Vision and Scope Document

Prepared By

TEAM A NETWORK DESIGN

Version 2.1 approved

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ITEC495-V2WW Information Technology Capstone

Professor: Wayne Smith

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Revision History

Name	Date	Reason For Changes	Version
Kelly Stelzriede	09/14/09	Created draft of document	0.1
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Joe Dykes	9/30/09	Added WAP model	0.3
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1. Business Requirements

Kinsley & Associates, LLC, an upstart architectural firm based in Destin Florida, is currently constructing new 300 square foot office space and requires a computer network infrastructure to be designed, installed, implemented, tested, and maintained. This project involves selecting, purchasing, and installing the wiring and networking equipment, and all computer hardware. To build and maintain a competitive edge in an industry that is highly competitive and in which technology changes rapidly, Kinsley & Associates requires top of the line equipment, skilled installation and management, thorough and detailed documentation, appropriate instruction for personnel, and a fail-safe disaster recovery program.

1.1 Background

Kinsley & Associates, LLC was chartered in September of 2009 and is currently in the process of hiring architects, draftsmen, a bookkeeper, and a receptionist. The core partnership, consisting of Matt Kinsley, Walter Bass, and Felicia Rodriguez, has begun the process of acquiring new business for the upstart firm and hopes to be fully operational by March 1, 2010.

1.2 Business Opportunity

To bring the information systems infrastructure to a level of full functionality, all network resources must be completely installed and tested and be fully operational. Once this has been accomplished, staff has been trained, and documentation has been provided, Kinsley & Associates will require a maintenance program that will continue to provide the organization with stable and productive network operations. This program must also allow for growth of the company and for technology advancement.

1.3 Business Objectives and Success Criteria

A successful network design and implementation will provide Kinsley & Associates with a network solution that enhances the productivity of the organization, provides a secure operating environment, prepares for risk mitigation and disaster recovery, and provides staff members with tools and skills that will facilitate their organizational function. The continued operation of the network infrastructure, and the provision for growth and upgrade, will allow Kinsley & Associates to focus on building custom homes rather than technology concerns. Measured success of the implementation and maintenance of the full system will be gauged by the timeliness of the installation, the reliability, security and speed of the network, the ease of use regarding the equipment and software, and the effectiveness of the maintenance and upgrade program. Upon completion of the project and prior to the release of the maintenance program, all parties will be in agreement that the network provides for the requirements of the organization:

- The wiring has been installed, fully tested and functional
    - Network communication must comply with current wiring standards and consist of cat6 Ethernet cabling

  - Each office has 2 RJ-45 ports on each wall except the interior wall with door entrance
  - Each cubicle/workstation has two RJ-45 ports
  - All Ethernet wiring terminates inside the server room on punch down block and patch panels
  - Cabling connects patch panel ports to the ports on the Cisco 2960 switches as needed
- The network hardware has been installed, fully tested, and functional
  - Routers
  - Switches
  - Firewall
  - Access points
  - Router are configured for point to point connection to ISP with a trunk connection to Switch1
  - Firewall is configured with public IP address and VPN accounts configured for each employee
  - Switches are configured with appropriate VLANs to separate departments
  - Wireless Access points are configured with WPA2-Personal with AES encryption
- Server has been installed, configured, fully tested and functional
  - Users and groups are configured
  - Storage directories are configured and mapped
  - VPN access is configured
  - Cross-platform communication has been configured
- The workstations have been installed, fully tested, and functional
- The printers and scanners have been installed, fully tested, and functional
- All office productivity software (Microsoft Office, Intuit QuickBooks, and Vectorworks 2010 by Nemetschek Architectural Design Software) is installed, configured, fully tested, and functional
- PC's and Macintosh computers are able to seamlessly and effectively communicate with the servers and with the scanners and printers and this communication will be fully tested and functional. All Microsoft XP workstations communicate with all Mac OSX workstations and with the Macintosh Snow Leopard server.
- Network security has been configured, fully tested, and functional
  - Firewall configured to block unwanted and unauthorized network traffic
  - User accounts and passwords configured appropriately for anyone who has access to network equipment
  - No cdp enabled on ISP connection on 2800 router
  - Equipment has been located in a locked server room, with access on a limited basis for IT personnel
- Backup server has been installed, configured, fully tested
- Documentation has been provided for the network
  - Network maps
  - Configuration schematics

  - Software configuration documents
  - Acceptable Use Policy
  - Security Policy
- Users have been trained to use appropriate office productivity software, and have been trained in Kinsley & Associates Acceptable Use Policy and Security Policy
- A maintenance program has been designed, detailed, and put into writing, signed and agreed upon by both parties
- Success in all of these areas will be measured in the following ways:
  - After initial installation, thorough testing would ensure the equipment configured is accomplishing the tasks it is required to perform
  - Tests will be performed Team A Network Design (TAND) to attempt to compromise the network using any tools that would be available to a possible hacker, and solutions would be put in place to prevent any possible breaches in security
  - Over time, the network will be analyzed with respect to the amount of data passing through it and the uptime it experienced by the network infrastructure without failure

1.4 Customer or Market Needs

Kinsley & Associates requires a network to be built from the bottom up that will facilitate the productivity and output of their firm.

TABLE 1.1

Network Hardware	Amount	Hardware
	4000	Plenum cat6e cabling
	1	Punch down block
	1	Cisco ASA Firewall
	1	Cisco 2800 router
	2	Cisco 2960 switches
	2	Cisco c1140 wireless access points
	2	Cisco HWIC-1GE-SFP High speed WAN Interface cards
	5	Cisco GLC-LH-SM= Single mode fiber SFP connectors

	2	~3ft. LC fiber jumpers
Server/Backup	1	Quad Core OS X Server
	1	Sun 7110 Server (storage with Radius auth)
Work Stations	13	24 inch iMac; 3.06 GHz Core 2 Duo; 4 Gb ram memory; 1 Tb hard drive; 8x double-layer SuperDrive; built-in display NVIDIA GeForce GT graphics adapter; keyboard/mouse incl.
	2	20 inch iMac; 2.66 GHz Core 2 Duo; 2 Gb ram memory; 320 Gb hard drive; 8x double-layer SuperDrive; built-in display; NVIDIA GeForce 9400m graphics adapter; keyboard/mouse incl.
	2	Dell Vostro 220 Mini Tower; Intel Celeron 450 2.20 GHz; 1 Tb hard drive; 16X DVD-RW; keyboard/mouse incl.
	2	Dell 17 inch Widescreen E1709 Analog Flat Panel Display
Printers	2	HP LaserJet P2055dn printer
	1	HP Color LaserJet CP 2025dn printer
	2	HP PhotoSmart C8180 All-in-one scanner copier printer
	2	HP DesignJet 110plus r wide platform printer
Scanner	1	Ricoh IS330DC document scanner
Installation and Configuration		Network installation/ wireless configuration
		Server installation and configuration
		Workstation installation and configuration
		Peripheral device installation and configuration
		Software installation and configuration
Documentation and SOP		Network
		Workstation
		Use policies

		Security
Maintenance and Upgrade		Server
		Network hardware
		Security
		Disaster prevention and recovery
Software		Vectorworks 2010 by Nemetschek Architectural Design Software
		Microsoft office Productivity Suite
		AVG Anti-Virus Corporate
		Intuit Quickbooks 2009 Premier

1.5 Business Risks

Table 1.2

Risk	**Severity**	**Mitigation**
Project completed over budget	Medium	• Monitor and track all costs weekly as the project progresses. • Pay close attention to potential trouble areas like equipment costs and labor cost • Utilize change orders signed by customer and vendor
Project completed over deadline	High	• Examine potential areas of delay at each stage of the project and develop a plan to alleviate slowdowns • Utilize change orders signed by customer and vendor

		• Maintain close communication with client regarding progress
Skill set unavailable within TAND to program Cisco routers for appropriate security protection	High	• Obtain outside consultant skilled in Cisco router programming
Skill set unavailable within TAND to train users in Vectorworks, the architectural design software the company has chosen	High	• Secure alternate training programs though Nemetschek VectorWorks and establish a training program
Communication breaks down between client and vendor	Medium	• Agree upon a communication venue • Agree upon frequency of communication
Third party internet service provider will not complete setup of Internet service in allotted time frame	Medium	• Maintain communication with ISP • Obtain alternate means of Internet connectivity in the event of a service breakdown or communication failure

2. Vision of the Solution

The vision that the Principals of Kinsley & Associates have of the information systems infrastructure is of one that :

- Facilitates productivity of the organization
- Provides ease of use
- Provide secure and fast Internet connectivity
- Provides necessary resource management and security
- Provides for risk mitigation and disaster recovery
- Provides employees with the training required to take full advantage of the system
- Provides stable and reliable functionality
- Provide for growth of the organization

Figure 1.1 Office Layout

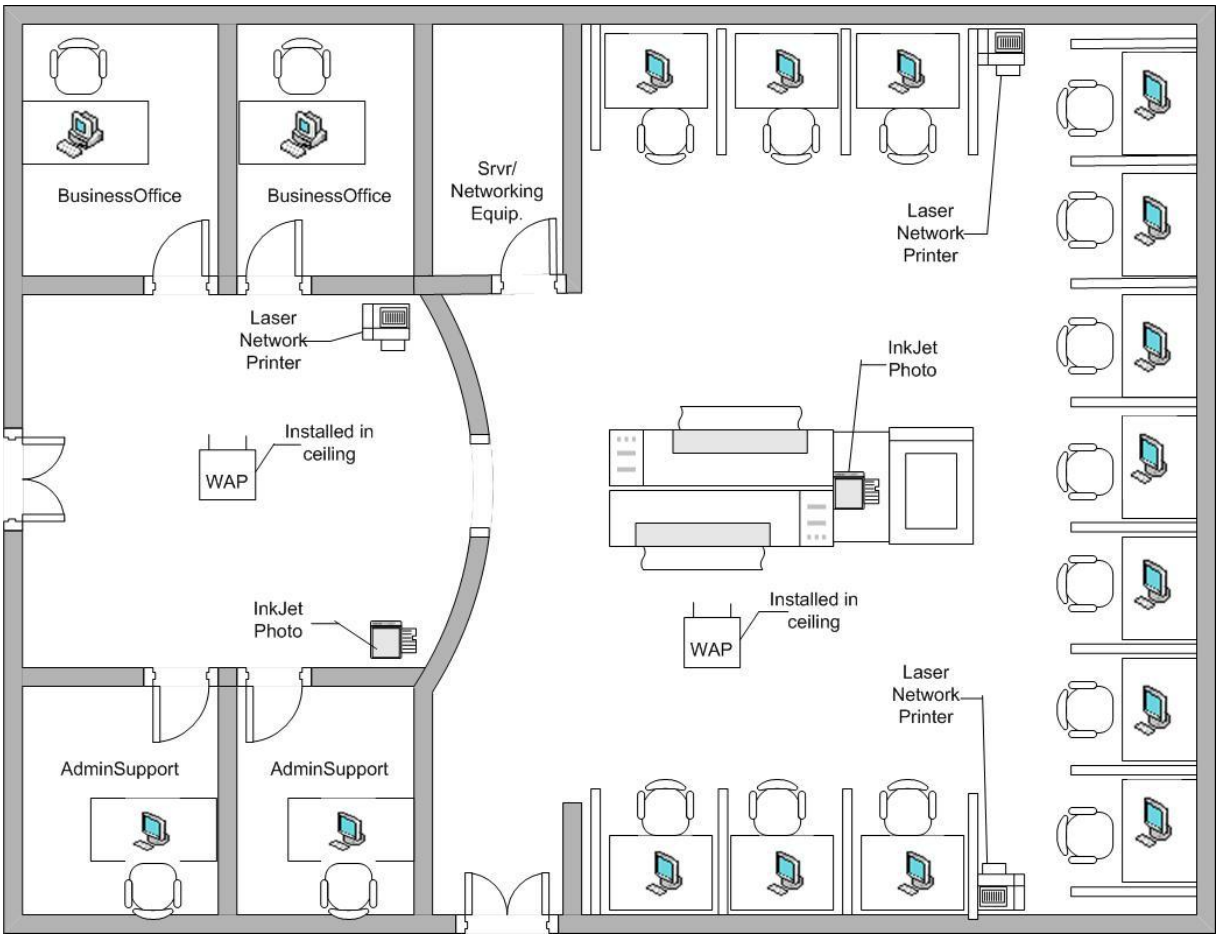
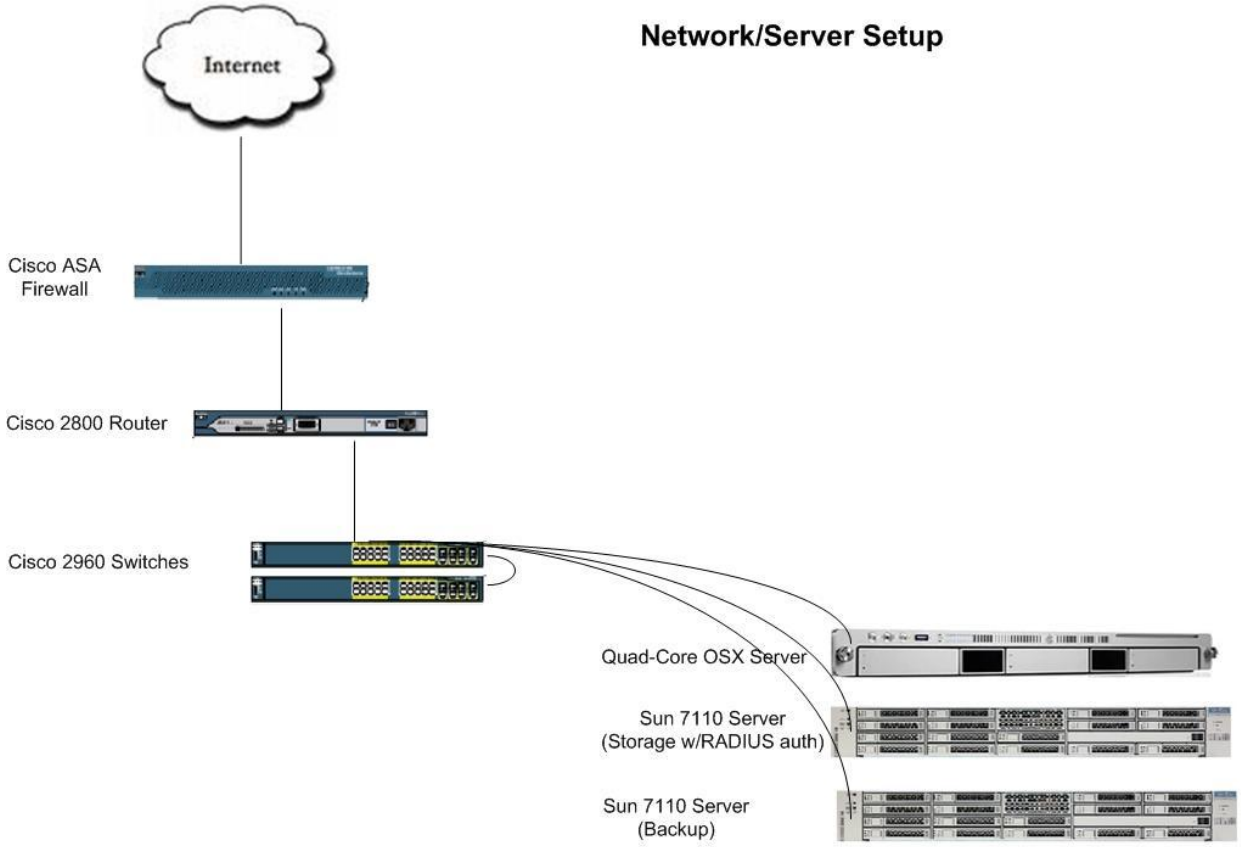


Figure 1.2 Network/Server Setup



2.1 Vision Statement

Kinsley & Associates, LLC, an architectural engineering firm, specializing in luxury home construction, strives to become a leader within the industry. TAND will demonstrate it's own superiority within the technology industry and provide them with means to achieve Kinsley & Associates' goal of excellence and leadership among its competitors. Crucial to this goal is the development and implementation of a sturdy, reliable, functional, information systems infrastructure. This solution will be provided, in full, by TAND.

2.2 Major Features

This solution will incorporate all areas of network function including:

- Network appliance: hardware, software, and configuration
- Server and backup: hardware, software, and configuration
- Reliable and redundant disaster prevention and recovery
- Workstation hardware and software and configuration
- Fast and secure Internet connectivity

  - The Internet connection coming into the building will consist of a leased line, using point-to-point connection to our ISP. TAND will have a dedicated speed of 10mb coming into our router to be used by our workstations, servers, and VPN users. Given the size of the company and its needs, this speed will adequately handle the amount of expected traffic on the network.
- Thorough training of all network and resource users
- Complete documentation of the network infrastructure
- Provide excellent service, support and maintenance.
- Appropriate malware prevention installation on all workstations
- Routers and switches will be securely located with limited physical access
- Networking equipment will be configured so all changes are tracked indicating user, as needed.

2.3 Assumptions and Dependencies

TAND makes the following assumptions:

- The Mac OS X 10.6 Snow Leopard, is the primary operating system platform required by Kinsley & Associates. This includes both server and workstation systems.
- Hardware required by the staff of Kinsley & Associates include:
  - Network appliance hardware
  - 1 Server
  - 1 Storage Server
  - 15 Apple Macintosh workstations with capabilities to run graphic rendering and architectural design software.
  - 2 Microsoft Windows XP Professional based workstations
  - 3 laser printers
  - 2 photo quality ink jet printers
  - 2 wide platform printers
  - 1 wide platform scanner
- Productivity Software required by Kinsley & Associates include:
  - Vectorworks 2010 by Nemetschek
  - Microsoft Office Productivity Suite
  - Intuit Quickbooks 2009 Premier
  - AVG Anti-Virus Protection
- Kinsley & Associates will require all phases of network and hardware installation to be performed by TAND including, but not limited to, wiring the offices that are under construction.
- Kinsley & Associates has contracted with BellSouth Internet Services to implement leased line connectivity through fiber optic cabling.
- The construction of the new facility will be ready for wiring by October 25, 2010.
- The construction of the new facility will be completed by November 30, 2010.

- The installation and implementation of the entire information systems infrastructure must be completed by December 31, 2010.

Success of the project is dependent upon

- TAND will provide all hardware and software to Kinsley & Associates
- Working within the operating budget
- Working within the allotted timetables

3. Scope and Limitations

The scope of the initial project will encompass a solution that will provide Kinsley & Associates with a functioning information systems infrastructure. This infrastructure will be built from the ground up and will provide all hardware, software, and configuration required to allow Kinsley & Associates to begin business operations on March 1, 2010.

3.1 Scope of Initial Release

The network infrastructure installation will include the provisions, installation, configuration, and testing of all network hardware:

- Wiring and cabling infrastructure
  - Wiring to all workstations and network devices
  - Server room configuration and setup including rack for servers and network wiring patch panel
- Network appliances
  - Cisco ASA Firewall
  - Cisco 2800 router
  - Cisco 2960 switches
  - Cisco c1140 wireless access points
  - Cisco HWIC-1GE-SFP High speed WAN Interface cards
- Server
  - Apple Quad Core OS X Server
- Backup server
  - Sun 7110 Server (storage with Radius auth)
- Fifteen Macintosh workstations possessing the Core 2 Duo processors
- Two Microsoft Windows-based workstations running at 2 GHz or better
- Three network laser printers
- Two wide platform printers
- Two photo-quality inkjet printers
- One wide platform scanner

3.2 Scope of Subsequent Releases

The server will be configured to provide Kinsley & Associates with secure data sharing and storage, and user and device management. The backup server will provide redundant (RAID Mirrored) backup of all organizational data.

The Macintosh workstations will be configured to support Nemetschek VectorWorks 10 and Microsoft Office Productivity Suite. The Microsoft Windows-based work stations will be configured to support Intuit QuickBooks 2009 Premier and Microsoft Office productivity Suite.

All printers, workstations, and the wide-platform scanner will be operational for Macintosh workstations only. Inter-office connectivity and data sharing will be configured at each workstation, full documentation, and thorough training will be provided.

Once the information systems infrastructure is in place and fully operational, TAND will institute a maintenance, upgrade, and support program. This program will provide all levels of system support, upgrades, repairs, and replacements for hardware and software, and include a risk mitigation and disaster recovery continuity plan. Labor will be billed at:

- $140.00/hour onsite, regular business hours
- $175.00/hour onsite, off business hours
- $250.00 /hour onsite weekend & holiday
- $105.00/hour remote access support all hours
- $170.00/hour remote access support holidays
- $75.00/hour remote access maintenance and upgrade per schedule

3.3 Limitations and Exclusions

The scope of this project does not include any hardware and software installation or configuration that is not included explicitly in the project bid.

The scope of this project does not include the provision of Internet bandwidth by TAND.

The scope of this project does not include any fault or error created by use outside of the system by Kinsley & Associates after it being declared fully operational by TAND project lead.

The scope of this project does not include any damage to the network infrastructure caused by forces of nature and natural disaster after the information systems infrastructure being declared fully operational and agreed upon by TAND and Kinsley & Associates.

Change orders will be required by TAND to continue work if these phases of the overall organizational development are not completed on the existing time table and are beyond the control of TAND:

- Construction of the building being completed
- Furniture being delivered and installed
- Internet Access being installed to the building
- Employee hiring and placement within Kinsley & Associates

4. Business Context

The partners of Kinsley & Associates, being the primary stakeholders in the project, along with the organization's architects, structural engineer, draftsmen, administrative support persons, and bookkeepers, will require that the network infrastructure, provided and implemented by TAND, to facilitate business function and productivity. Architectural design has become an increasingly competitive field since the speed and accuracy of product output has been enhanced by technology. Most architects no longer draw by hand; they require solid, powerful design tools to implement their ideas. The success of the organization hinges on the power and reliability of the network and the network resources available to it.

It is critical to the success of the business that the network resources are fully operational and that the users are able to consistently and effectively produce output from the network resources.

4.1 Stakeholder Profiles

Table 3.1

Stakeholder	**Major Value**	**Attitudes**	**Major Interests**
Partners	Increased organizational quality and productivity	See increased revenue and market competitiveness	A more solid, current, reliable system than competitors have, that will provide users with faultless operation. Down-time= revenue loss and loss of competitive edge. Data will be required to be secure and the network infrastructure must be protected against theft and attack. Partners will require that they can access data and reports through the network from the bookkeepers, who will be using Windows-based workstations.

Stakeholder	**Major Value**	**Attitudes**	**Major Interests**
Structural Engineer and Architects	Increased productivity and fewer faults and errors in output. Reduced rework.	Expect faultless performance 100% of the time but do not require the system for 100% of their productivity.	Speed of individual workstation, speed and reliability of data transfer. Data security.
Draftsmen	Increased productivity and fewer faults and errors in output. Reduced rework.	Will be required by architects to produce output quickly and without fault. If any part of the system is down and this end cannot be reached productivity becomes 0%	Solid, reliable, and secure systems operations.
Bookkeepers	Increased productivity and increased output. Fewer faults and errors in output. Reduced rework.	Will require their individual systems to function without fault. Productivity relies 75% upon the system	Solid, reliable, and secure systems operations.
Administrative support	Increased productivity and increased output. Fewer faults and errors in output. Reduced rework.	Will require their individual systems function without fault. Productivity relies 50% upon the system.	Solid, reliable, and secure systems operations. Watch the typos above
TAND	Provide and implement an information systems infrastructure that will provide for increased and consistent organizational productivity. Provide a secure system that will provide for disaster recovery and prevention.	Confident this is possible	The project team abides by budget and time constraints and works for effective risk mitigation.

4.2 Project Priorities

Table 3.2

Dimension	**Driver**	**Constraint**	**Degree of Freedom**
Schedule			
Phase 1	Development and agreement of implementation schedule by 11/01/2009	Deadline gives very little room for movement within the allotted time frame	90% agreement within project team
Phase 2	Installation of network wiring, appliances, configuration of routers and firewalls 1/15/2010	Must work within construction schedule	Network hardware must be 100% functional
Phase 3	Configuration of servers and backup 1/31/2010	Must be completed after installation of Internet access	100% functional
Phase 4	Installation of all workstations and peripheral devices and configuration, installation of software 1/25/2010	Must be completed after delivery and installation of office furniture	100% functional
Phase 5	Testing by Project team and client by 2/15/2010		90% by both parties
Phase 6	Training of all employees and users of the network	Must be completed after operations commence an employees are hired and placed	90% by both parties
Staff			
In-House	Existing tech staff of TAND	3 system engineers, 2 technicians	Will complete 95% of project
Outsourced	Outside Cisco consultant	Tom Macy, Macy Systems Consulting	Will complete 5% (Phase 1)
Cost			
	$60,000 Hardware $40,000 Labor	Change order signed by major stakeholders required to operate outside of budget	15% overrun of budget approved without change order requirements

4.3 Operating Environment

TAND is within geographic proximity of the offices being constructed by Kinsley and Associates. All project members will be on site, as needed. All installation and configuration will be performed on site.

The network infrastructure will be built using Cisco equipment, devices, and appliances. Cisco is a solid, reliable, industry standard and will provide for the degree of fault tolerance and security required by Kinsley & Associates. The workstations and server will be Apple Macintosh and will all operate with Mac OSX as the primary operating environment. The bookkeeping workstations will be Microsoft Windows XP Professional systems and will communicate seamlessly with both the server and the peripheral devices. All software, outside of the business office, will be Macintosh compatible software.

5. Human Resources

The Human Resources aspect of the project will detail the Team Charter, the staff skill set and attributes, and the separation of duties and responsibilities among the staff. It will also define the communication strategies that will be utilized by the team to facilitate seamless advancement through each phase of the project.

5.1 Team Charter

Team A Network Designs assembled for a meeting on 9/28/2009 to discuss the depth of the project, were able to break it down and define the project specifically, and then chose team roles. It was agreed that Pam Kelly would act as Team Lead and all communication with the Professor would be through her. Parameters for submission of each phase of the project were defined and a schedule of delivery was defined as well. Pam Kelly would provide Professor Smith with a weekly status report and copy each team member.

The project the team developed, based on mutual skills, interests, and experience, was that of Team A Network Designs (TAND), a network design and security-consulting firm. TAND would design and implement a 20+ node network with cross-platform functionality and disaster prevention and recovery.

Via Email communication, text message communication, and Instant Message communication, the details of the project were agreed upon and each member contributed his or he knowledge and experience.

Google Documents are big part of the collaboration process. The projects are created and then uploaded to the Google Documents folder, and it is the responsibility of the file owner to “share” the document and set the editing and viewing options for everyone on the team. Each team member can make changes at the uploaded document in real time. Once completed, each document is reformatted into the desired APA formatting and each

team member reviews it. Then the document is mailed to our business practitioner for evaluation. A meeting between team members is facilitated to update the document based on the results of the practitioner's notes. Each member is assigned a new assignment that will be added to the final document. The team members check spelling and formatting, while Pamela Kelly, team lead, is responsible for handing in the final documentation to Professor Smith.

Weekly meetings are scheduled in the beginning of the week, in order to work with team member availability. Assignments for the project are divvied up to the team member most qualified for the topic. If there are questions they are discussed via email, chat, phone, or Franklin Live sessions.

The goal of this team is to produce excellent work that is completed with time to spare. By utilizing the strengths of each team member, and maintaining a focused work pace, TAND is able to generate quality work on a within the required time frame.

All issues and grievances are to be brought to Pam Kelly immediately and will dealt with in a professional and effective manner. Each team member has agreed to contribute 100% effort and notify the team promptly if an assignment is falling behind schedule.

5.2 Technical Skills and Attributes

Table 4.1

Name	**Skills**	**Attributes**
Pamela Kelly	Project Management, training	Well organized and focused, leadership skills and experience
Kelly Stelzriede	Technical writing, Network design and implementation, cross-platform integration, hardware installation and configuration, training.	Extroverted, detailed, pragmatic
Joe Dykes	Network design and implementation, network security, disaster prevention and recovery	Extremely detailed, laterally thinking
Joseph Grange	Network and hardware installation.	Detailed, focused
Tish McFee	Network and hardware installation, training.	Detailed, focused

5.3 Roles and Responsibilities

Table 4.2

Name	Role	Responsibilities
Pamela Kelly	Project Lead	Oversee project progress, communicate with major stakeholders, provide documentation and training
Kelly Stelzriede	System Engineer	Oversee hardware installation, software installation, server configuration
Joe Dykes	System Engineer	Oversee network installation, device configuration, firewall configuration, Internet access, security policy construction
Joseph Grange	Hardware and Network Technician	Perform network and hardware installation
Tish McFee	Hardware and Network Technician	Perform network and hardware installation
Tom Macy	Cisco CCDE	Perform all Cisco router and appliance configuration

5.4 Communication Strategies

The Project Lead and engineers will meet face-to-face with Major Stakeholders during the initial phase of the project to establish communication guidelines:
Team members will communicate via email on all major issues so that there is documentation for future reference. Team members will present the Project Lead with written documentation, in the form of email, of all concerns or issues that are arise. The Project Lead will report progress in a Progress report to Major Stakeholders, delivered via email each week at the start of the week. Team engineers will be copied on this report. This report will include all problems, overruns, issues, and developments that occur during the course of the previous week.

A face-to-face meeting between Project Lead and Major Stakeholders will take place at the start of each phase to discuss progress and change requests.

6. Project Management

The Project Management section outlines the schedule, the dependencies and the deliverables of the full project implementation. Pam Kelly, TAND Team Lead, will handle all communication with Major Stakeholders, provide structure and guidance to the project as it progresses, and will provide documentation to the customer at the completion of the project. Kelly Stelzriede, Project Engineer will develop the schedule for the project, detail all aspects of the project, clearly define the scope and the vision of the project and will oversee the hardware and software installation of the project. Joe Dykes

will provide all networking and presentation documents, and will oversee the networking infrastructure implementation

6.1 Deliverables

Upon completion of the project, Kinsley & Associates will receive:

- A fully installed, secure, and operational network infrastructure that works in tangent with third party provided Internet access.
- All server hardware and software installed and configured to appropriate specifications.
- All disaster prevention and recovery hardware and software installed and configured to appropriate specifications.
- All peripheral hardware and software installed and configured to appropriate specifications.
- Acceptable Use Policy and Security Policy provided to Major Stakeholders of Kinsley & Associates.

The project will be considered a success and will be completed when the major stakeholders of Kinsley & Associates and TAND Project team lead agree within 90% that the contract has been fulfilled and the deliverables have been provided in full.

Figure 6.1 Core Network

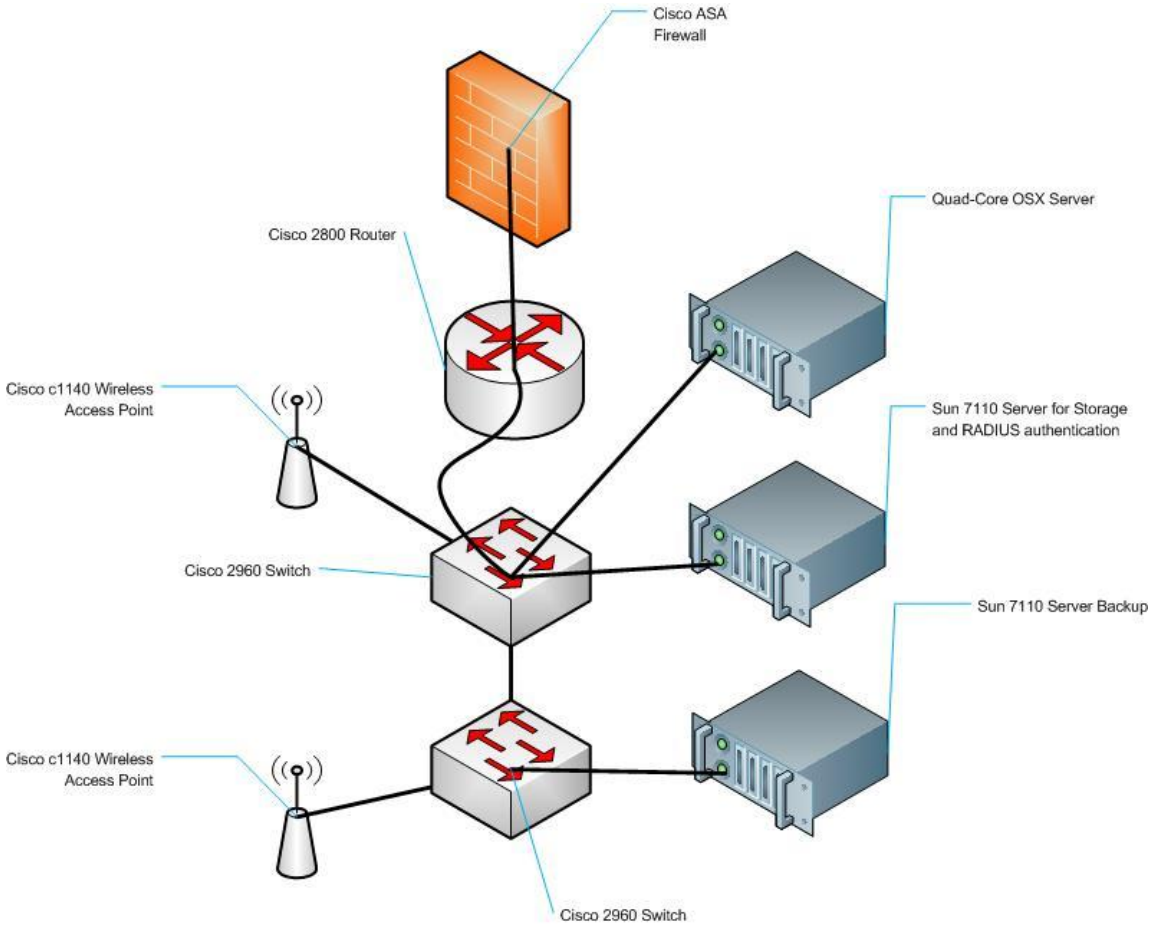


Figure 6.2 Users and Devices

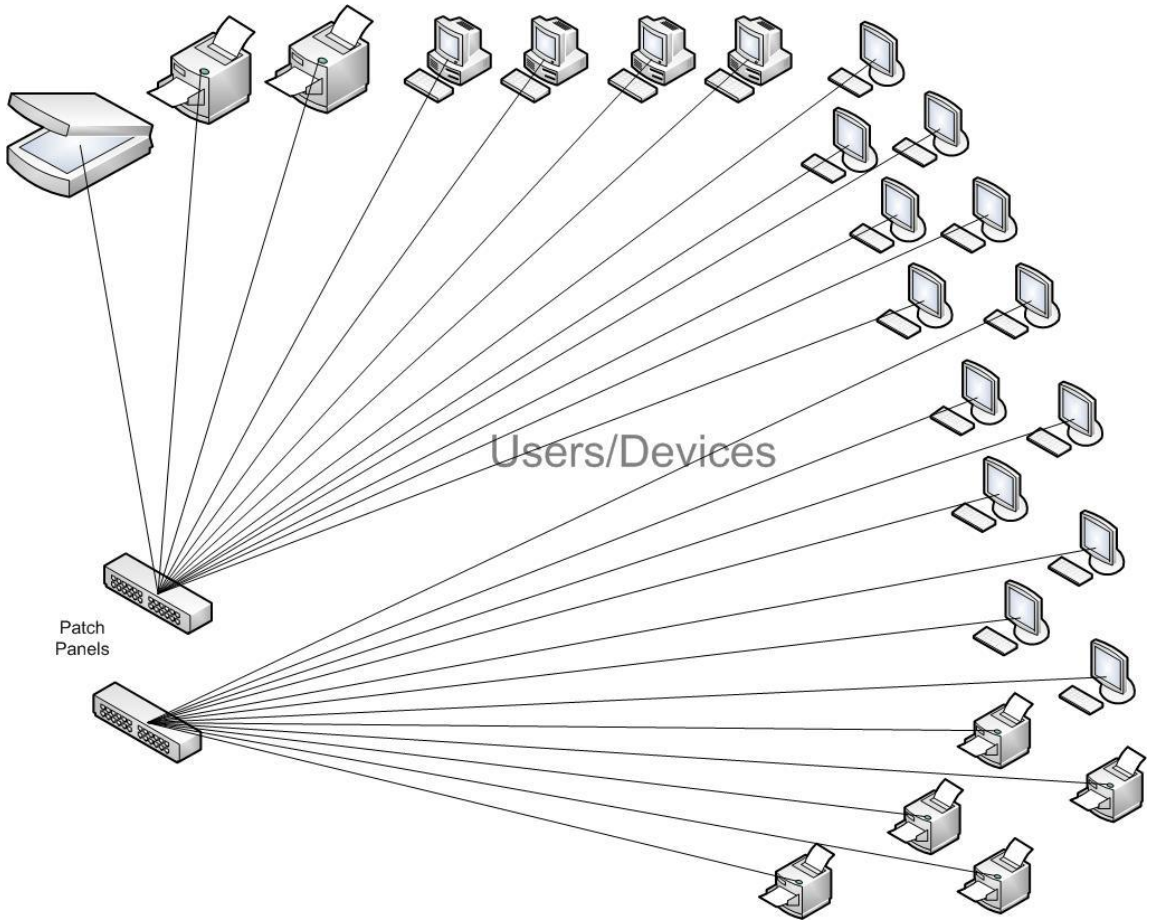
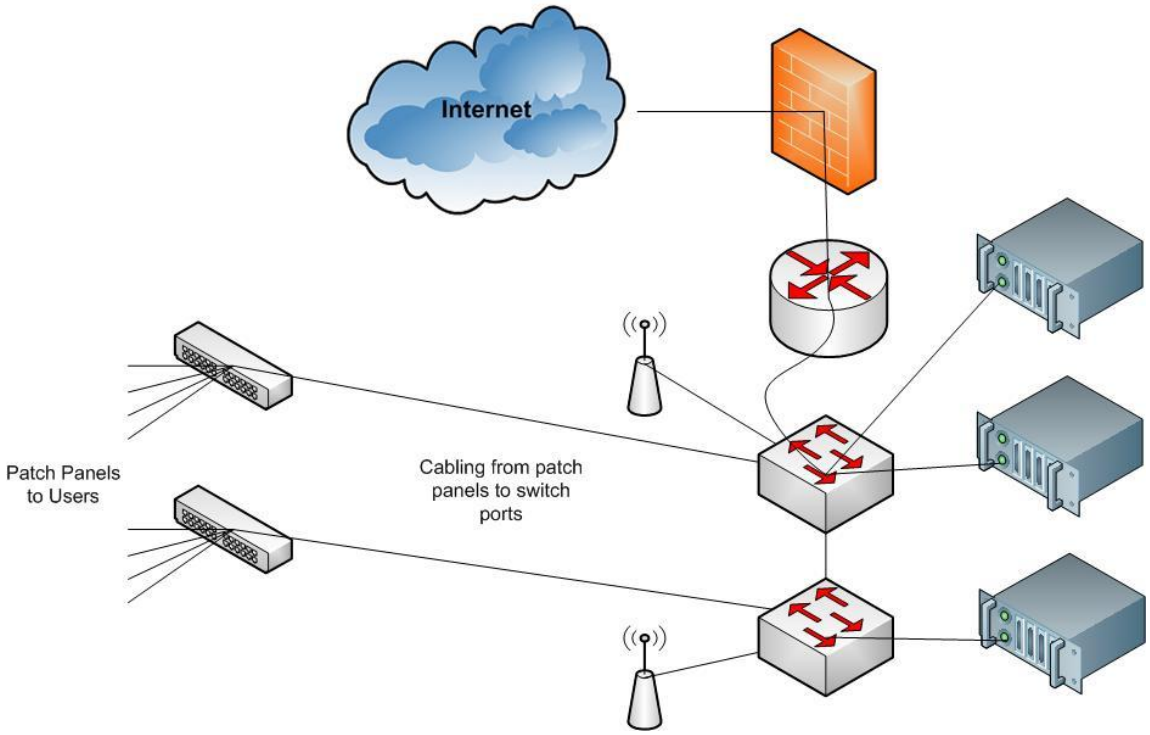


Figure 6.3 Connection to Equipment



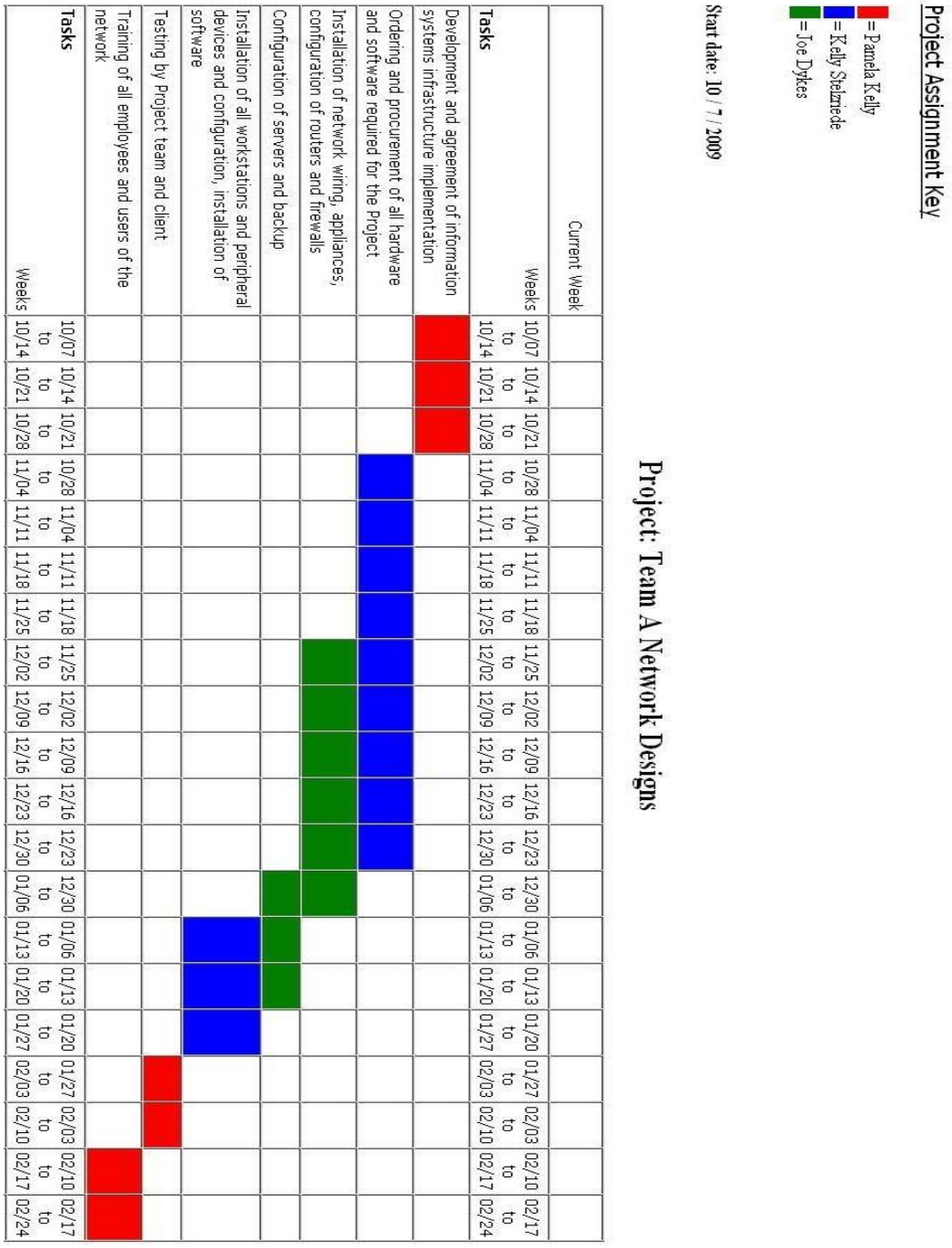
6.2 Dependencies

Success of the project will depend on, in chronological order (*contribution beyond the provision of TAND in italics)*

- *Building construction reaching the wiring phase*
- Network installation and configuration
- *Building construction being completed*
- *Furniture being delivered and installed*
- Server, workstation, and peripheral device installation and configuration
- *Internet Access successfully installed at the building.*
- *Hiring and placement of all users of the network.*
- Training of all network users
- Full documentation provided

6.3 Schedule

Table 6.1



7. Educational/Program Outcomes

The vision of this project is to provide Kinsley & Associates with a robust, fault tolerant, secure, and user-friendly information systems infrastructure that will allow the organization to focus on production rather than means of production. The network will facilitate the productive output of each employee and provide the organization with a considerable competitive edge.

7.1 General Education

The project Lead will organize a training program for all members of the organization a will address the following areas:

- Network resource utilization
- Macintosh operating system overview
- Acceptable use of network resources
- Information systems security
- Basic troubleshooting
- Acceptable email and Internet use

Further,

- A training program obtained from Nemetschek VectorWorks for Architects and Draftsmen
- Documentation for the acceptable use of the information systems resources and basic troubleshooting of workstation and network problems will be provided

7.2 Information Technology

The proposed project involves a complete design and implementation of an information systems infrastructure and encompasses all aspects of network design and implementation:

a. Wiring and network device installation and configuration

b. Server and disaster recovery installation and configuration

c. Workstation and peripheral device installation and configuration

d. Fault testing network infrastructure

e. Training and documentation for information systems infrastructure

The proposed project will provide TAND with the opportunity to exercise learned project management skills as the overall project management is critical to the success of the project.

a. Project scheduling and tracking

b. Communication and conflict resolution

c. Organization and management of team members and consultants

The proposed project will allow TAND to utilize crucial systems administration skills and techniques as the project moves into the final phase.

a. The entire system must be maintained on a regular maintenance schedule

b. Updates to all software and firmware must be performed on a regular schedule

c. General system support must be offered to the organization and must be provided in a timely, effective, professional manner as to not impede the productivity of the organization

d. Additional training must be provided as new software is installed and employees are added

e. Risk mitigation and disaster recovery must be performed regularly and in the event of a data loss

Annotated Bibliography

Apple, Inc. (2009). *Apple Support*. Retrieved October 1, 2009 from http://support.apple.com/downloads/ Apple, Inc. (2009). *Apple Store*. Retrieved October 1, 2009 from http://store.apple.com/us

Pricing, specifications, operating systems, corresponding software, and model numbers for the Mac workstations and server indicated in this project can be collaborated using Apple's website. Informational support including driver downloads, user manuals, Mac forums, and other Apple specific technical information will be used in the installation and training package included within the scope of this projects

Cerruzi, P (2003). A history of modern computing. (2nd). Cambridge, MA, MIT Press.

This book goes over the past successes within information systems, presenting the changes of computers over time. This is useful in directing the forward movement of the project, leaving room for scalability within the proposed system.

Cisco System, Inc (2009). *Cisco*. Retrieved October 1, 2009 from http://www.cisco.com/

This website is a plethora of information supporting the purchase, installation, and maintenance of all networking devices contained within this project. Including routers, hardware specifications, pricing, and customer support for all network products and configurations.

Dell, Initials. (2009). *Small and medium business learning center*. Retrieved from http://www.dell.com/business?~ck=mn

This website offers business discounts on the workstations, computer software and peripherals including printers and scanners. Excellent customer support is offered online and via telephone from this company, offering free and ongoing support while outside the scope of the TAND project, beneficial to the Kinsley & Associates.

First, Initials. (2009). Forum of incident and resopnse security teams. Retrieved from http://www.first.org/

This website offers up-to-date technical documents that have been modified to create the Acceptable Use and Security Policy for the this project.

Laudon, J, & Laudon, K. (2001). Essentials of Business Information Systems. Pearson Prentice Hall. Corresponding website: http://wps.prenhall.com/bp_laudon_essbus_7/48/12301/3149209.cw/index.html

This book offers the theory, including the benefits and disadvantages behind a series of project management approaches. These approaches offer detailed observations and directions in the creation of Gantt Charts, the planning cycle, organizational design, and scope control.

Reynolds, G (2007). Ethics in Information Technology. (2nd). Boston, MA, Thomson.

This book goes over what is appropriate within the information technology department in regards to employee surveillance, property infringement, privacy, and compliance.

Snedaker, Susan (2006). Syngress IT Security Project Management Handbook. Rockland, MA: Syngress Publishing.

This book helps IT professionals learn how to handle new jobs and duties like, budgeting, managing employees, and measuring the usefulness of new technologies.

Subramanian, M. (2000). Network Management: Principles and Practice. Addison-Wesley Longman, Inc.

This book goes over the technical details of networking, including configuration, hardware, security, and policy management.

Whitman, M., & Mattord H. (2009). Principles of information security (3rd ed.). Boston, MA: CourseTechnology.

This book goes over the risks involved with stored data, the laws that protect privacy information laws, and ways to protect networks.