhancing student services and promoting University operations with professionalism and integrity.

Core Values
The Information Technology staff endeavors to deliver the best service possible to the Carson-Newman family. This includes but is not limited to the following commitments:

   Reliability
We will provide our services as dependably, accurately and as thoroughly as we can while balancing the user’s need for accessibility against the overarching need for data security and privacy.

   Respect
We will treat the faculty, staff, students, parents, alumni, each other, and vendor-partners with mutual respect and understanding. We will honor Carson-Newman’s legacy and traditions while actively working with others to shape her future. We will make every attempt to provide timely, consistent, and accurate communications to the Carson-Newman campus and online communities.

   Community
We are committed to facilitating the use of technology tools, equipment and training in a collegial and collaborative atmosphere that fosters teamwork and cooperation among the Carson-Newman family.

   Leadership
We are dedicated to delivering innovative and forward-looking solutions. We strive to model strategic thinking, proactive leadership, and collaborative partnerships in support of Carson-Newman’s mission.

   Stewardship
We will act as good stewards of the resources and information entrusted to our care.
Expectations of Information Technology
The Carson-Newman Information Technology Department will demonstrate continuous effort to improve operations and reengineer work processes to ensure that the strategic objectives of the University can be adequately supported and delivered through the use of technology.

Organizational Structure
The Department of Information Technology is headed by the Chief Information Officer who reports directly to the Executive Vice President and Provost. The organizational chart below outlines the reporting structure within the department.

Position Descriptions
While each of the job descriptions may be generic we recognize that each person working in the Information Technology department brings their own mix of skills and abilities to the department. Each person contributes to the department with a common set of values, mission, and goals. Complete position description are provided as an appendix to this plan.

Chief Information Officer
This person provides strategic leadership and direction for the University’s Information Technology Networking and Technology Support Services, Enterprise Systems, and Online Learning divisions of Information Technology. Using a comprehensive knowledge of organizational strategy and subject-area expertise, the CIO serves the University by understanding and developing the role of technology within the organization, assessing and executing on strategic technology-enabled projects, and overseeing the technological operations within the University.

The CIO is the campus leader on information technology policy and practices. He/she, in consultation with the Provost and CFO, develops and manages the strategic plan and operating budget for the University’s information technology infrastructure, technology acquisition, technology support, technology integration and operational expenses.
**Director of Information Technology**
This person will provide leadership and direction for the University’s Information Technology Networking and Technology Support Services and Enterprise Systems Technology. Managing the day-to-day operations of IT the Director has responsibility to provide technical oversight, analytical and technical support to the University. The oversight will include server oversight, software management, system maintenance, data and systems security, system documentation, web and technology resources, intranet and shared work environment, customer initiatives and service programs, staff supervision, budget and financial planning.

This individual will serve as the primary technology representative for the department. Working with the senior leadership of the University, the IT Director addresses both the capacity and the effectiveness of University technologies at student, faculty, and administrative levels. In consultation with the Chief Information and Financial Officers the Director will develop and manage the strategic plan and operating budget for the Universities information technology infrastructure, technology acquisition, technology support and operational expenses.

**Networking and Systems Administrator**
This person has responsibility for implementation and administration of Carson-Newman’s data network, server hardware, Active Directory, messaging, storage, security infrastructure and other campus technologies. Some of these items include wired and wireless networks, e-mail, firewalls, storage networks as well as tier 2 technical support.

**Enterprise Systems Administrator**
This person provides leadership and planning for all aspects of the University’s Administrative Enterprise Systems. Primary responsibility includes management of the Datatel Colleague ERP software and related applications and interfaces. Provide Administrative Enterprise System software support including coding, testing, documenting, troubleshooting, training and installation of programs/systems to satisfy University objectives and user requirements. Supervises and provides junior programming and analyst staff with leadership, training, and technical guidance.

**Assistant Networking and Systems Administrator**
The assistant network administrator has responsibility to assist the network administrator in the implementation and administration of Carson-Newman’s data network, server hardware, Active Directory, messaging, storage, and security infrastructure and systems. He/She will also perform tier 1 and tier 2 technical support.

**Networking and Systems Support Specialist**
This person provides technical support to Carson-Newman employees and students in the use of campus technologies. Primary responsibilities include managing daily IT Requests, facilitating IT aspects of departmental projects, providing support to users in person, on the phone, or through e-mail, and providing a centralized location for technology purchasing. This position also maintains a current inventory of campus technology equipment, maintains and updates the Carson-Newman network, as well as maintains and updates all other systems on campus. This position assists the IT department in researching, testing, troubleshooting, documenting, as well as planning for and installing new technologies to satisfy University objectives and user requirements.

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Enterprise Systems Programmer/Analyst
This person provides support, implementation and training for all aspects of the University’s Administrative Systems and assists the Administrator and Senior Programmer/Analyst as well as the Director of Information Technology in any planning, research and development of IT Enterprise Systems. Provide administrative software support including coding, testing, documenting, troubleshooting, training and installation of programs/systems to satisfy University objectives and user requirements.

Coordinator of Institutional Research
Working closely with the Enterprise Systems Programmer/Analysts the Coordinator of Institutional Research organizes the production of reports to meet university, state, and federal agency information requirements. (IPEDS, TICCUA, SACS). As a key member of the IT Enterprise Resource Systems team, this person coordinates the acquisition of data which provides research and assessment related to university programs and services, institutional planning initiatives and institutional accreditation. The Coordinator of Institutional Research conducts comprehensive studies on targeted topics such as student retention and enrollment projections.

Online Learning Director
This person is responsible for the function, coordination, development and organization of the University’s online courses. Working with the Academic Council and Provost’s office this person is responsible for assessment and documentation to review the effectiveness of all online courses and programs. She/he is responsible for providing the faculty with development programs on new instructional resources and technology to enhance their on-campus and online courses with appropriate technologies. The Online Learning Director will also administer and support the University’s learning management system software.

Student Systems Support Specialist
This is an entry-level student position providing computing support to the Carson-Newman students and faculty. The position is responsible for first level problem determination, problem/incident recording, and problem resolution and problem escalation to Tier 2/3 Network and Systems Support.

Student Intern Programmer/Analyst
Develop reports and assist in the analysis of the data in response to requests by various University departments. This student worker will also assist students and employees in their efforts to log into and access various parts of the student information system.

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Support Functions and Services

The following support functions and services are provided to all faculty, staff, students and departments of Carson-Newman. This includes 140 full-time faculty equivalents, 1930 full-time student equivalents, 184 full-time staff equivalents, and over 50 different academic and administrative departments.

General

Support
- Delivers one-to-one and workshop training to the end-users
- Provides support for faculty, staff, and students which includes a walk-in and after hours help desk Sunday – Friday during the academic year as well as a 24x7 self-service online library of white paper documents, videos, knowledge base and training links.
- Manages technology purchasing and inventory for the university
- Facilitate planning for new technology systems and processes

Project Management
- Provides faculty & staff current pricing for Carson-Newman hardware & software procurement
- Collaborate with various University offices to develop effective computing and other technology-related solutions
- Recommends best practices for standardization and implementation of new project
- Researches, recommends and implements emerging technologies, creating an environment fostering innovative teaching and learning with technology.

Security
- Manages and maintains network Firewalls and access
- Delivers System Account management and Authentication using Active Directory, LDAP, etc.
- Provides VPN Connectivity and Support
- Maintains server level virus/intrusion protection
- Disaster Recovery Planning of IT Systems
- Enforces Password Maintenance and policies
- Provides Virtual network/desktop connections and environment
- Secure storage management including backup/retention of disk and tape storage

Governance
- Maintains Information Technology Policies including: Acceptable Use, Access Control Policies
- Maintains Standard Operating Procedures
- Maintains Budget and financial planning
- Implements and updates Best Practices in Information Technology
- Handles IT Technology Procurement approval and oversight
- Maintains license subscriptions, inventories and compliance
Network & Systems Services

Network
• Network engineering, design and maintenance of the campus network infrastructure including: servers, SANs, routers, switches, hubs, wired and wireless devices, etc.
• Internet Access, which includes bandwidth monitoring and management
• Design and installation of University-wide network applications including: Microsoft Office, SharePoint (EagleNet), Exchange (e-mail), Edvance360 (online learning management system), File and Print services (network shares and print monitoring/routing), etc.
• Application of patches, revisions and updates

Systems
• Configures, installs, and repairs PCs, Macs, printers, projectors and other equipment as appropriate to campus computing technology. Installs and tests software.
• Maintains equipment inventory which includes warranty, maintenance support and other vendor related agreements
• Maintains the Employee & Student Technology Handbooks and Materials
• Maintains the Information Technology web and intranet sites
• Attends and presents at events and conferences to promote the awareness of Carson-Newman technological services
• Manages student and faculty Information Technology help desk schedules

Enterprise Resource Systems
• Planning, implementation, development, and maintenance of information management Enterprise Resource systems supporting administrative functions of Carson-Newman. (Ellucian/Colleague, Informer, C-N Connect)
• Maintains the Enterprise Servers
• Database integration to other campus and 3rd party systems
• Enterprise document imaging
• Information Reporting
• Assist users in accessing institutional data for use in operational and strategic decision making
• Collaboration with various University offices to develop processes which use effective computing and other technology-related solutions

Online Learning
• Collaborates with University personnel in the development and delivery of online courses, and graduate and undergraduate online education programs (credit and non-credit).
• Plans and promotes professional development opportunities for faculty and staff in the areas of designing online courses, enhancing online teaching skills, and effective technology integration in the online environment.
• Primary support and administrator of the University’s learning management system.
• Researches and contributes to the research of best practices for online teaching, technology integration and professional development of faculty teaching.
• Collaborates with C-N Director of Institutional Effectiveness by providing statistical demographic data on online students and course offerings and assessing student satisfaction with instruction, programs, and services.
• Maintains the Online Learning Website
• Maintains the Online Learning Faculty & Student Handbooks
Comparative Data

Comparative data was gathered from 3 TICUA schools of like size. These responses are from the 2013 TICUA Information Technology survey.

<table>
<thead>
<tr>
<th></th>
<th>Carson-Newman</th>
<th>Rhodes College</th>
<th>FHU</th>
<th>King University</th>
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<td>5/45</td>
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<td>- Computer Hardware Repair</td>
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Key Trends in Information Technology


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<thead>
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<th>Technology</th>
<th>Adoption Time Frame</th>
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<tbody>
<tr>
<td>Flipped Classroom</td>
<td>1 Year</td>
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<tr>
<td>Learning Analytics</td>
<td>1 Year</td>
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<tr>
<td>3D Printing</td>
<td>2 to 3 Year</td>
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<tr>
<td>Games and Gamification</td>
<td>2 to 3 Year</td>
</tr>
<tr>
<td>Quantified Self</td>
<td>4 to 5 Year</td>
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<tr>
<td>Virtual Assistants</td>
<td>4 to 5 Year</td>
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<table>
<thead>
<tr>
<th>Technology</th>
<th>Adoption Time Frame</th>
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<tbody>
<tr>
<td>Massively Open Online Courses</td>
<td>1 Year</td>
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<tr>
<td>Tablet Computing</td>
<td>1 Year</td>
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<tr>
<td>Games and Gamification</td>
<td>2 to 3 Year</td>
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<td>Learning Analytics</td>
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<tr>
<td>3D Printing</td>
<td>4 to 5 Year</td>
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<tr>
<td>Wearable Technology</td>
<td>4 to 5 Year</td>
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2012 Horizon Report (http://www.higher-education-marketing.com/blog/2012-horizon-report-emerging-technologies-higher-education)

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<thead>
<tr>
<th>Technology</th>
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<td>Electronic tablet computing</td>
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<td>Learning analytics</td>
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<tr>
<td>Game-based learning</td>
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<td>Gesture-based computing</td>
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<td>Electronic Books</td>
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<td>Mobile Devices</td>
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<td>Augmented Reality</td>
<td>2 to 3 Year</td>
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<tr>
<td>Game-based Learning</td>
<td>2 to 3 Year</td>
</tr>
</tbody>
</table>

Information Technology scans the technology environment and adopts only after there is identified use and need for such adoption.
# Information Technology SWOT Analysis

## Strengths

- **Information Technology Department Staff**
  - Knowledgeable: Combined 141 years of IT experience
  - Demonstrated Commitment: Combined 68 Carson-Newman experience
  - Innovative instincts and willingness to learn new skills
  - Resourceful: Creative skills to accomplish much with little resources
  - Flexible: All have the ability to adjust to the ever evolving nature of technology
- **Solid network Infrastructure in place**
  - Ahead of many nearby Universities in the wired and wireless infrastructure. C-N has had campus-wide wireless computing since 2009.
  - Internet provider pipeline 500mbps
  - Excellent performance and up-time
  - Successful Integrated Enterprise computing

## Opportunities

- Help increase use of technology in other departments through training
- Continue to develop positive relationships with students, faculty, and staff through the use of established service level agreements
- Help students, faculty, and staff become more self-sufficient through documented procedures and guidelines in regard to technology acquisition, use, security, and disposal
- Build on the knowledge and proficiencies of the IT Department which will have positive results for Carson-Newman
- Strategically build in time for Research and Development for newer technologies which will produce a profitable return on investment for Carson-Newman.

## Weaknesses

- Knowledge Silos: Little cross-training within the IT Department and in external departments. This creates black holes almost impossible to fill when an employee is away for an extended period or is no longer with the University
- Communication pits with Carson-Newman “customers”
- Low employee morale
- Limited opportunity for research and development of new/proposed technologies
- Staff Size

## Threats

- Organizational culture resistant to change
- General University-wide lack of basic proficiency with technologies to work effectively or efficiently
- Lack of incoming communication to IT when new University and department projects are in the conception stages
- No disaster preparedness or documented security procedures.
- Absence of overall end user security awareness and practices
- Lack of specific department plans and training for retaining knowledge assets related to a specific employee. IT often called upon to take up the slack when an employee leaves.
- Fiscal situation
Goals, Objectives, and Strategies

Major Issues

Overview
Technology has become not only essential to the way people work and communicate but newer and better technology is a universal expectation. For Carson-Newman to remain competitive while providing quality programs and maintaining fiscal sustainability, it must invest in solutions for tomorrow while leveraging its existing technologies investments. It is critical for Information Technology to be included in any planning, development, and implementation in order to identify user and process problems and translate these into technology solutions.

Major Themes
There are five major themes which shape Information Technology, driving its activities. They are:

- Instruction
- Enterprise Processes
- Security
- Support
- The Future

Within each of these themes Information Technology has developed its strategies, set objectives, and formulated tactical plans and evaluation processes.

Instruction
Goal: Information Technology will assist faculty and students in the use and implementation of technologies which will enhance the learning experience for on-campus and online programs.

Strategy:
1. Help faculty model best practices of technology integration into their instruction.
   1.1. Offer a minimum of 4 three-hour workshop professional development opportunities in the use of technology in alignment with best-practice instructional pedagogies
   1.2. Provide one-to-one assistance which incorporates new technologies into course design/re-design through professional and student worker assistance to at least five faculty per semester.
2. Assist the faculty, staff, and students in the use of existing standard software technologies for efficiency and success
   2.1. Develop a multi-modal three-tier training system to teach the beginner, intermediate and advanced levels of existing standardized Carson-Newman technology.
   2.2. Incorporate training with all new services offered by the Information Technology Department
3. Bring additional capabilities and modes to the learning experience by enhancing the digital learning tools available to students and instructors.
   3.1. Consult with at least five academic program coordinators per semester to identify which courses lend themselves best to mobile or digital learning tools
   3.2. Identify 3 to 5 most common digital devices (iPads, smart phones, e-readers, etc.) which are compatible with the Carson-Newman network technologies and offer recommendations and general guidelines for connecting these devices to the Carson-Newman campus network.
Enterprise Processes

Goal: Assist each of the departments with their technology selection and integration of existing Carson-Newman resources.

Strategy:
1. Identify development/upgrade priorities and plan for enterprise resource systems of Carson-Newman
   1.1. Develop a “checklist” template for preliminary consideration by departments who may need the involvement of Information Technology because of necessary integration with the current systems
   1.2. Create an awareness for the need of other departments to involve IT at the beginning of a project for the purpose of determining how much participation IT needs to have at all phases of project/software purchase consideration
   1.3. Establish an Enterprise Systems Advisory Board
      1.3.1. Conduct needs assessment studies for enterprise systems and upgrades
      1.3.2. Advise/prioritize purchases, upgrades and implementations
      1.3.3. Assist in marketing of new/upgraded enterprise systems to the appropriate departments
      1.3.4. Aid in collaboration between departments of implementation of development of new systems
2. Promote uniform practices and procedures to streamline processes and gain the most benefit from the Carson-Newman enterprise resource system.
   2.1. Conduct or Facilitate training of the Enterprise Resource Systems.
   2.2. Aid in the retention of knowledge assets through documentation of known procedures and encourage documentation across all departments.

Goal: Help guide Carson-Newman in leveraging all departmental owned information technologies to reach full potential before implementing new and possibly unnecessary, cost prohibitive solutions.

Strategy:
1. Implement a system whereby new departmental technology solutions are formally evaluated and recommended by the IT department.
   1.1. Document project definition to ensure all involved understand the scope of the evaluation.
   1.2. Conduct needs analysis for department so as to prevent unsustainable solutions for the future, the negligence of existing solutions.
      1.2.1. Accurately assess the value and role of existing related solutions in the context of new benefits that would be achieved over and above any existing current solutions
      1.2.2. Identify any Carson-Newman departments which may be affected by implementation of the new solution.
   1.3. Create workable timelines to ensure there are adequate IT human resources available to complete a project.
   1.4. Continue to promote the capture, storage and management of digital content while reducing paper-driven processes to improve efficiency.
2. Document Information Technology accountability phases for technology solution implementation and support
   2.1. Implement a defined project proposal and agreement system
   2.2. Gage timelines and IT resource allocations throughout the life of the project cycle by using a project management system visible to all involved departments.
   2.3. Build in “check points” for each supported to ensure knowledge of agreements are vocalized to people not involved in the original project.
Security

**Goal:** Implement new and revise old/existing policies and procedures to maintain the integrity of the IT infrastructure and data of Carson-Newman

**Strategy:**
1. Apply IT security best practices for higher education within the authority of the IT department and means of the IT budget.
   1.1. Refine “best practices”
   1.2. Distribute guidelines via presentation/committee
   1.3. Keep a running implementation of guidelines list visible to all Carson-Newman
3. Purpose full disaster recovery plan and options to Carson-Newman leaders by 8/1/2014
   3.1. Recommend options based on risk and costs
   3.2. Request approval of said plan
4. Implement approved Disaster Recovery plan by 12/31/2014
   4.1. Test the plan by 02/01/2015
   4.2. Report to Carson-Newman administration the results of testing
   4.3. Plan for future tests and monitoring
5. Institute and document formal network assessment/audit testing processes by 1/1/2015
6. Modify and enhance existing Virtual desktop infrastructure.
   6.2. Increase awareness of the savings and reasons to implement.

**Goal:** Information Technology will back-up data at a secondary on-campus site with future-minded plans to back-up data at an off-site location

**Strategy:** Information Technology will research, compare, plan for monetarily, and construct a secondary on-campus site for redundant storage back-ups

1. IT will request quotes and implementation plans from multiple vendors
   1.1. Develop a vision of the secondary site to relay to vendors
   1.2. Contact vendors we currently use
   1.3. Research and contact an outside vendor, if needed
2. IT will compare quotes and plans from vendors and choose the best option in conjunction with approval from the CFO
3. IT, in conjunction with the CFO, will develop a financial strategy to support site
4. IT will partner with selected vendor for installation and implementation of site

**Technology and Support (Faculty/Staff)**

**Goal:** Maintain at least an 85% satisfactory level with service delivery performance which includes quality, timeliness, and positive resolution

**Strategy:**
1. Provide Service Level Agreements (SLA)
   1.1. These will be available on EagleNet, by request through our Help Desk, addressed during employee workshops, and disseminated through e-mail as “expectations of IT.”
   1.2. Each member of the IT staff will strive to achieve the goals of the SLA. The Director and CIO will be responsible for overseeing compliance.
   1.3. These agreements will be reviewed and adjusted before the start of each fiscal year.
2. Provide standard operating procedures and guidelines for IT processes
   2.1. These will be available on EagleNet or by request through our Help Desk.
   2.2. Each IT sub-department will be responsible for determining its procedures and guidelines.
   2.3. These procedures and guidelines will be reviewed and adjusted before the start of each fiscal year.

**Goal:** Information Technology will use one system to monitor and keep record of all incoming IT Requests

**Strategy:** Information Technology will have a centralized first point of contact for support by implementing the use of a single ticket tracking system (SysAid) that has multiple support email addresses and that routes requests appropriately for all incoming IT Requests

1. IT will offer support for Enterprise System requests through connect@cn.edu
2. SysAid will route all requests that are received by connect@cn.edu to a “New ES Request” category, which will assign the “Enterprise Systems” administrator
3. SysAid will route all requests with categories related to Enterprise Systems to the “Enterprise Systems” administrator
4. IT will offer support for all other IT requests through ithelpdesk@cn.edu
5. IT will route all requests that are received by ithelpdesk@cn.edu to an “Unassigned” administrator
6. IT will use this system for monitoring SLA, end-user satisfaction, and problem resolutions

**Goal:** Information Technology will provide training for faculty and staff for technology applications used at Carson-Newman.

**Strategy:** Information Technology will make available online and in-person resources for faculty and staff to further their knowledge, understanding, and usability of technology applications used at Carson-Newman.

1. IT will continue to provide up to date online training videos for and documents pertaining to C-N Online through the Help tab within https://cnonline.cn.edu
2. IT will continue to provide up to date answers to frequently asked questions regarding applications used on campus at www.cn.edu/it
3. IT will provide support documents and in person training for using Microsoft Office products
4. IT will publish a training calendar at the beginning of each semester

**Goal:** Information Technology will provide limited support for personal devices that are used in the scope of work for Carson-Newman

**Strategy:** Information Technology will provide resources for connecting devices to the CN network and using such devices to better perform assigned duties.

1. IT will publish documentation for connecting wireless devices to the CN wireless network at www.cn.edu/it.
2. IT will publish links to resources and videos on how to better use the devices being used at CN.
3. IT will provide virtual desktop computing to that faculty and staff whose department requests and provides monetary support for the employee license.
**Goal:** Information Technology will efficiently track details of current inventory in a centralized location

**Strategy:** Information Technology will research, implement, and use a detailed inventory tracking system

1. This system will provide an at-a-glance look at current inventory numbers of each type of equipment and devices
2. Items will be entered into and removed from this system as soon as they are stored or distributed
3. This system will include details such as purchased date, purchased cost, current cost, warranty expiration date, etc. for each individual device

**Goal:** Help guide Carson-Newman in leveraging all departmental owned information technologies to reach full potential before implementing new and possibly unnecessary, cost prohibitive solutions.

**Strategy:**
3. Implement a system whereby new departmental technology solutions are formally evaluated and recommended by the IT department.
   3.1. Document project definition to ensure all involved understand the scope of the evaluation.
   3.2. Conduct needs analysis for department so as to prevent unsustainable solutions for the future, the negligence of existing solutions.
      3.2.1. Accurately assess the value and role of existing related solutions in the context of new benefits that would be achieved over and above any existing current solutions
      3.2.2. Identify any Carson-Newman departments which may be affected by implementation of the new solution.
   3.3. Create workable timelines to ensure there are adequate IT human resources available to complete a project.
   3.4. Continue to promote the capture, storage and management of digital content while reducing paper-driven processes to improve efficiency.

**Technology and Support (Students)**

**Goal:** Information Technology will provide limited assistance for students in the support of their personal computers.

**Strategy:** Information Technology will be available and provide resources based on published guidelines for students to ensure that their personal computers work properly while at Carson-Newman.

1. IT will post helpful tips and instructions for how to properly use one’s personal computer while at Carson-Newman at [www.cn.edu/it](http://www.cn.edu/it)
2. IT will have a Help Desk with office hours of 1-4:00, Monday-Friday and 6-8, Sunday-Thursday, during which time students can speak with a support specialist or an IT student worker about computer issues and receive assistance. If the problem is beyond the scope of work of C-N IT, we will provide a recommendation of a partner program as an option to remedy the problem. Students can also receive computer help by calling 865-471-3506 or emailing ithelpdesk@cn.edu
3. IT will offer Microsoft Security Essentials as an Anti-Virus for all students and will install it on students’ computers in the Help Desk office. A link to download the software is on [www.cn.edu/it](http://www.cn.edu/it)
4. IT will publish online and in the helpdesk office guidelines and limitations for student computer/device support.
Goal: Information Technology will provide limited support for connecting personal devices that are used here at Carson-Newman.

Strategy: Information Technology will provide resources for connecting devices to the CN network and using such devices to enhance the education experience at Carson-Newman.
1. IT will publish documentation for connecting wireless devices to the CN wireless network at www.cn.edu/it.
2. IT will publish links to resources and videos on how to better use the devices being used at CN.
3. By July 2013, IT will have in place a plan to supply virtual connection apps to students who need to access Carson-Newman course specific applications.

Technology and the Future

Goal: Information Technology will consistently research and recommend new technologies which fit into the mission and vision of the University and keep Carson-Newman relevant and attractive to the student of “today”.

Strategy: Include one proposed “future” initiative report for each dimension of Information Technology which included feasibility for manpower and financial resources of obtaining/implementing such technology. These are:

1. Enterprise Systems
   1.1 Find and evaluate a replacement for financial reporting software used by the CFO.
   1.2 Transition to a replacement for CN-Connect, online portal that allows students, faculty and staff access to their institutional data.
   1.3 Investigate mobile app that ties with our ERP software
2. Networking
   2.1 Increase mobile flexibility including printing.
   2.2 Investigate newest wireless standards.
   2.3 Investigate replacement for our network authentication control.
3. Online/Instructional Technologies
   3.1 Learning Analytics
   3.2 Game-based Learning
Information Technology Staff

Gail Greene – Coordinator of Institutional Research
Kevin Houk - Enterprise Systems Administrator
Connie Kenyon - Enterprise Systems Programmer-Analyst
Jenifer Lovelace - Assistant Network and Systems Administrator
Nathan Miles - Enterprise Systems Programmer-Analyst
Valerie Stephens – Chief Information Officer and Online Learning Director
Aaron Taylor - Network and Systems Support Specialist
David Tuell - Director and Network and Systems Administrator
Josh Weiler - Enterprise Systems Programmer-Analyst