BUSINESS TECHNOLOGY

"Man is still the most extraordinary computer of all."
-John F. Kennedy

BT 1

Revision 8.1

Work Certified™ 1.2016

BUSINESS TECHNOLOGY
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BUSINESS TECHNOLOGY

SUMMARY

BT 3

Revision 8.1

Work Certified™ 1.2016

BUSINESS TECHNOLOGY SUMMARY

Title: **Business Technology**

Hours: **12 hours**

Description: Business Technology is designed to provide members with a review of the computer and the Internet, as well as an understanding of appropriate office equipment use and social networking.

Members will learn how a computer system operates, how the Internet works, basic Windows operating system skills, basic word processing skills, and how to use spreadsheets, browsers, search engines and e-mail. (Please note: Beginning computer courses and/or workshops can be required by the certifying agency before a member takes this module.)

In addition to these skills, the members will also be introduced to social networking and effective use of these sites to demonstrate the importance of appropriate computer and Internet use in a work environment.

Objectives: After completing this course, members will have the basic knowledge and ability to use a keyboard, mouse, and common Windows operating system tools. In addition, the member will be able to perform simple word processing tasks, basic spreadsheet skills, browse and search the Internet, send e-mail and understand social networking and other common sites. The member will also understand the acceptable uses of business equipment in the work environment.

Materials: A computer for each member, a marker board or chalk board, an LCD projector attached to the instructor's computer (helpful, but not required), a course outline handout, in-class exercises and quiz study guide, an e-mail account for the instructor and an e-mail account for each member. A common printer for the classroom is necessary to have the members print their work for instructor review for mastering competencies for this module.

Implementation: The environment for this course should be fun and informal. The instructor should continually circulate the room to check the status of members by viewing their computer monitor to ensure that they are keeping up with the lecture/in-class exercises. The instructor should make use of handouts, a marker or chalkboard and a computer overhead (recommended, not mandatory) during the presentation of the content in this module.

Topics:

General Office Equipment Overview
Computer Use Exercises
Computer Lecture
Practicing Mouse Control
Word Processor
Excel Overview/Exercises
Internet Overview
Using a Browser
Using Search Engines/Exercises
Using E-mail/Exercises
Social Networking

Certification Requirements:

Score 80% or higher on the Business Technology Online Quiz
Master all competencies for Business Technology (see page BT6-7)
Score 80% or higher on the Work Certified™ Certification Exam

BUSINESS TECHNOLOGY COMPETENCIES

BT-07. Demonstrates understanding of Business Technology by understanding appropriate use of office environment safety with equipment and tools, as well as practicing sustainable workplace responsibilities as evidenced by observation of performance.
BT-08. Demonstrates understanding of social networking and appropriate use as evidenced by observation of performance.
BT-09. Demonstrates proficiency in connecting to the Internet and go to web sites when provided with web site addresses and successfully bringing up a minimum of 5 web sites in class as evidenced by observation of performance.
BT-10. Demonstrates proficiency in using search engines to find web sites on specific topics by performing a minimum of two searches correctly in class (one search per topic) as evidenced by observation of performance.
BT-11. Demonstrates ability in using the Internet to find the answers to specific questions by scoring 75% or higher on the Search Engine Exercise (Scavenger Hunt) as evidenced by observation of performance.
BT-12. Demonstrates proficiency in using a mouse effectively as evidenced by observation of performance.
BT-13. Demonstrates proficiency in using a computer keyboard by exactly reproducing the letter in the Word Processing Exercise as evidenced by product review.
BT-14. Demonstrates proficiency in using word processing format functions by completing the following on the Word Processing Formatting Exercise (using bold and italics and changing fonts, font sizes, font colors, and clipart) as evidenced by product review.
BT-15. Demonstrates ability to effectively use spreadsheets by using formulas and functions as evidenced by observation of performance.
BT-16. Demonstrates proficiency in successfully making at least one web site a favorite place (bookmark) in class as evidenced by observation of performance.

BUSINESS TECHNOLOGY COMPETENCIES (continued)

BT-17. Member accomplishes understanding managing an incoming e-mail by retrieving their Work Certified™ Welcome e-mail and forwarding to their Instructor, which results in validation of member's e-mail address.
BT-18. Member sends an e-mail to the Instructor by entering a proper address in the "To" field, applicable subject in the "Re:" or "Sub." field and e-mail is successfully received by the Instructor confirming accomplishment of sending an e-mail and validation of member's e-mail address.
BT-19. Demonstrates ability to save the e-mail address from an incoming e-mail to an address book by performing the activity successfully in class as evidenced by observation of performance.
BT-20. Demonstrates knowledge of computers, the Internet and software applications by achieving a score of 80% or higher on an **online module quiz**.

BUSINESS TECHNOLOGY COURSE OUTLINE

LESSON 1

- Course Outline & Competency Requirements
- Business Technology Overview
- Office Safety Awareness
- General Office Equipment Overview
- Computer Overview
  - Computer Use Exercises
  - How A Computer Works Overview
  - Computer Hardware/Software

LESSON 2

- Practicing Mouse Control
- Word Processor and Keyboarding
  - Word Processing Exercise
- Excel Overview
  - Excel Spreadsheet Practice Exercise

LESSON 3

- Internet Overview
- Using the Browser/Practice

LESSON 4

- Using Search Engines
  - Search Engine Exercises
- Using E-mail
  - E-mail Exercises
- Social Networking
  - Using Social Networking in Job Search
  - Using Social Networking in the Workplace

Business Technology Module Online Quiz

BUSINESS TECHNOLOGY TEACHING PLAN OVERVIEW
LESSON 1

This lesson plan is for three hours. Take two 10-minute breaks at appropriate times.

TOPIC	TIME	COPIES REQUIRED as HANDOUTS
Course Outline & Competency Requirements	10 -15 minutes	Course Outline - page BT8 Course Competencies-page BT6-7
Business Technology Overview	20-30 minutes	Business Technology Handout- pages BT12-13
General Office Equipment Overview	25-30 minutes	General Office Equipment Overview Handout-page BT14
Business Tech and Equipment Exercise **Competency**	60-90 minutes	Business Tech and Equipment Exercise- page BT15
Office Safety Awareness	25-30minutes	Office Safety Awareness Handout- page BT16
Computer Lecture Computer User Exercises How A Computer Works Overview Computer Hardware/ Software	35-45 minutes	Computer User Exercises- page BT17-BT18 How A Computer Works Overview Handout- page BT19 Computer Hardware/Software Handout - page BT20-21

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 1

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Course Outline & Competency Requirements	Course Outline-page BT8 Competencies-page BT6-7	N/A	Review material on these documents.

INSTRUCTOR NOTES:
Make sure you go over all competency requirements for this module with the members.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Business Technology Overview	Business Technology Overview Handouts-page 12-13	N/A	Review the material on these documents.

INSTRUCTOR NOTES:
echnology is a powerful energy in business environments. Corporations can implement computers, servers, intranets, software applications and programs or Internet websites into their daily business operations. Rapidly changing technological changes can have significant influence on businesses.
Technology provides the tools for businesses to increase productivity and profitability. Understanding how technology is impacting businesses, both positive and negative, reveals the influence of innovation. Technology today can assist consumers and businesses both in how to enhance and streamline their interactions.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
General Office Equipment Overview	General Office Equipment Overview Handout- page BT14	N/A	Review the material on these documents.

INSTRUCTOR NOTES:
1. Review the handout with the class. Basic definitions and discussion over general office equipment found in most offices. An understanding of the functions is stressed here.

2. Review etiquette of office equipment as acceptable practices expected in any office environment. Each office may have their own expectations for the use of their office equipment; therefore, these are general to all office environments.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 1 (continued)

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Competency-Business Technology Overview Exercise	**Business Technology Overview Exercise**- page BT15	N/A	An overview exercise for Business Tech and office equipment.

INSTRUCTOR NOTES:
The purpose of this exercise is three-fold: using the computer, researching on the Internet, and identifying with the impact of Business Technology and the equipment most commonly used today. Have the members realize the impact the equipment we take for granted today versus the time when we did not have such conveniences.

This is a competency requirement that all participants must perform correctly.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Office Safety Awareness	Office Safety Awareness Handout- page BT16	N/A	Review the material on these documents.

INSTRUCTOR NOTES:
Stress to the class the importance of maintaining a safe work environment. Practicing safety at work can decrease costs for the company which can ultimately result in a return to the employees through improved office space and equipment and possibly increase in wages or incentives/benefits.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Computer Lecture Computer Use Exercises How A Computer Works Overview Computer Hardware/ Software	Computer Use Exercises- page BT17-BT18 How A Computer Works Overview Handout- page BT19 Computer Hardware/Software Handout - page BT20-21	N/A	Review material to assist members in recognizing safe practices for physical comfort when using a computer. Review handouts of computer operations and the components of the computer and applications.

INSTRUCTOR NOTES:
Review materials for practice of proper exercises and understanding of computer operations.

TOPIC A: BUSINESS TECHNOLOGY OVERVIEW

Business technology has played a big part on the history of human beings. It has been the driving force behind so many of the advancements in communications. It has also had a persistent influence on styles of work and enhanced the value of certain career skills. Knowing the basics of business technology will give you a better understanding of the business world.

History

Since the beginning of mankind we have had a way of communicating to each other and of recording history, but as civilization progressed and business ensued we developed more sophisticated equipment. The typewriter was invented as early as 1857. Masking tape was invented in 1925 by Dick Drew. Cellophane tape and the ball point pen, both pieces of business technology that are still used today, were invented in the 1930s. Eventually, advances in technology have allowed us to invent fax machines and word processors. Personal computers became a part of life in the 1970s.

Variety

The variety of business technologies used has changed with advances in the field. The basic types have stayed with us throughout the years. Supplies such as tape and white-out have not changed over the years and remain an often-used part of business technology. Technological advances have changed most other types of business technology. From typewriters to Personal Computers (PCs), to wrist watch computers to smartphones which continue to change to improve and outperform the generation before.

Trends

Trends in business technology are pointing to smaller and faster and more portable office equipment. They will be capable of carrying out more diverse functions with nominal human input. Faster computers and things that make business easier will take precedence over older technologies. The way we manage business relationships is also changing. The Internet allows us to reach talented business professionals all over the world who can meet our needs.

Influence

Business technology has made a huge impact on everyday life. The inventions in this industry have migrated into the lives of mainstream society. People have in their homes much of the technology used in business such as phones, word processors, PCs, fax machines, copiers, scanners, wireless networks, and network connections. The way we conduct business has changed the way we live.

Function

The function of business technology is to enhance the way business is done to make it more efficient and profitable. Each type of business technology has its own unique function. Some types are used to do menial tasks and some, like the personal computer, are multifunctional. All are used to streamline business procedures with the least amount of effort and time.

BUSINESS TECHNOLOGY OVERVIEW (continued)

Communication
E-mail makes it easy for companies and their customers to communicate, both internally and externally; a customer issue can often be dealt with effectively through e-mail and communications can be documented. Technology allows companies to reach consumers in new economic markets, whether regional, national or international.

Production
Business owners and managers can use technology to increase the effectiveness and efficiency of their operations, which often results in an increase in production output. This occurs because employees can complete more tasks and activities while cutting back on wasted resources. Businesses that use up-to-date systems and technology for production can offer more competitive services and products. Smaller businesses can also compete with larger organizations using carefully marketed Internet operations. Internet sales websites can operate 24/7, allowing companies a continual reach to customers.

Social Networking
The introduction of social networking through websites like Twitter™ and Facebook™ have offered companies new marketing tools, as well as the opportunity to build relationships with their customers.

Considerations
Although most technology provides a benefit of some kind to businesses, it also comes with drawbacks. Doing business on the Internet is much more competitive, and smaller companies can go unnoticed; additionally, bad press on social media websites can cost a business profits. Many companies implement information technology management functions to ensure that their computers and other technological equipment remain current. Technology quickly becomes outdated, which can be of some detriment to companies. Failing to upgrade technology can actually increase operating costs more than purchasing and implementing new equipment.

Source: http://wwwebizmba.com

GENERAL OFFICE EQUIPMENT OVERVIEW HANDOUT

Offices today invest in equipment that will streamline and efficiently assist their employees in achieving results. In order to ensure that the employee is comfortable and knowledgeable in using the equipment, below are the most common office machines, even the good old fashioned ones, and the proper etiquette for their use.

Calculator

A machine for performing mathematical calculations, most modern electronic calculators are small (often pocket-sized) and usually inexpensive. In addition to general purpose calculators, there are those designed for specific markets; for example, there are scientific calculators which focus on advanced math like trigonometry and statistics for real estate and banking uses.

Computer

A computer is a machine that manipulates data according to a list of internal instructions and/or software.

Copier

A photocopier (copier) is a machine that makes hard copies (paper) of documents and other visual images quickly. Today, copiers may also have the capability to scan or fax documents as well as print in color or black and white. Some photocopiers require a key code for printing.

Facsimile Machine or Fax

A telecommunications machine used to transfer copies (facsimiles) of documents to other locations with a fax machine around the world through telephone lines and electronic transmission of the copy contents. Make sure to use a cover sheet to announce your document(s), as well as, to ensure that they are received and given to the intended person or department.

Telephone

The telephone is a telecommunications device that is used to transmit and receive sound (most commonly speech), usually two people conversing, but sometimes three or more, commonly referred to as a conference call. Telephones can be modified for hearing impaired persons as well. Most offices have individually designed telephone systems to handle numerous lines for all employees, to include messaging systems.

OFFICE EQUIPMENT ETIQUETTE

- If it's empty, fill it. This includes paper, toner, ink, etc. If you cannot do so, report it to your supervisor!
- If it's broken, fix it, or at least ask for repair. Don't just walk away and hope the next person will take care of it! If necessary, report it to your supervisor!
- If you don't know how to use the equipment properly, ask and learn. Not using equipment properly can damage it!
- If it isn't your turn, wait. Remember we all have priorities. Big jobs should be scheduled at times when traffic is low!
- When you're finished with it, make sure it's ready for the next person to use. Reset the copier to original settings!
- Do not use your employer's equipment for personal use without prior permission. This includes e-mails, downloads, copying, and faxing.

COMPETENCY
BUSINESS TECHNOLOGY OVERVIEW
EXERCISE

Please pick one of the following to complete a competency requirement for this module.

Using the internet, find an article which discusses a topic in the Business Technology Overview and how it has impacted a business, community, corporation, the workforce, etc. and bring to class for presentation.

TOPIC B: OFFICE SAFETY AWARENESS HANDOUT

Maintaining a safe work environment is every employee's responsibility. Safe work environments mean less injuries and accidents. Your employer has a responsibility, too, in ensuring that steps are taken to provide a safe, comfortable environment that is in compliance with local and federal regulations. **OSHA, the Occupational Safety and Health Administration**, sets forth rules and regulations that employers must implement to ensure better working environments. Most employers have an employee Safety Team that works with the company Human Resources team in ensuring that established rules for safety are enforced. Depending on the industry, the safety rules may encompass specific rules for use with specific equipment, work areas, and materials.

SOME DO'S AND DON'TS OF OFFICE SAFETY

1. Don't lean back in your chair. If you do, you could end up on the floor.
2. Do keep the floor and walkway clear of electrical, telephone and computer cables, boxes, etc.
3. Do close one drawer in your filing cabinet before opening the next one; this will prevent the file cabinet from tipping over.
4. Do watch out for slippery surfaces, clean up spilled drinks immediately.
5. Do look where you are going. Don't read or talk on a cell phone while walking.
6. Walk. Don't run!
7. Don't use desks, chairs, or boxes as a stepladder.
8. Do hold onto handrails when using stairways and stay to one side to avoid bumping into another person.
9. Do know the designated smoking area for your workplace.
10. Don't overload wall sockets with extension cords. It can cause a fire.
11. Don't touch electrical switches, sockets, plugs, etc. with wet hands.
12. Don't eat or drink at a computer station. It could result in malfunction of the computer and void the warranty. And make the IT guy very angry.....
13. Do watch for unsafe conditions such as defective equipment, burned out lights, loose steps, torn carpet, etc and report them to your supervisor immediately.

TOPIC C: EXERCISES FOR COMPUTER USERS

There are many quick and easy exercises that can relieve physical stress if you are spending long days at a computer. You should do these exercises regularly.

EXERCISE GROUP 1: FOR BACK, NECK AND SHOULDERS

A. While standing, bend your knees slightly and let your body roll down over your feet. Let your arms hang down and stay in this position for approximately fifteen seconds. Roll up slowly with your head coming up last.

B. While sitting in a chair, bend your body forward and let your arms hang over your feet. Stay in this position for approximately fifteen seconds. Roll up slowly with your head coming up last.

C. Stand up and raise your arms over your head. Stretch your right arm above your left and then stretch your left arm over your right arm. Continue with these alternating arm stretches for approximately fifteen seconds.

D. While standing, slowly roll your head down to your chest and then to your right side. Slowly roll your head back down your chest and to your left side. Repeat this exercise six or seven times.

EXERCISE GROUP 2: FOR THE EYES

A. Eye pushups: Position a pen, pencil or finger at arm's length directly in front of your eyes. Slowly bring the object toward your eyes until your eyes are stressed or you experience double vision, and then slowly return the object to arm's length. Repeat several times.

B. Eye relaxation: Take your eyes away from the monitor and look into the distance. This should be done for about 15 seconds every 20 minutes.

EXERCISE GROUP 3 FOR THE HANDS, WRISTS AND ARMS

A. While sitting, shake both hands vigorously for approximately five seconds being careful not to bump into anything.

B. Rub the inside of your wrists gently with your thumbs.

C. Hold your arms out with palms down. Slowly bend your wrists up and down alternating between left and right.

EXERCISES FOR COMPUTER USERS (CONTINUED)

D. While sitting, hold your elbows with your hands. Gently pull your left elbow with your right hand and turn your head and upper body to the right. Repeat on the opposite side by pulling your right elbow gently with your left hand turning your head and upper torso as you pull. Repeat twice for each side.

EXERCISE GROUP 4: ISOLATION EXERCISES

A. While standing, roll your shoulders forward five times, then reverse and roll them backward five times.

B. Roll your right shoulder backward five times, the forward five times. Repeat with your left shoulder.

EXERCISE GROUP 5: FOR THE LEGS AND FEET

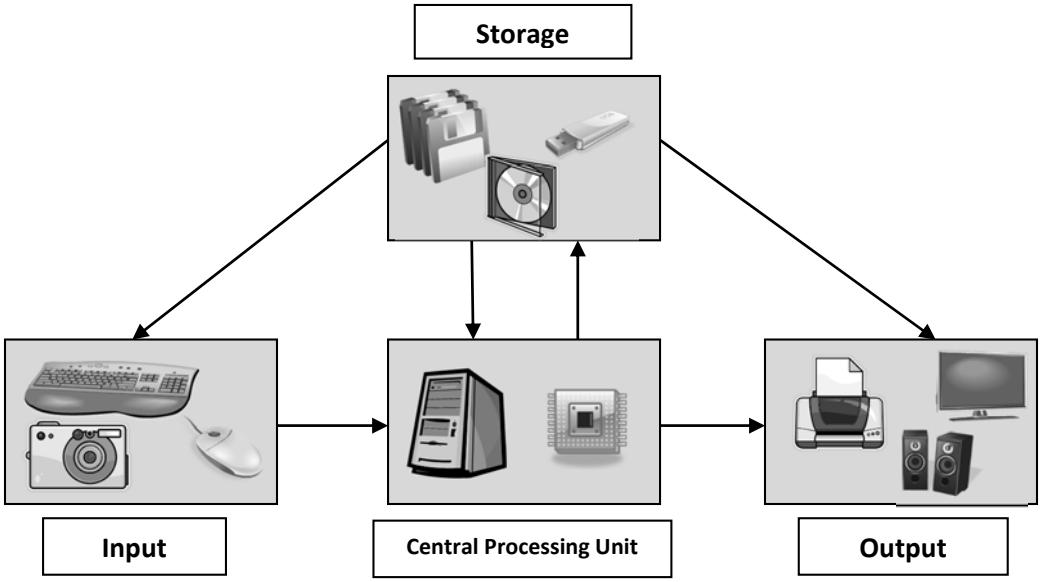
A. Sit in a chair with your feet flat on the floor and lift the heel of your left foot off the floor while keeping your toes on the floor. Hold for a few seconds and return your heel to the floor. Perform this exercise six times for each foot.

B. This exercise is similar to the previous one, except, lift your toes off the floor. Repeat six times for each foot.

C. Lift your left knee several inches off the chair and release. Do this exercise six times for both the left and right knee.

TOPIC D: HOW A COMPUTER WORKS

A **COMPUTER** is an electronic machine that inputs, processes, outputs, and stores data at high speeds according to programmed instructions (hardware /software), producing a visual or auditory product.



Central Processing Unit or CPU- the heart of the computer; housing the microprocessors on a circuit board that manages the equipment that processes the data; completes the requested command

Input- data or commands are entered to the computer for processing through a keyboard, mouse, disks, etc.

Output- the final product of your entered data or commands as processed and revealed through a monitor, speakers, or a printed document

Storage- the location in which you "save" or protect your data. Storage can be achieved through internal or external devices, such as discs, CDs, USB Flash drives or the internal hard drive of the computer.

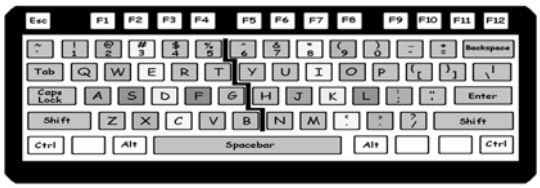
Computers come in a variety of types of phones, handheld PDAs, laptops, personal desktops, and are changing all the time!

Larger computers, referred to as mainframes, allow multiple users to access computers at the same time.

COMPUTER HARDWARE/SOFTWARE

HARDWARE: The physical parts of the computer.

Input devices are equipment used to enter data, pictures, or document information into the computer.



Keyboard: A device of arranged keys or buttons by which alpha-numeric information can be entered into a computer; closely designed from the standard typewriter keys.

Mouse: A small manual device used by hand (fingers/palm) that controls movement of a cursor as well as manipulating other commands and functions for a computer display

Scanner: A machine that scans documents or a pictures for use or storage on a computer; also used with e-mail and in place of fax machines

Flash Drive (USB): A small device functioning as a disk drive, containing memory, which can be removed easily for transport and can store in excess of 500 gigabytes (500,000,000 bytes) of data

Disks: A data storage form that is made of a magnetic film enclosed in a plastic case. The case protects the fragility of the data storage. Today's disks are more recognized in the form of a **CD, (compact disk)**, a round, plastic form, metallic in appearance, that records and saves data as well as videos and music.

Digital Camera: Captures images that can be downloaded to view on a monitor and then printed or e-mailed

Output devices are external equipment that provides a visual or audible display of data, pictures, or documents.

Monitor: Similar to the appearance of a television screen, provides a visual display of activity in real time or through accessible memory.

Printer: Provides a hard copy, paper or photograph, when directed through computer linked to printer.

Speakers: A device that converts audio signals to audible sound

SOFTWARE -the programs (instructions) that tell the computer what to do

Operating Systems Software that manages computer resources and provides individuals with a vehicle to access those resources. An operating system processes system data and user input, and responds by allocating and managing tasks using internal system resources. Examples include Windows®, Mac®, Linux®, etc. The software must be compatible with the operating system.

Applications

Word Processing A program used to create documents using a word processor program such as MS Word® or Micro Soft Works®; you can create documents such as forms, letters, resumes, and stationery.

Spreadsheet A program created to replace the hand-written spreadsheet. The sheet displays a grid of rows and columns that contain alpha-numeric data. There are mathematical formulas, to include financial and statistical formulas, used to provide results for reports and bookkeeping. The most well-known program is MS Excel®.

Database A computer database program is a structured compilation of records or data stored in a file to be used to supplement other programs for the purposes of report writing and storage of data organization. The most popular program is Micro Soft Access®.

Games Program software created for entertainment through games/activities. They range from simple programs like Solitaire, to more complicated games with complex graphics and complicated rules.

Utilities A variety of available software programs that allow you to securely manage your computer and data by monitoring safety and searching for possible obstructions that can be harmful to data, as well as, hardware and software. Examples of software include programs to make pictures, videos, scan for viruses or problems, detect potentially damaging programs or e-mails, etc.

BUSINESS TECHNOLOGY TEACHING PLAN OVERVIEW
LESSON 2

This lesson plan is for three hours. Take two 10-minute breaks at appropriate times.

TOPIC	TIME	COPIES REQUIRED as HANDOUTS
Practicing Mouse Control	35-45 minutes	None
Word Processor Overview	35-45 minutes	Word Processing Overview Handout-pageBT27
Word Processing Exercise	35-45 minutes	Word Processing Exercises - page BT28-29
Word Processing Letter Exercise	35-45 minutes	
Excel Spreadsheet Overview	35-45 minutes	Excel Spreadsheet Overview – page BT30-33
Excel Spreadsheet Practice	45-60 minutes	Excel Spreadsheet Practice- page BT34

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 2

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Practicing Mouse Control	Solitaire and Paint If you do not have access to Solitaire, go to www.CNET.com. At the site, click on downloads. The click on Games, click on Cards. Look for a free card game to download. One potential game is: 123 Free Solitaire 2003 5.11 If you can't find it in the list of games you can search on the exact name within CNET and limit your search to downloads. Also, Object Paint 1.0 is available to download at CNET as an alternative to Paint. NOTE: Instructors may want to check on local availability of mouse specific training programs	N/A	Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension. Start with an introduction to the computer and the hardware, such as keyboard, mouse, mouse pad, if used. Using the Instructor notes, have the students practice and familiarize themselves with the equipment and how it is used. Engaging the students in the game and using the Paint feature will allow them to gain confidence and comfort in using the mouse. Circulate the room to ensure they are doing these techniques and learning the skills effectively and comfortably. This is the instructor's confirmation of their student's demonstration of proficiency in using the mouse.

INSTRUCTOR NOTES:

1. **Remind clients to use their computer exercises for safety and comfort.** Be sure to check everyone's progress by circulating and observing all members as they work in Solitaire and Paint.
2. Inform the class that the keyboard and mouse are separate items.
3. Explain and demonstrate the difference between the mouse pointer/cursor and the stationary cursor that indicates text/number type location.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 2 (continued)

4. Inform the class how they should hold the mouse (as a permanent part of their hand as opposed to a device they keep taking their hand off and on). Talk about what holding the button down on the mouse while moving the mouse does (drag and drop), how little they have to actually move a mouse to travel distances on their computer screen.
5. Do not spend too much time going over the strategy of solitaire. If a member is lost, sit with them and show them how it is played. Then point out the moves they should make and watch as they make the moves. Then go on to the next member. During solitaire, be sure to review the **minimize, resize, close box** that is on the **top right of every window**. Have the members use all three during the Solitaire exercise for practice. During minimize, talk about multi-tasking, how the computer can do many things at once, and demonstrate this by minimizing Solitaire, which keeps it running, and they can go online to the Internet.
6. Make sure every member uses the multiple options during Paint including the thick and thin paint brushes, the spray cans, drawing lines and shapes, adding text, etc.

This is a required competency that all participants must perform correctly.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Word Processing Overview	Word Processing Program Overview with MSWord or Works-page BT27	N/A	Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension. Have the members open up a word processing program, type their names and hit enter five times. Go over some of the basic word processing commands. Have members practice typing and using the various commands. Use anything you want as a practice exercise. Circulate the room to ensure they are doing these techniques and learning the skills effectively and comfortably. This is the instructor's confirmation of proficiency in using the mouse.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 2 (continued)

INSTRUCTOR NOTES:

1. **Reminder to clients to use their computer exercises for safety and comfort.** Everyone thinks of ***cut, copy*** and ***paste*** together but it is really ***cut and paste*** and ***copy and paste***. Paste is the second half of both the cut and the copy functions. Be sure to witness everyone doing ***cut*** and ***paste and copy and paste*** correctly. *It is a required competency.*

2. On the keyboard explain how to type capital letters (shift and letter) and explain the difference between that and caps lock. Have the members practice the full range of format commands on their name. Be sure to talk about what highlighting is and how to do it (move mouse to beginning and hold down left mouse button and drag it to end). Also explain that you can only highlight in one direction so you have to start at the beginning or end; it won't work in the middle. Often, letters will jump around on the screen during this function (computer reads it as a drag and move instead of highlighting). Inform the class that if errors occur they need to immediately stop what they are doing and go to the top menu and click on edit and select the first option which is undo. Explain the purpose of header (same title on all pages) and footer (automatic page numbering, etc.).

3. When talking about clip art pictures, explain how clicking on the picture places a box around it and that box is to pictures what highlighting is to words. Then reinforce that you must let the computer know through highlighting what words you want to change or what picture you want to move or resize.

4. Before going over spell check, explain how the program lets users know that they have a word that is not in its dictionary. Then explain how it points out grammatical errors. Let the class know that the colored underlining does not show up when printing a document. If time allows, as the more advanced members get the hang of the basic commands you can show some advanced commands to practice (not part of competencies) and let them practice it on their own.

This is a required competency that all participants must perform correctly.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Competency-Word Processing Letter Exercise	Competency-Word Processing Exercise - page BT28-29	N/A	Distribute the Word Processing Exercise. **Note:** If the computers do not have print capability you will have to grade the exercise by reviewing the letters on the monitors.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 2 (continued)

INSTRUCTOR NOTES:
Members are allowed to show the instructor one draft, have all errors pointed out and be informed of how to correct them and then hand in a final product.

Comment:
Please point out that in real life, underlining parts of speech on the resume letter is not necessary. These elements are included here as part of the exercise for using bold and underline commands.

This is a required competency that all participants must perform correctly.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Excel Overview	Excel Overview- page BT30-33	N/A	Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension.
Excel Exercises	Excel Spreadsheet Practice Exercise - BT34	Page BT35	

INSTRUCTOR NOTES:
1. Review the handouts referencing the Excel Spreadsheet Overview.

2. Encourage the members to practice and play around using the toolbar features in Excel.

TOPIC E: WORD PROCESSING OVERVIEW

Word processing is the most common application used to create, edit, and print documents. A word processor enables you to create a document, store it electronically on a disk or your computer hard drive files, display it on a screen, modify it by entering commands and characters from the keyboard, and print it on a printer. The great advantage of word processing over using a typewriter is that you can make changes without retyping the entire document. If you make a typing mistake, you simply back up the cursor and correct your mistake! If you want to delete a paragraph, you simply remove it, without leaving a trace. It is equally easy to insert a word, sentence, or paragraph in the middle of a document.

Word processors also make it easy to move sections of text from one place to another within a document, or between documents. When you have made all the changes you want, you can send the file to a printer to get a hard copy!

Word processors vary considerably, but all word processors support the following **basic features**:

Insert text: Allows you to insert text anywhere in your document and to **Delete text, a**llowing you to erase characters, words, lines, or pages as easily as you can cross them out on paper.

Cut and **paste :** Allows you to remove (*cut*) a section of text from one place in a document and insert (*paste*) it somewhere else.

Copy : Allows you to copy a section of text and insert it somewhere else.

Search and replace : Allows you to direct the word processor to search for a particular word or phrase. You can also direct the word processor to replace one group of characters with another everywhere that the first group appears.

Word wrap : The word processor automatically moves to the next line when you have filled one line with text, and it will re-adjust text if you change the margins.

Print: Allows you to send a document to a printer to get a hard copy.

There are additional features that enable you to manipulate and format documents in more sophisticated ways. The most used are listed below, and are not by far a complete listing:

Font specifications: Allows you to change fonts within a document. For example, you can specify bold, italics, and underlining as well as increase or decrease the actual size of the printed letters/numbers.

Graphics: Allows you to embed illustrations and graphs into a document. Some word processors let you create the illustrations within the word processor; others let you insert an illustration produced by a different program.

Headers, footers, and page numbering: Allows you to specify customized headers and footers that the word processor will put at the top and bottom of every page. The word processor automatically keeps track of page numbers so that the correct number appears on each page.

Layout: Allows you to specify different margins within a single document and to specify various methods for indenting paragraphs.

Spell check : A utility that allows you to check the spelling of words. It will highlight any words that it does not recognize. The T**hesaurus** allows you to search for synonyms without leaving the word processor.

Tables of contents and indexes: Allows you to automatically create a table of contents and index based on special codes that you insert in the document. WYSIWYG ***(what you see is what you get):*** With WYSIWYG, a document appears on the display screen exactly as it will look when printed.

READY TO GET STARTED?

BT 27

COMPETENCY
WORD PROCESSING EXERCISE

Step 1: Create your own stationery by creating letterhead in the header portion of your word processing document. The letterhead should be centered on your page and use the following format:

Name
(Bold, different and slightly bigger font and different color than rest of address)

(Insert a Picture or multiple pictures using clip art)

Address 1
Address 2
City, State Zip
Phone number **(italics and bold but in same smaller font as other address fields)**

Step 2: Switch to the main body of your word processing document and type exactly as it appears on the letter (BT29). Only type the body of the letter since you have your own letterhead.

Step 3: Save this word processing document to your diskette or file location **as directed by your instructor**. Print out a copy of the letter for this completion of this competency.

WORD PROCESSING LETTER COMPETENCY

TYPE YOUR NAME
TYPE YOUR ADDRESS/PHONE NUMBER/E-MAIL ADDRESS

Type Current Date

Type Instructor's (Employer) Name
Type Agency Address
Type City, State, Zip Code

RE: Administrative Secretary Position

Dear Mr. /Ms. *Instructor's Last Name*:

Please accept this cover letter and attached Résumé in application for the position of Administrative Secretary as posted in the News Chronicle on Sunday, *type date*.

I have served as an Executive Secretary for senior executives for twenty years. Although I don't have the Associate Degree you request, you'll find that my administrative experience and office management skills are superior.

I am proficient in word processing, spreadsheets, and databases. I am also skilled in **dictaphone transcription**, as well as in the use of multi-line telephone systems. I am able to efficiently manage and prioritize several projects and tasks by daily review and organization.

I would appreciate meeting with you to discuss how my abilities and qualifications will benefit your company. Please contact me during the day at *(555) 555-1234*, evening at *(555) 555-5678*, or at my e-mail address: (*type your e-mail address*).

Thank you for your time and consideration to interview me for this position.

Sincerely,

Type your name

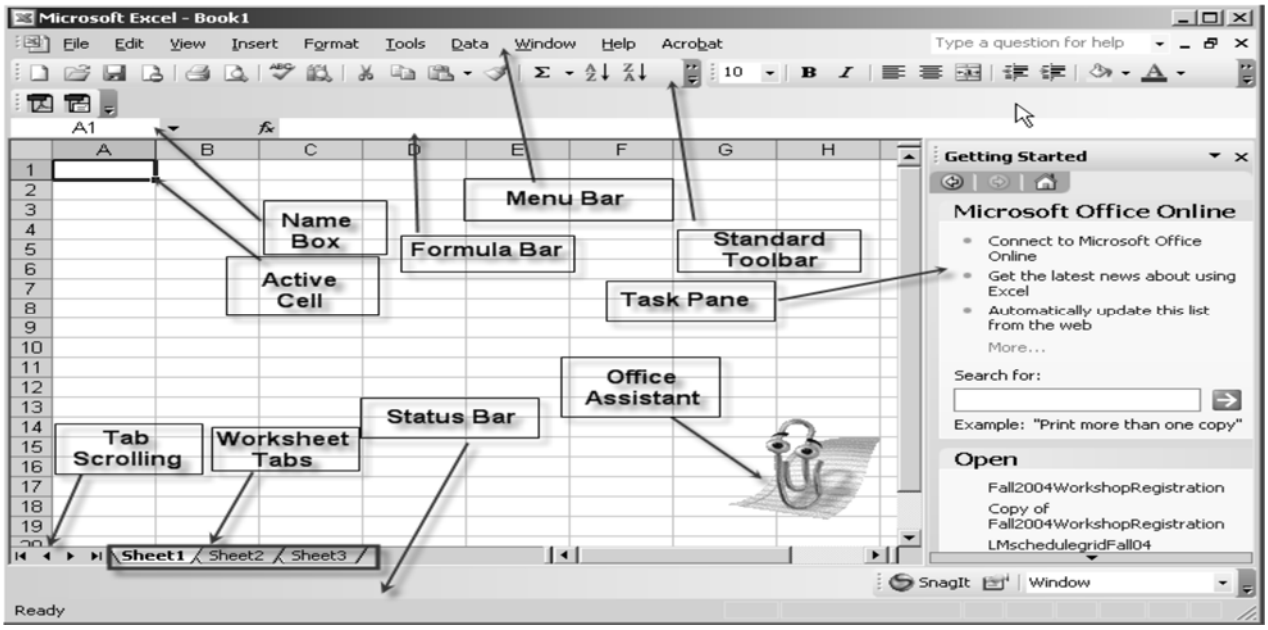
Enclosure: Résumé

TOPIC F: EXCEL© SPREADSHEET

Microsoft Office Excel© is a powerful tool you can use to create and format spreadsheets, and analyze and share information to make more informed decisions. There are different versions of MSExcel©, but the elements remain the same.

What is a Spreadsheet?

A spreadsheet is a tool for working with and analyzing numerical data. In structure, it consists of a grid of rows and columns, rather like a large sheet of graph paper. Each row is numbered, usually from 1 to about 8,000, and each column is labeled by a letter. The sequence of letters is usually A to Z, then AA, AB, AC...and so on. A typical spreadsheet is shown below.



At the top of the window is a blue bar called the **title bar**. The title bar contains the name of the application (*Excel*) and the name of the workbook you are working in (automatically called "Book 1" until you rename it).

The title bar also includes the minimize, maximize/restore, and close buttons. Below the title bar is the **menu bar**, containing lists of commands you will use with *Excel*. Many of the menus on this bar –such as File, Edit, Format, or Help - will seem familiar if you use other Microsoft products. Beneath the menu bar is the **standard toolbar**, which contains buttons with images that correspond to some frequently used menu commands:

To see what a toolbar button does, pause your mouse pointer over the button and a brief description will appear. If you want to add a function to your toolbar, hover your mouse over the **toolbar options** icon and click. You will see a list of available options. Click on the toolbar option you would like to add.

NOTE: *If a particular button appears "grayed out" on a toolbar, it means that option is not available for your current activity.*

EXCEL© SPREADSHEET OVERVIEW (continued)

How many cells are in an Excel Workbook? Almost too many to count! Each worksheet has 256 columns (from A to IV) and 65, 536 rows. Multiplied together, that gives you 16, 777, 216 cells per worksheet. Each new workbook you open has three worksheets, giving you 50,331,648 cells initially. You can also add worksheets to workbooks to even further expand the number of cells available.

This simple structure can help you to perform very complex and powerful calculations and data storage. At the intersection of any column with any row you get a **cell**. A cell is like a box that has a label and contains information. The label of the cell is called the *cell reference* or *cell address* and this is derived from the cell's column letter and the row number. So, a cell in column C and row 3 has the cell reference C3. Every cell can contain one of three types of information:

1. Numbers

The basic element of every spreadsheet is numbers. As mentioned above, any number you type into a spreadsheet will be stored in the same format, no matter what it refers to. So the result of a scientific calculation will be stored in the same way as a figure relating to a budget proposal. This is fine as far as calculations are concerned, but it does not make the spreadsheet easy to read. Therefore most spreadsheets have the ability to display numbers in different ways. Typically there are fixed formats (normal numbers with a fixed number of decimal places), scientific notation, currency and commas (to designate 1,000's). All these formats are for display purposes only, but they are important in making your spreadsheet clear to yourself and other readers.

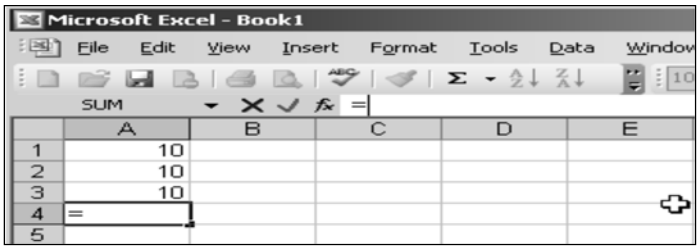
2. Text

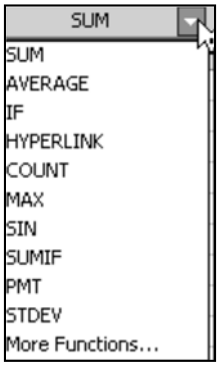
You could have your spreadsheet just filled with numbers and calculations, and it would still do the job for you perfectly well. However, if you have a mistake in your calculations or you need to edit the spreadsheet, or someone else needs to look at your spreadsheet, multiple screens full of numbers is not very informative. Text in a spreadsheet is used mainly for labeling and explaining the numbers so that you know what the numbers are referencing. Most spreadsheets have some simple database capabilities including searching and sorting, therefore, the text becomes quite important. The text is always important when it comes to presenting your numbers and calculations to other people. Most spreadsheets therefore allow you to present your text in a variety of typefaces, sizes and styles to add visual impact to a presentation.

EXCEL© SPREADSHEET OVERVIEW (continued)

3. Formulas

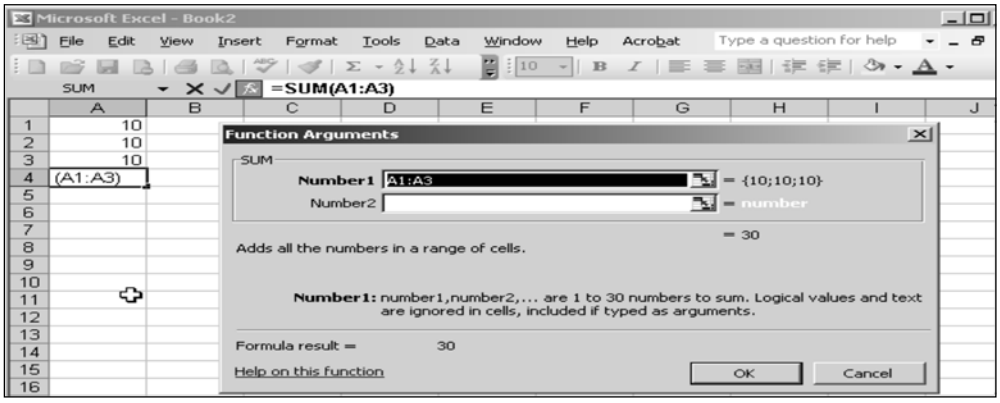
Spreadsheet cells can contain formulas instead of text or numbers. When a formula is entered into a cell then the result of the formula is displayed rather than the content. The true utility of *Excel* is its ability to use formulas. A **formula** is used to calculate the value of the contents of a specific cell or range of cells. All formulas must start with the equal sign (=). The formula for a particular cell or range of cells will appear in the formula bar, while the results are displayed in the cell itself. Formulas can refer to other cells.





Once you have entered the equal sign, you will notice the name box turns into a grey box with the word **SUM** and a down arrow.

Click on the **down arrow** next to the word SUM to list functions available. If you do not see the one you want, you can choose "More Functions..." from the list. Select the title of the function/formula you would like to use (in this case, **SUM**). Note the formula has been entered in the formula bar for you. Click **OK** when you are satisfied with the formula.



Excel functions are predefined formulas. The **SUM** function used above could be used to return the same value as the formula =A3+A4+A5+A6. When entering this function, you could choose to enter it as:

=SUM(A3, A4, A5, A6) or =SUM(A3:A6)

and expect to get the same results. Functions must begin with the equal sign (=) and must be followed by parentheses–even if no reference is required between the parentheses.

EXCEL© SPREADSHEET OVERVIEW (continued)

Some common functions are:

Function	Result Displayed Is…	Example
AVERAGE	The mean of the cells referred to in parentheses	=AVERAGE(A3:A6)
COUNT	The number of *numerical* values in the cells referred to in parentheses	=COUNT(A3:A6)
MAX	The highest value among the cells referred to in parentheses	=MAX(A3:A6)
MIN	The lowest value among the cells listed in parentheses	=MIN(A3:A6)
TODAY	Today's date	=TODAY( )

The following are several common **operators** used in formulas:

* Multiplication	=2*2 = 4
/ Division	=4/2 = 2
+ Addition	=2 + 2=4
- Subtraction	=4 – 2 =4
: Colon – used to specify a range of cells	=A5:A9
, Comma– used to combine multiple cell references into one reference	=SUM (D3:D7, F15, G9)
( ) Combination – you can combine operators as needed.	=(A1+A2+A3)/3 [The average of the contents of cells A1-A3]

Just like in mathematics, Excel formulas follow a certain "order of operations". When creating formulas, keep in mind the following:

- Operations are performed from left to right.
- Parentheses may be used (as in the "combination" example above) to group operations to be performed first.

EXCEL© SPREADSHEET PRACTICE EXERCISE

Enter the following information into Sheet 1 of your worksheet – being sure to hit Enter after each item:

⇒ Type your name in cell A1 of your worksheet.
⇒ Type today's date in cell C1 of your worksheet.
⇒ Type the number 10 in cells A3-A6 on your worksheet.
⇒ Type the number 2 in cells B3-B6 on your worksheet.
⇒ Type the formula =A3+B3 in cell C3. (Addition)
⇒ Type the formula =A4-B4 in cell C4. (Subtraction)
⇒ Type the formula =A5/B5 in cell C5. (Division)
⇒ Type the formula =A6*B6 in cell C6. (Multiplication)
⇒ Click in cell A7. Put an Equal sign in the formula box. Use the SUM function to add the contents of cells A3 through A6.

IMPORTANT REMINDER: In *Excel*, you can only enter or edit information in the **active cell**!

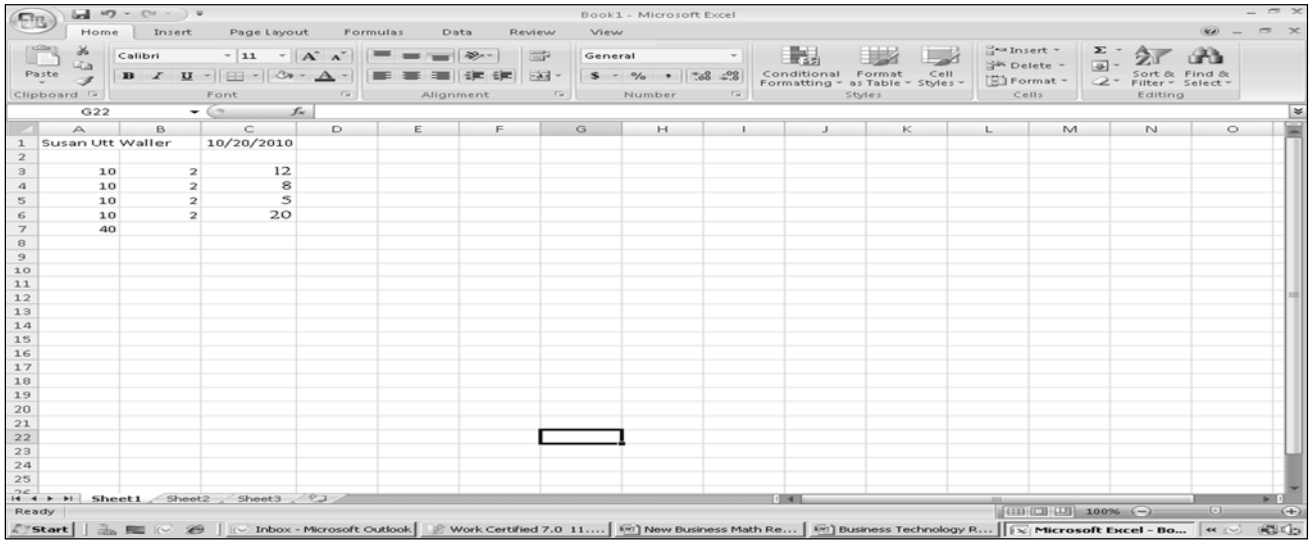
NOW:

Change the formula in **cell B7** of your spreadsheet to give the total of **cells B3, B4, B5, and B6** (Hint – use =B3+B4+B5+B6).

EXCEL© SPREADSHEET PRACTICE EXERCISE ANSWER KEY

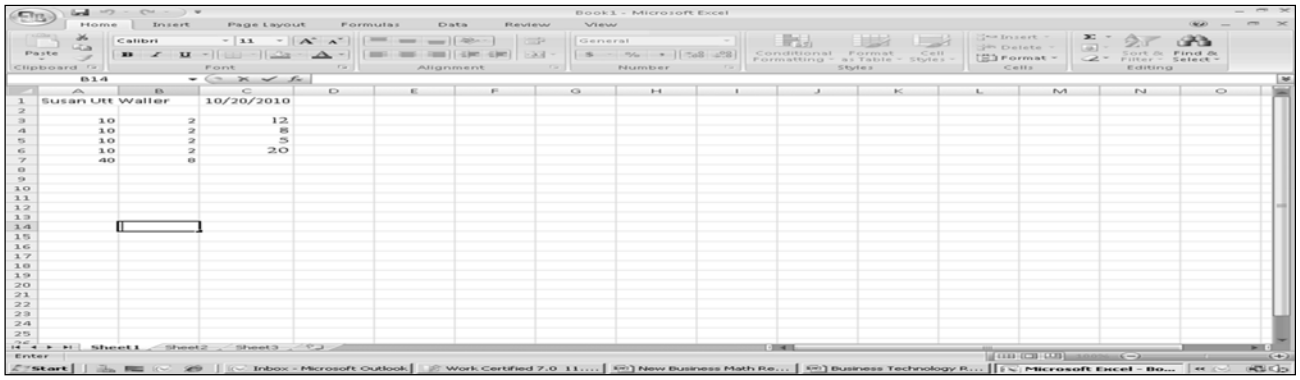
Enter the following information into Sheet 1 of your worksheet – being sure to hit Enter after each item:

⇒ Type your name in cell A1 of your worksheet.
⇒ Type today's date in cell C1 of your worksheet.
⇒ Type the number 10 in cells A3-A6 on your worksheet.
⇒ Type the number 2 in cells B3-B6 on your worksheet.
⇒ Type the formula =A3+B3 in cell C3. (Addition)
⇒ Type the formula =A4-B4 in cell C4. (Subtraction)
⇒ Type the formula =A5/B5 in cell C5. (Division)
⇒ Type the formula =A6*B6 in cell C6. (Multiplication)
⇒ Click in cell A7. Put an Equal sign in the formula box. Use the SUM function to add the contents of cells A3 through A6.
IMPORTANT REMINDER: In *Excel*, you can only enter or edit information in the **active cell**!



Try this now!

Change the formula in **cell A7** of your spreadsheet to give the total of **cells B3, B4, B5, and B6** (Hint –use =B3+B4+B5+B6). The result of Cell A7 should be the same as cell B7. Use **Undo** to return your spreadsheet formulas to their original state.



BT 35

Revision 8.1

Work Certified™ 1.2016

BUSINESS TECHNOLOGY TEACHING PLAN OVERVIEW
LESSON 3

This lesson plan is for three hours. Take two10-minute breaks at appropriate times.

TOPIC	TIME	COPIES REQUIRED as HANDOUTS
Internet Overview	45-60 minutes	Internet handout - pages BT40 Business Technology Terminology Handout- page BT54-56
Using the Browser	60-80 minutes	None

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 3

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Internet Overview	Internet Handout - pages BT40 Use your Business Technology Terminology Handout - page BT54-56 to help with your computer lecture.	N/A	Use the Internet handout and Business Technology Terminology Handout to help with your lecture.

INSTRUCTOR NOTES:
Talk about band width, you may compare it to the size of an access road to a web site, less band width would correlate to a smaller "road" which would cause more likely traffic jams. Higher bandwidth would result in more space resulting in a faster access to a website.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Using A Browser	Use your Business Technology Terminology Handout - page BT54-56 to help with your computer lecture.	N/A	Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension. Explain ISPs, browsers, search engines, e-mail, cookie, downloading and viruses and proper and improper Internet use at work. Ask for and provide examples of browsers, search engines and ISPs.

INSTRUCTOR NOTES:
Explain that when you go to the Internet you always have two things on your monitor, a browser (the top that stays the same as you go to new web sites) and a web site (changes as you go to new sites or new pages within a site). You always type the name of the site you want to go to in the browser, not on a web page.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 3

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Competency-Using the Browser to go to Web Sites	Instructor to suggest websites. The following are web sites that can be used for these exercises: **(Please check availability/access.)** www.dmoz.com The Open Directory Project is the largest, most comprehensive human-edited directory of the Web. www.onlinenewspapers.com Newspapers from all over the world. www.movies.com Upcoming releases is a fun area to visit. www.nbc.com Web site for the television station. www.monster.com Web site to look for jobs. www.uselessknowledge.com Fun web site with trivia content. www.scifi.com Today's news is a good link on this web site. www.cnet.com A good path on this web site is to look at the free downloads. www.mlb.com Major league Baseball's official web site. www.radio-locator.com Find radio stations you can listen to over the Internet. www.wikipedia.org The free encyclopedia www.nationalgeographic.com National Geographic Society official web site www.towerrecords.com Can search for CDs by group or album www.hatrack.com Author Orson Scott Card's web site; can read portions of his novels	N/A	Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension. Start with a lecture on the features of a browser. Show a browser to the members and explain common browser features (including where you type in an address, the back and forward buttons, the drop down menu of past web sites visited, the home button, stop and reload, bookmarks/ favorite places). Have the class go to a minimum of five web sites (Required competency). It is important to circulate the room to check the computers of all members to ensure that they are keeping up with the work and so that you can offer one-on-one help.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 3

INSTRUCTOR NOTES:

1. Tell your clients that the browser lets you store your favorite websites as bookmarks or favorites. If you know a website address, you can type it into the address bar to immediately go to that site.

2. Have the class go to a minimum of five web sites (Required Competency). Explain that the browser reads the website address in a code and is able to immediately connect to that website for you to view! Use the following features during these visits:

   a. Type in address and have each member go to at least one linked page.

   b. Type in address and have each member go to at least one linked page. Use the back button to go back to main page.

   c. Type in address and have each member go to at least one linked page. Use the drop down menu to find site and have the class click on it to return to that web site. Then have the members use the forward button to return to the main page of site **c**.

   d. Type in address and have each member go to at least one linked page. Work with the members to make the main page for this web site a favorite place (bookmark).

   e. Type in address and have each member go to at least one linked page. Then use the favorite places (bookmarks) to return to site **d**.

   Finish this lecture by reviewing the five ways to get to a web site - type in an address, use a hyperlink, use the back/forward buttons, use the drop down menu, and use favorite places/bookmarks.

   This is a required competency that participants must perform correctly.

TOPIC G: UNDERSTANDING THE INTERNET

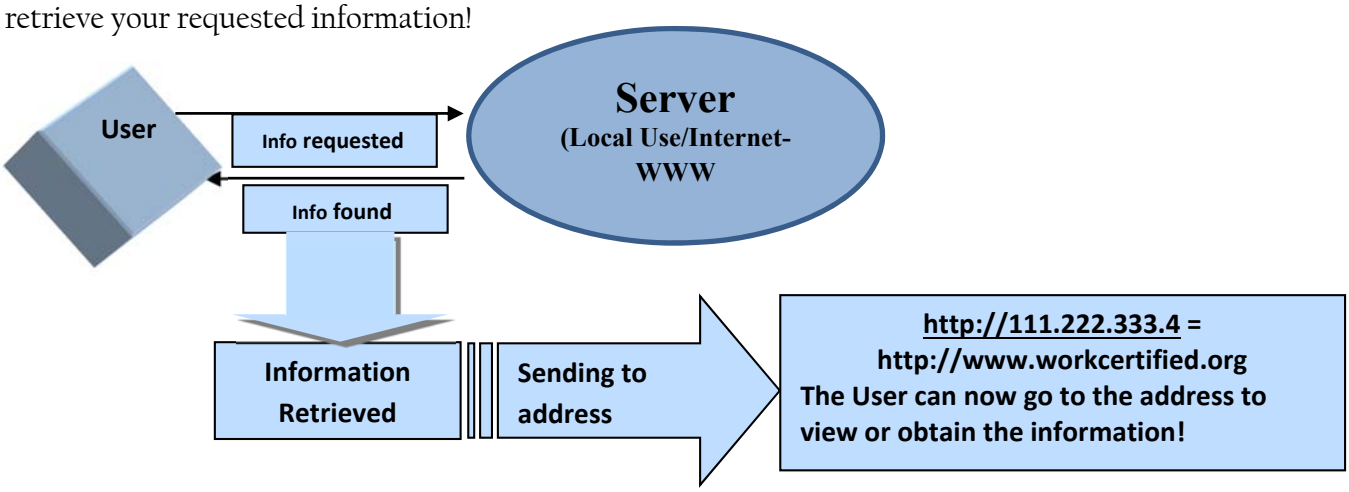
The Internet is an extensive international network of computers. No one person or company owns it or profits from it!

Created by scientists, along with government personnel, to transfer, save, and view data, the Internet was a means of communicating to thousands through the use of computers. Through this creative and extensive means of communication, businesses find that the "marketing" of their products or services can reach millions. The general public had to have access to ensure this means of increased commerce, so the Internet was open!

The Internet basically means that one computer can "talk" with other computers regardless of their location. Therefore, data, services, products, and information can be available to millions of people and computers all over the world.

Internet= "among the network"

Through an extensive combination of cables, wires, and memory storage **Servers**, the internal circuitry processes the information for the **user**. The **user** retrieves the information and makes it available. To ensure that this information is available and goes to the right **user**, a common language is required, referred to as a **protocol**. This is referred to as the **hypertext transfer protocol** or the http://. Each package of information is then sent to the requesting address, which is numeric, for opening. These addresses are called **IP addresses or Internet Protocol addresses**. (Ex. 111.222.333.4) You can now retrieve your requested information!



BUSINESS TECHNOLOGY TEACHING PLAN OVERVIEW
LESSON 4

This lesson plan is for three hours. Take two 10-minute breaks at appropriate times.

TOPIC	TIME	COPIES REQUIRED as HANDOUTS
Search Engine Exercise- ***Competency***	45-60 minutes	Search Engine Exercise - page BT45
Using E-mail Etiquette	45-60 minutes	E-Mail Etiquette Handout-page BT47
Social Networking Using Social Networking in Job Search Using Social Networking in the Workplace	30-45 minutes	Social Networking Handout-page BT48 Using Social Networking for Job Search- page BT49 Using Social Networking in The Workplace- page BT50-53
Business Technology Online Quiz	15 -20 minutes	Online Business Technology Terminology-page BT54-56

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 4

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Search Engine Exercise- ***Competency***	Search Engines Exercise – page BT45	Page BT46	Distribute the Search Engines Exercise and collect and grade the results (correct answer to question only).

INSTRUCTOR NOTES:
Update answers prior to assignment of the competency
You can provide helpful hints during the exercise but you cannot perform the exercise for anyone (i.e. you may give tip when requested).

This is a required competency that participants must perform correctly.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Using E-mail Etiquette- ***Competency***	Using E-mail Etiquette- page BT47	N/A	Have members send an e-mail by using the address book entry to fill out the field in the e-mail form. Then have the members send an e-mail to the instructor to verify this **competency**.

INSTRUCTOR NOTES:

1. The members can also set up a G-mail, Hotmail or Yahoo e-mail account for this course and competency if they do not already have one established.

2. Be sure to remind clients that in regards to e-mail, if it isn't yours, don't read it. If you find someone else's document in the copy machine or see a transmission addressed to your co-worker in the fax machine, resist the temptation to gather some inside information or gossip by reading it. Once you determine to whom the original belongs or to whom the fax is addressed, put the document in his or her mailbox.

   NOTE: The "don't read it" rule also applies to data displayed on someone else's computer screen and to mail lying on someone else's desk.

   E-Mail Address Validation
   The instructor checks the client's valid e-mail address listed in the client's profile in the LMS Database; and then has the client correct the profile if necessary. **This assures the competency for BT 17 and BT18; and the validation competency has been completed for database accuracy.**

This is a required competency that participants must perform correctly.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 4

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Social Networking	Social Networking Handout- page BT48		Instructors in the past have used a laptop and projector to demonstrate these exercises for their clients for a visual explanation prior to their hands-on exercises with positive results for the members' comprehension.
Using Social Networking in Job Search	Using Social Networking in Job Search Handout-page BT49-		Introduce social networking to the course by asking the students what they already know or have experienced with using these sites.
Using Social Networking in the Workplace	Using Social Networking in the Workplace Handout= page BT50-53		**Facebook** is a social network service and website launched in February 2004 that is operated and privately owned by Facebook, Inc. As of December 2015, Facebook has more than 1.5 billion monthly active users, [update] which is about one person for every five in the world. **Twitter** is a website, owned and operated by Twitter Inc., which offers a social networking service, enabling its users to send and read other users' messages called *tweets*. Tweets are text-based posts of up to 140 characters displayed on the user's profile page. Tweets are publicly visible by default, however, senders can restrict message delivery to their friends list. As of the third quarter of 2015, Twitter had in excess of 307 million registered users [update] **LinkedIn** is a business-oriented social networking site. Launched in May 2003, it is mainly used for professional networking. As of the end of 2015 , LinkedIn had more than 396 million registered users [update], spanning more than 200 countries and territories worldwide.

BUSINESS TECHNOLOGY TEACHING PLAN
LESSON 4

INSTRUCTOR NOTES:
Using the list of the 10 most popular sites for vertical job agents (page BT49), have your students go into at least 3 or 4 of the sites and explore career opportunities and interests throughout the nation. By observation, ensure each student is using these sites for job search practice.

TOPIC	TOOL	ANSWER KEY	LECTURE FLOW
Competency- Business Technology Online Quiz	LMS Database/Program Website- www.workcertified.org	N/A	Business Technology Quiz is online. See hardcopy of quiz and answer key in Chapter 3: LMS Database/Module Quizzes

INSTRUCTOR NOTES:
1. Members may use the Business Technology Terminology, page BT54-55, with the quiz online.

2. Distribute the Member Program Evaluation Form (see Chapter 2) just prior to handing out this quiz and be sure to fill out your Instructor Program Critique Form (see Chapter 2). Members must score 80% or higher on this quiz to be eligible for certification.

This is a competency that students must perform correctly.

COMPETENCY
SEARCH ENGINE EXERCISE

QUESTION	SEARCH ENGINE	KEYWORDS	ANSWER
What is the Fortune 500? Who are the top 5 companies for previous year on the Fortune 500 list?			
What is the current National Minimum Wage? What is the minimum wage in the state of Texas? And how does it compare to the federal wage?			
What agency oversees labor standards and fair practices?			
What is the occupational network database? What does it offer to you?			

COMPETENCY
SEARCH ENGINE EXERCISE ANSWER KEY

QUESTION	SEARCH ENGINE	KEYWORDS	ANSWER
What is the Fortune 500? Who are the top 5 companies for previous year on the Fortune 500 list?	www.google.com www.bing.com	Fortune 500	The **Fortune 500** is an annual list compiled and published by *Fortune* magazine that ranks the top 500 U.S. closely held and public corporations as ranked by their gross revenue after adjustments made by Fortune to exclude the impact of excise taxes companies collect.[1] The list includes publicly and privately-held companies for which revenues are publicly available. The first Fortune 500 list was published in 1955.
What is the current National Minimum Wage? What is the minimum wage in the state of Texas? And how does it compare to the federal wage?	www.google.com www.bing.com	National minimum wage State minimum wages	$7.25 per hour $7.25 per hour and it is equal to the Federal wage according to the FMWA (Fair Minimum Wage Act).
What agency oversees international labor standards and fair practices?	www.google.com www.bing.com	Governing body of fair labor practices	The International Labor Organization (ILO) is the tripartite UN agency that brings together governments, employers and workers of its member states in common action to promote decent work throughout the world.
What is the occupational network database? What does it offer to you?	www.google.com www.bing.com	ONET	ONET is a database that contains well-researched job descriptions and other job information for jobs that exist in the United States (both government and private). Consumers can readily have current job information as it becomes available. Additionally, ONET online is able to provide a fuller range of job information, such as specific Knowledge, Skills, Abilities, and Other characteristics (KSAOs) and worker requirements.

Note: check all sites before teaching the class and make any necessary changes to the exercise.

ANSWERS AS OF 1/2016

TOPIC H: EMAIL AND SOCIAL NETWORKING

Electronic mail—E-Mail—has become a part of everyday life in business, as well as in our personal lives. As a result, the etiquette associated with e-mail is still in development as to appropriate and inappropriate practices. Below are the most common tips for proper and professional use of e-mail.

1. Carefully review the content of your message for spelling and grammar. Your message should be brief, but informative. Make sure the content supports the title or reference of your message. Don't write a novel!

2. Don't use e-mail to avoid personal contact with someone. Address personal, negative, or potentially upsetting messages face-to-face.

3. Be careful in responding to an e-mail. Be sure to double check to who you are replying and including in a response! Many times people have "clicked" send and inappropriately included or excluded key people! Additionally, use BC, or "Blind-copy" carefully and only when necessary for ethical reasons.

4. Use proper sentence case! CAPITAL LETTERS indicate that you are SHOUTING! Use the same sentence structure as you would in a letter or professional document. Tone and meaning cannot always be determined through e-mail, so you should proofread carefully to ensure there is no wrong assumption for the recipient.

5. E-mail at work is not private! Using company equipment and services is just that, the company's property. E-mails and documents are subject for review and/or use as legal documents regarding company business. People have been terminated for inappropriate use of e-mail.

6. Do not send chain letters, photos, jokes, or other non-business content at work. It is space/time consuming and can be construed as misuse of company equipment. This includes inappropriate language or content that may offend someone and result in a HR violation in an addition to misuse of equipment! Encourage your friends and family to forward to your home e-mail instead of your work.

7. Make sure that you include contact information in your e-mails, so that the recipient can contact you by letter, phone, or fax if needed.

8. Be careful with the use of abbreviations or slang in your e-mail. Not everyone understands "BCNU" and "ROTFL"! (BCNU-Be seein' you and ROTFL-Rolling on the floor laughing ☺).

Remember, e-mail represents <u>you</u> on their monitor, so make sure that it is an accurate reflection!

SOCIAL NETWORKING

"Social Networking.... the way the 21st century communicates today "

Social networking is the grouping of individuals into specific groups, like small rural communities or a neighborhood subdivision, if you will. Although social networking is possible in person, like book clubs, hobby/interest groups, etc., it is especially prevalent online for groups with common interests such as school or work.

The Internet is filled with millions of individuals who are looking to meet other people, to gather and share first-hand information and experiences about cooking, golfing, gardening, developing friendships or professional alliances, finding employment, business-to-business marketing and even groups sharing information about their favorite sports team or highly controversial political topic. The topics and interests are as diverse and rich as the story of our world.

When it comes to online social networking, websites are commonly used. These websites are known as **social sites**. Social networking websites function like an online community of Internet users. Depending on the website in question, many of these online community members share common interests in hobbies, religion, or politics. Once you are granted access to a social networking website you can begin to socialize. This access may include reading the profile pages of other members and possibly even contacting them.

The friends that you can make are just one of the many benefits to social networking online. Another benefit includes diversity because the Internet gives individuals from all around the world access to social networking sites. This means that although you are in the United States, you could develop an online friendship with someone in Europe or Asia. Not only will you make new friends, but you just might learn a thing or two about new cultures or new languages and learning is always a good thing.

As mentioned, social networking often involves grouping specific individuals or organizations together. While there are a number of social networking websites that focus on particular interests, there are others that do not. The websites without a main focus are often referred to as "traditional" social networking websites and usually have open memberships. This means that anyone can become a member, no matter what their hobbies, beliefs, or views are. However, once you are inside this online community, you can begin to create your own network of friends and eliminate members that do not share your common interests or goals.

There are dangers associated with social networking, including data theft and viruses, which are on the rise. The most widespread danger often involves online predators or individuals who claim to be someone that they are not. Although danger does exist with networking online, it also exists in the real world, too. Just like you're advised when meeting strangers at clubs and bars, school, or work -- **you are also advised to proceed with caution online**.

USING SOCIAL NETWORKING IN JOB SEARCH

The Bureau of Labor and Statistics has reported the U.S. economy continues to heal in the aftermath of the Great Recession. The current employment rate is at 5.0 percent, this sure looks better than 10.0 percent in 2009. The U.S. had job gains over the past few years and especially this past year. In December 2014 alone 252,000 positions was added. Employment levels are improving, but remain below prerecession levels

Social networks are increasingly becoming part of the criteria that both hiring managers and college admissions officers are using to weed out applicants. One in five hiring managers conduct background checks using social networks (primarily Facebook™), while one in ten college admissions officers do the same.

It's time for us to become open-minded and to think differently about how you're going to get your next job and keep it. Continue to submit your resume to job banks, corporate websites, **vertical job agents** or when attending job fairs. Using social networks will broaden your chances and opportunities to get that preferred job!

Reference: *Dan Schawbel is the author of Me 2.0: Build a Powerful Brand to Achieve Career Success, and owner of the award winning Personal Branding Blog.*

A **vertical search** engine focuses on a specific segment of online content. The vertical content area may be based on topicality, media type, or genre of content. Common examples include jobs, legal, medical, patent

Popular Vertical Job Search Agents Include:

1. indeed.com
2. sangajob.com
3. careerbuilder.com
4. dice.com
5. monster.com
6. simplyhired.com
7. linkup.com
8. us.jobs.com
9. jobing.com
10. net-temps.com
11. theladders.com

USING SOCIAL NETWORKING IN THE WORKPLACE

We live in a world where technology has changed the way people communicate, the way they are informed and how they do business. Traditional social networks have expanded from a few dozen acquaintances to hundreds of friends, friends of friends, connections and followers. We live in a world where people would rather communicate by sending a text message from their mobile phone, post comments on their favorite online network or send a short Tweet to inform all their friends that they have just got out of bed or they are out to dinner.

The growth of social networking platforms has been phenomenal. Millions of people around the world with access to the Internet are members of one or more social networks. They have a permanent online presence where they create profiles, share photos, share their thoughts with friends and spend hours catching up with what their hundreds of friends are doing with their lives.

Give most people access to the Internet and they will spend the next hour checking their email, their Facebook profile, updating their Twitter account, and their LinkedIn account. And it doesn't happen only once a day. The time spent using social networking applications is one reason why many businesses are reluctant to allow employees to use sites like Facebook and LinkedIn during office hours. Add the time spent on non-work related browsing, and employers have a point. At the same time, however, businesses are starting to appreciate that social networking has its advantages, and there are many companies that have adopted social networking as another vehicle to gain a better presence online and a wider audience.

The Benefits

Expanding Marketing Opportunities

Social networking sites give businesses a fantastic opportunity to widen their circle of contacts. Using Facebook, for example, a small business can target an audience of thousands without much effort or advertising. With a good company profile and little in terms of costs, a new market opens up, as do the opportunities to do business.

Personal Touch

Social networks allow organizations to reach out to select groups or individuals and to target them personally. Businesses can encourage their customers to become connections or friends, offering special discounts that would be exclusive to online contacts. This personal touch is not only appreciated but may give the business access to that customer's own network of contacts.

Improve Your Image

Building strong social networks can help a business to improve its reputation with as little advertising as possible. Social networks can boost your image as competent leaders in their specific industry and customers/contacts will then recognize your business as reliable and an excellent source of information/products that suit their requirements.

USING SOCIAL NETWORKING IN THE WORKPLACE

Low-Cost Marketing

Once social networks have become established and people become familiar with the brand, businesses can use the sites or applications to implement marketing campaigns, announce special offers, make important announcements, and direct interested people to specific web sites. It is mostly free advertising, and the only cost to the business is the time and effort required to maintain the network and the official web site.

The Concerns

Social networking sites are applications and, as such, are generally not a problem for organizations. It is the people who use them that are a cause for concern. Social networkers, if one can call them so, are the root of five problems (listed below) for an organization that allows social networking at work.

Productivity

One reason why organizations frown on social networking in the workplace is the fact that employees spend a great deal of time updating their profiles and sites throughout the day. If every employee in a 50-strong workforce spent 30 minutes on a social networking site every day, that would work out to a loss of 6,500 hours of productivity in one year! Although this may be a generalization, organizations look very carefully at productivity issues, and 25 hours of non-productive work per day does not go over well with management. When you factor in the average wage per hour you get a better (and decisive) picture.

There is also an effect on company morale. Employees do not appreciate colleagues spending hours on social networking sites (or other sites) while they are functioning to cover the workload. The impact is more pronounced if no action is taken against the abusers.

Resources

Although updates from sites like Facebook or LinkedIn may not take up huge amounts of bandwidth, the availability of (bandwidth-hungry) video links posted on these sites creates problems for IT administrators. There is a cost to Internet browsing, especially when high levels of bandwidth are required.

Viruses and Malware

This threat is often overlooked by organizations. Hackers are attracted to social networking sites because they see the potential to commit fraud and launch spam and malware attacks. There are more than 50,000 applications available for Facebook (according to the company) and while Facebook may make every effort to provide protection against malware, these third-party applications may not all be safe. Some have the potential to be used to infect computers with malicious code, which in turn can be used to collect data from that user's site.

USING SOCIAL NETWORKING IN THE WORKPLACE

Social Engineering

Social engineering is becoming a fine art and more and more people are falling victim to online scams that seem genuine. This can result in data or identity theft. Users may be convinced to give personal details such as Social Security numbers, employment details and so on. By collecting such information, data theft becomes a serious risk. On the other hand, people have a habit of posting details in their social networking profiles. While they would never disclose certain information when meeting someone for the first time, they see nothing wrong with posting it online for all to see on their profile, personal blog or other social networking site account. This data can often be mined by cybercriminals

Employers must be on the lookout for information that their employees may post, as this may have an impact on the company. People often post messages without thinking through what they've have written. A seemingly innocuous message such as "I'm working this weekend because we've found a problem in our front-end product" may be a spur-of-the-moment comment but could raise concern among customers who may use that system, especially if the company handles confidential or financial detail.

Reputation and Legal Liability

At the time of authorship, there have been no major corporate lawsuits involving evidence from social networking sites. However, organizations need to watch for employees who may be commenting publicly about their employer. For example, one young employee wrote on her profile that her job was boring and soon received her marching orders from her boss. What if a disgruntled employee decided to complain about a product or the company's inefficiencies in his or her profile? There are also serious legal consequences if employees use these sites and click on links to view objectionable, illicit or offensive content. An employer could be held liable for failing to protect employees from viewing such material. The legal costs, fines and damage to the organization's reputation could be substantial.

To Ban or Not to Ban? There is no simple solution to any of the above issues. While internal controls and technology can be used to an extent to control employee use of social networking tools, it is impossible to control what they are posting at home.

And this is the dilemma that many businesses face today: They feel the need to change and adopt these new methods of communication but they are greatly concerned that the disadvantages and possible repercussions are too serious to ignore. Every action, every minute spent online (and on social networking sites) may expose an organization to numerous security threats. While the subject of productivity increase is debatable, the security issues are not – they are all too real. Where does that leave businesses?

They have three options:

- Ban access to social networking sites (and access to Internet as well).
- Set limits and restrictions on use.
- Allow unmonitored access.

USING SOCIAL NETWORKING IN THE WORKPLACE

Banning access to social networking sites may be an optimal solution for some organizations, and one can see banks and government departments particularly keen on keeping the status quo. However, many smaller organizations may feel that taking a heavy-handed approach could be counterproductive, indicate a lack of trust in employees (probably justified to an extent) and is too restrictive.

On the other hand, you certainly do not want to give unfettered access to social networking sites. The best option may be to allow access to social networking sites while imposing limits (when these can be used, for how long, and by whom). Regardless of which option an organization may choose, they must ensure that the basic safeguards are in place:

- Up-to-date anti-virus software firewall
- Ability to monitor the use of the Internet in general
- Ability to monitor social networking sites in particular.

Striking a Balance

What is worrying about social networking sites is that they encourage people to give as much information about themselves as possible. Even the most prudent and well-meaning individuals can give away information they should not—the same applies to what is put online via company-approved social networking platforms. At the same time, nearly everyone today (even senior managers) has their own online profile on a social networking site and like the idea that they can keep in touch with contacts and friends (and their employees) via that interface.

<u>If a business is going to allow access to social networking sites, there are some basic tips to follow:</u>

Restrict access. Give employees a breather and allow them to access social networking sites during their lunch break and/or before and after office hours. Web filtering software gives administrators the ability to implement time-based access to these and other sites.

Educate and train staff. This is very important. Most employees are not aware how their actions online can cause security issues for the organization. Tell them in a language they understand how a simple click on a link they receive or an application they download can result in malware infecting their machine and the network. Additionally, tell them not to click on suspicious links and to pay attention when giving out personal details online. Just because employees are clever enough to have an online profile does not mean they are technically savvy or that they have a high level of security awareness.

Set security and usage policies. Have all employees sign any policies related to the use of the Internet at work, access to social networking sites and what they are allowed to say or do during office hours. Monitoring of all Web activity is important, and employees should be aware that their actions are being recorded and that failure to adhere to company policy can result in disciplinary action and/or dismissal.

Source: Kelleher, David. ***5 Problems with Social Networking in the Workplace.*** Information Management Special Reports, October 6, 2009

TOPIC I: BUSINESS TECHNOLOGY TERMINOLOGY

Antivirus- Software that blocks, scans, and removes malicious programs designed to capture information, delete files and data, or use your computer to send messages to others.

Bit - Short for *binary digit*, the smallest unit of information on a machine.

Boolean search -A type of search allowing users to combine keywords with operators such as AND, NOT and OR to further produce more relevant results. For example, a Boolean search could be "hotel" AND "New York". This would limit the search results to only those documents containing the two keywords.

Broadband- megabits-per-second speeds as opposed to narrowband or dial-up access.

Browser - manages users' navigation on the web and reads and interprets web site code and displays web sites on a computer monitor.

Cloud storage- is a model of data storage in which the digital data is stored in logical pools, the physical storage spans multiple servers (and often locations), and the physical environment is typically owned and managed by a hosting company.

Cookies - files kept on your computer and the host computer that keep details of web activity (last site visited, browser being used, operating system being used, etc.). It is more "big advertising exec is watching" than "big brother is watching." However at work, the cookies will tell your supervisor the web sites you visited.

Digital Voice- Calls transmitted using digital technology on a line other than a traditional phone line.

DNS- Domain Name Servers translate names (example: mybusiness.com) into IP address codes (ex: 192.60.45.23).

Domain (Domain name)- A plain-language name used to identify an Internet website. The Internet uses numerical IP address codes (example: 192.60.45.23). Assigning an easy-to-remember, plain-language or domain name like "mybusiness.com" helps users find websites.

Download- To move or copy files from an external source, such as the Internet, to your computer. Examples of this include downloading software updates and email attachments.

E-mail - inboxes are not kept on user's computers (otherwise if your computer was turned off, e-mail could not be delivered). Therefore, every e-mail address must have @nameofsite.com so the browser knows what computer to send the e-mail to. There is never a space in an e-mail address or a web site name.

File Extensions- File extensions, for any computer files, are the three letters at the end of the filename. These three letters are preceded by a dot, to separate the filename from the extension. In the example mypresentation.ppt the file extension is *ppt*, meaning a PowerPoint presentation.

Firewall- Software or hardware that protects your computer against unwanted attackers.

Gateway- A connection between one computer network and another. Routers are sometimes referred to as gateways, depending on the features they provide.

HDTV- An acronym for High-Definition Television. Hi-def uses digital technology to deliver higher picture resolution and clarity than standard television.

Hyper Text Transfer Protocol or HTTP- the hypertext transfer protocol that enables documents to be read on the Internet

Internet Service Provider (ISP) - provides access to the Internet by managing the users'

Internet- The interconnection of computer networks. The Internet has grown exponentially because of the ability of Internet providers, such as Comcast, to interconnect IP (Internet Protocol) packets.

IP gateway- IP stands for Internet Protocol, the internationally standardized packet format used to send data (voice, data, video, or other format) across the Internet.

Kbps- Thousands of bits per second.

Local Area Network- A LAN supplies networking capability to a group of computers in close proximity to each other such as in an office building, a school, or a home. A LAN is useful for sharing resources like files, printers, games or other applications.

Mbps- Mega (one million) bits per second.

Modem- (modulator-demodulator) is a device that modulates an analog carrier signal to encode digital information, and also demodulates such a carrier signal to decode the transmitted information. The goal is to produce a signal that can be transmitted easily and decoded to reproduce the original digital data

Network- a group of computers and devices interconnected by communications channels that facilitate communications among users and allows users to share resources.

Online meeting service- An online meeting or conferencing service that offers the user an opportunity to view or present audio-video and multimedia files.

Router- A hardware device that links multiple computers to a single network. The computers can then communicate with each other, creating a local area network (LAN).

Search engine- a web search engine is designed to search for information on the World Wide Web and FTP servers. The search results are generally presented in a list of results and are often called *hits*. The information may consist of web pages, images, information and other types of files.

Spam- Junk or unsolicited email.

Upload- To move or copy files from your computer to another source. For example, businesses can upload or back up their critical files to other locations as a form of disaster protection.

VoIP- An acronym standing for Voice over Internet Protocol. In other words, phone calls over the Internet. (For example, Skype)

Web site - written in code, interpreted by a browser and located on a Host Computer that is registered with the Hyper Text Transfer Protocol. Web site addresses are typically: www.nameofsite.com. The (www) represents the folder the web files are in, the name of site is the registered name and the .com is a file extension.