



Chapter 13: The IT Professional



IT Essentials v6.0

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Chapter 13 - Sections & Objectives

- 13.1 Communication Skills and the IT Professional
 - Explain why good communication skills are a critical part of IT work.
- 13.2 Ethical and Legal Issues in the IT Industry
 - Explain appropriate behavior when faced with the legal and ethical issues that arise in the IT industry.
- 13.3 Call Center Technicians
 - Explain the call center environment and technician responsibilities.
- 13.4 Chapter Summary

13.1 Communication Skills and the IT Professional



Introduction

- Troubleshooting is as much about communicating with the customer as it is about knowing how to fix a computer.
- Learn to use good communication skills as confidently as you use a screwdriver.



Communication and Troubleshooting

- A knowledgeable technician who uses good communication skills will always be in demand in the jobs market.
 - As technical knowledge increases, so does ability to quickly determine a problem and find a solution.
- A technician should establish a good rapport with the customer since a relaxed customer is better able to explain the details of the problem.
- The technician has access to several communication and research tools. Any of these resources can be used to help gather information for the troubleshooting process.

Communication Skills, Troubleshooting and the IT Professional

- Establish good communication skills
 - Listen to your customer to learn the details of the problem
 - Speak directly with the customer
 - Gather information from the customer
 - Present yourself professionally
 - Keep your own emotions in check



Working with a Customer

- Determine customer problem
 - Listen actively to customer problem
 - Do not interrupt
 - Understand the problem, ask to clarify as necessary
- Display professional behavior
 - Treat customer with respect and prompt attention
 - Know the proper procedure to put a customer on hold or transfer a call
 - Explain how you can assist the customer
- Stay focus
 - Keep the communications focus on the customer issue
 - Understand how to deal with different customer types
- Proper netiquette
 - Practice good netiquette when communicating online with the customer



Employee Best Practices

- Time and stress management
 - Prioritize your activities by following the business policy
 - Compose yourself between customer calls
 - Adjust your work station to help you do your job
- Observe SLAs
 - SLA defines an agreement between the interested parties.
 - When dealing with customers, you need to observe the content of the SLA.
 - Management determines the exceptions to the SLA.
- Follow business policies
 - Handling customer calls
 - Call center activities
 - Ensuring customer satisfaction



Communication and Professionalism

- A technician's professionalism and good communication skills will enhance their credibility with the customer.
- Successful technicians control their own reactions and emotions from one customer call to the next.
- **Avoid:**
 - Over-explaining the cause of the problem.
 - Putting the customer on hold.



Determine the Problem

- **Know** - Call the customer by name.
- **Relate** - Use brief communication to create a one-to-one connection between you and your customer.
- **Understand** - Determine what the customer knows about the computer to effectively communicate with the customer.
- Practice active listening skills. Listen carefully and let the customer finish speaking.
- After the customer has explained the problem, clarify what the customer has said.
- Ask follow-up questions, if needed.
- Use all the information to complete the work order.

Holds and Transfers

Putting a customer on hold:

- Let the customer finish speaking.
- Explain that you will put the customer on hold and why.
- Ask for their permission to do so.
- Explain how long they will be on hold and what you will be doing during that time.



Transferring a customer:

- Let the customer finish speaking.
- Explain that you will transfer their call, to whom, and why.
- Tell them the number you are transferring them to.
- Ask for their permission to do so.
- Thank the customer and explain the details of the transfer.
- Tell the new technician the details of the case.

Types of Difficult Customers

Recognize traits to manage a call accordingly.

- A **talkative** customer discusses everything except the problem and uses the call to socialize.
- A **rude** customer complains during the call, makes negative comments, may be abusive and uncooperative, and may be easily aggravated.
- An **angry** customer talks loudly, tries to speak when the technician is talking, is usually frustrated and upset that they have to call somebody to fix the problem.
- A **knowledgeable** customer wants to speak with a technician that is equally experienced in computers and usually tries to control the call.
- An **inexperienced** customer has difficulty describing the problem and may not be able to follow directions correctly.

Proper Netiquette

- Be pleasant and polite.
- Open with an appropriate greeting.
- Check grammar and spelling.
- Remember you are dealing with people.
- Follow the standards of behavior that you follow in the rest of your life.
- Know where you are in cyberspace.
- Respect other's time and bandwidth.
- Be ethical.
- Share expert knowledge.
- Respect the privacy of others.
- Forgive other's mistakes.
- Use mixed case lettering. All upper case lettering is considered SHOUTING.
- Never send chain letters through email.
- Do not send or reply to flames.
- If you would not say it to their face, then do not send or post.

Workstation Ergonomics

- Make sure that your desk layout works well.
- Have your headset and phone in a position that is easy to reach and easy to use.
- Adjust your chair to a comfortable height.
- Adjust your monitor to a comfortable angle.
- Place your keyboard and mouse in a comfortable position.
- Minimize external distractions such as noise.

Ways to Relax

- Practice relaxed breathing: inhale-hold-exhale-repeat.
- Listen to soothing sounds.
- Massage your temples.
- Take a break - go for a quick walk, or climb a flight of stairs.
- Eat something small - a snack with protein is best.
- Plan your weekend.
- Avoid stimulants like coffee, fizzy drinks and chocolate. All contain caffeine and can add to stress.

Business Policies

- Be aware of all business policies about customer calls.
- Maximum time on call
- Maximum time in queue
- Number of calls per day
- How to pass calls
- Promises to customer
- Follow SLA
- When to escalate



13.2 Ethical and Legal Issues in the IT Industry



Ethics and Legal Considerations

- Respect the customers and their property including their equipment and their data:
 - E-mails
 - Phone lists
 - Records or data on the computer
 - Hard copies of files, information, or data left on desk
- Obtain customer's permission before accessing their account.
- Divulging any customer information is unethical, and may be illegal.
- Do not send unsolicited messages or mass emails to customers.

Ethics and Legal Considerations

- Actions such as the following are generally considered illegal.
 - It is not permissible to make any changes to system software or hardware configurations without customer permission.
 - It is not permissible to access a customer's or co-worker's accounts, private files, or email messages without permission.
 - It is not permissible to install, copy, or share digital content (including software, music, text, images, and video) in violation of copyright and software agreements or the applicable law.
 - It is not permissible to use a customer's company IT resources for commercial purposes.
 - It is not permissible to make a customer's IT resources available to unauthorized users.
 - It is not permissible to knowingly use a customer's company resources for illegal activities.
 - It is not permissible to share sensitive customer information.

Legal Procedures Overview

- **Computer Forensics** is the collection and analysis of data from computer systems, networks wireless communications, and storage devices as part of a criminal investigation.
- Illegal computer or network usage may include:
 - Identity theft
 - Using a computer to sell counterfeit goods
 - Using pirated software
 - Using a computer or network to create or sell unauthorized copies of copyrighted materials
 - Pornography
- Two basic types of data are collected:
 - **Persistent Data** –Stored on a local drive, when computer turned off this data is preserved.
 - **Volatile Data** – Stored in Ram and cache, disappears when computer is turned off.

Cyber Law

- **Cyber Law** is a term to describe the collection of international, regional, country, state, and local laws that affect computer security professionals
- Cyber law explain the circumstances under which data (evidence) can be collected from computers, data storage devices, networks, and wireless communications
- IT professionals should be aware of the cyber laws in their country, region, or state.
- In the United States, cyber law has three primary elements:
 - Wiretap Act
 - Pen/Trap and Trace Statute
 - Stored Electronic Communication Act
- **First Response** is the term used to describe the official procedures employed by those people who are qualified to collect evidence. System administrators are usually the first responders at potential computer crime scenes.

Documentation and Chain of Custody

- The following, at a minimum, should be documented if illegal activity is discovered:
 - Initial reason for accessing the computer or network
 - Time and date
 - Peripherals that are connected to the computer
 - All network connections
 - Physical area where the computer is located
 - Illegal material found
 - Illegal activity that you have witnessed (or you suspect has occurred)
 - Which procedures you have executed on the computer or network
- **Chain of Custody** - For evidence to be admitted, it must be authenticated. A system administrator should be able to prove how this evidence was collected, where it has been physically stored, and who has had access to it between the time of collection and its entry into the court proceedings.

13.3 Call Center Technicians



Call Centers

- It is a place that exists within a company and provides computer support to both employees and customers of the company.
 - Busy, fast-paced, possibly 24/7 work environment
 - Could be internal or a service to outside customer
 - Has business policies regarding call priority
 - Uses support software to manage the job functions
 - Technicians with different experience levels

Call Prioritization

| Name | Definition | Priority |
|-------------|---|-----------------|
| Down | The company cannot operate any of its computer equipment. | 1 (Most Urgent) |
| Hardware | One (or more) of the company's computers is not functioning correctly. | 2 (Urgent) |
| Software | One (or more) of the company's computers is experiencing software or operating system errors. | 2 (Urgent) |
| Network | One (or more) of the company's computers cannot access the network. | 2 (Urgent) |
| Enhancement | There has been a request from the company for additional computer functionality. | 3 (Important) |

Level-one Technician Responsibilities

- Gather pertinent information from the customer.
- Document all information in the ticket or work order.
- Resolve simple issues and escalate the work order when necessary
- What questions should a Level 1 technician ask the customer?

Information Checklist

- Contact information
- What is the manufacturer and model of computer?
- What OS is the computer using?
- Is the computer plugged in to the wall or running on battery power?
- Is the computer on a network? If so, is it a wired or wireless connection?
- Was any specific application being used when the problem occurred?
- Have any new drivers or updates been installed recently? If so, what are they?
- Description of the problem
- Priority of problem

- Escalates a work order when a problem cannot be resolved within a predetermined amount of time.

Level-two Technician Responsibilities

- Usually more knowledgeable about technology.
- May have been working for the company for a longer period of time.
- Receives escalated work orders from level-one technicians.
- Calls the customer back to ask any additional questions.
- May use remote access software to access the customer's computer to diagnose the problem and possibly to resolve the issue.
- Level-two are always called when drivers, applications, or operating systems need to be installed.



13.4 Chapter Summary



Summary

- To become a successful technician, you will:
 - Use good communications skills with customers and co-workers
 - Conduct business in a professional manner
 - Practice good netiquette
 - Comply with customer's SLA
 - Follow business policies
 - Practice good time and stress management skills
 - Familiarize yourself with cyber laws in your country, region, or state
 - Know your responsibility in the fight against cybercrimes

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