

Participant Handbook

Sector
Telecom

Sub-Sector
Handset

Occupation
**Sales & Distribution-Handset
Segment**

Reference ID: **TEL/Q2200, Version
2.0 NSQF Level 4**



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**Telecom Customer Care
Executive
(Repair Center)**



Shri Narendra Modi
Prime Minister of India

“

Skilling is building a better India.
If we have to move India towards
development then Skill
Development should be our
mission.

”



Certificate

COMPLIANCE TO QUALIFICATIONPACK– NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

TELECOM SECTOR SKILL COUNCIL

for

SKILLING CONTENT: PARTICIPANT HANDBOOK

Complying to National Occupational Standards of
JobRole/Qualification Pack: 'Telecom Customer Care Executive(Repair Centre)'
QP No. 'TEL/Q2200 NSQF Level 4'

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The preparation of this handbook would not have been possible without the Telecom Industry’s support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the industry.

This participant handbook is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their endeavours.

About this Book

India is the second-largest telecom market in the world, with over 1.16 billion (116 crores) subscribers, and by 2025 it is expected to grow to 0.95 billion which is (92 crores).

The sector employed over 2.2 million (22 lakhs 20) employees directly and 1.8 million (18 lakhs) indirectly as of 2021, and it is expected to grow with the introduction of 5G network services. As on date, this sector is in the top five employment opportunity generators in the country.

This Participant Handbook is designed to impart theoretical and practical skill training to students for becoming a Telecom Customer Care Executive (Repair Centre). Telecom Customer Care Executive (Repair Centre) in the Telecom industry is also known as Customer Service Representative/Showroom Executive/Customer Relationship Executive/ Customer Service Executive/Repair Centre Executive.

Individuals at this job, interact with walk-in customers, handle their queries, listen to their problems, and provide a solution. They also do follow-up calls post the service, to check their problem is resolved to their satisfaction.

This Trainee Manual is based on the Telecom Customer Care Executive (Repair Centre) Qualification Pack (TEL/Q2200) and includes the following National Occupational Standards (NOSs):

- Identify Issues, Troubleshoot and Coordinate with Technical Team- TEL/N2201
- Manage work area and maintain personal appearance- TEL/N2215
- Organize work and resources as per health and safety standards -TEL/N9101
- Interact effectively with team members and customers - TEL/N9102

The Key Learning Outcomes and the skills gained by the participant are defined in their respective units.

After completing this training, the participant will be able to interact with the walk-in customer, provide solution to customer queries & complaints, and hence will be able to maintain the relationship with the customer.

We hope that this Participant Handbook will provide a great deal of learning support to our young friends to build attractive careers in the telecom industry.

Symbols Used



Key Learning Outcomes



Steps



Notes



Unit Objectives



Practical



Exercise

1. Role and Responsibilities of a Customer Care Executive - Repair Center



Unit 1.1 – Introduction to Roles and Responsibilities of a CCE-
Repair Center

Unit 1.2 – Telecom Industry

Unit 1.3 – Role of a CCE (Repair Center)

Unit 1.4 – Basic Terminologies used in a Telecom Repair
Center

Unit 1.5 – Basics of a Mobile Handset



Key Learning Outcomes



At the end of this module, you will be able to:

1. Explain the overview of the program
2. List down the necessary skills the training will cover
3. Explain the ground rules to make the program effective
4. Get an overview of the Telecom industry in India
5. Discuss the mobile handset industry in India
6. List the top mobile handset players in India
7. Gain knowledge about the job and personal attributes of a Customer Care Executive
8. Discuss the career ladder of a Customer Care Executive (Repair Centre)
9. Explain the different terminologies used in a Telecom Repair Center
10. Identify the different parts of a mobile Handset (External and Internal)
11. Demonstrate how to assemble and dismantle a handset

UNIT 1.1: Introduction to Roles and Responsibilities of a CCE-Repair Center

Unit Objectives

At the end of this unit, you will be able to:

1. Discuss the overview of the program
2. List down the necessary skills which the training will cover
3. Explain the ground rules to make the program effective

1.1.1 Program Overview

- The Telecom Industry in India
- Roles and responsibilities of a Customer Care Executive (Repair Centre)
- Telecom Repair Centre specific key concepts
- Behavioural, professional, technical, and language skills required for performing the job effectively
- Methods of Selling, Up-selling and Cross-selling companies' products and services
- Managing queries and complaints of walk in customers
- Classify problems/issues in the handset and accessories of walk-in customers and troubleshoot them
- Co-ordinating with internal team and customers for repair/replacement
- Interview Skills

1.1.2 Skills imparted by this training

- Communication skills
- Language Skills (Listening, Speaking, Reading and Writing Skills)
- Interpersonal Skills
- Rapport Building
- Time Management
- Selling Skills

1.1.3 Main Activities done by a Customer Care Executive (Repair Centre)

- Managing queries and complaints of walk-in customers
- Identifying issues/problems in the handset and accessories of customers and troubleshoot them
- Co-ordinating with internal team and customers for repair/replacement

1.1.4 Rules for Efficient Learning Environment

All the participants are expected to follow certain ground rules which will facilitate an efficient learning environment. These rules are:

- Arrive on time.
- Participate in all phases of the workshop.
- Keep mobile phones on silent mode.
- Adhere to the timelines. Fifteen minutes break means returning to the room within that time.
- Listen actively - respect others while they are talking.
- Learn what is taught
- Ask questions if you don't understand.

Exercise

1. What are your expectations from the training program?

Notes

UNIT 1.2: Telecom Industry

Unit Objectives

At the end of this unit, you will be able to:

1. Get an overview of the Telecom industry in India
2. Discuss about the mobile handset industry in India
3. List the top mobile handset players in India

1.2.1 Telecom Industry at a Glance

Telecom services play a very important role in the socio-economic development of the nation.

- Telecom's modern facilities are used to deliver mass education programmes for the rural folks of
- Telecom sector is the second largest revenue earner for the government after income-tax.

1.2.2 Telecom in India

- In recent years, the Indian telecom industry has witnessed phenomenal growth and is the second largest revenue earner for the government, after income-tax
- Government Policies and Regulations, Technology Innovations and increased subscribers majorly contribute to the growth of the telecom industry.
- The telecommunication network of India is the second largest in the world based on the total number of telephone users (both fixed and mobile phone).
- India achieved the distinction of having the world's lowest call rates, the fastest sale of mobile phones, the world's cheapest mobile handsets.

1.2.3 Mobile Handset Industry

- Interestingly, India is today, the second-largest mobile phone manufacturing hub after China.
- Most global corporations are looking at India as a regional hub for manufacturing and sales.
- India is expected to grow and reach a turnover of US\$ 230 billion by 2025 in mobile device manufacturing and become an export-oriented industry, creating 4.7 million jobs in India.
- By 2022, the Indian smartphone market is expected to return to growth, with a shipment of 167 million units
- As per the survey by Deloitte, in the year 2021, there were 750 million smartphone users, and it is expected to touch 1 billion by 2026, the major growth contributor is the rural population of India

1.2.4 Top Mobile Handset Players in India

1. Samsung
2. One Plus
3. Xiaomi
4. Apple
5. Oppo
6. Nokia
7. HTC
8. Vivo
9. Micromax
10. Asus



Exercise

1. Which is the top 3 most selling brands of mobile phones?

2. Which companies (of the above 10) sells the most expensive mobile

3. Name the top five mobile handset players in India.



Notes

UNIT 1.3: Role of a Customer Care Executive (Repair Centre)

Unit Objectives

At the end of this unit, you will be able to:

1. Gain knowledge about the role of a Customer Care Executive
2. List down the personal attributes of a Customer Care Executive
3. Discuss about the career ladder of a Customer Care Executive(Repair Centre)

1.3.1 Customer Care Executive

A Customer Care Executive in a mobile repair center handles the walk-in customers, listen to their problems with regard to the handset/accessories and assist in getting their problem solved. They also follow up with them, if the problem is solved to their satisfaction. They are often responsible for front-facing duties that directly impact the customer's experience of an organisation. Thus, they are the link between the company and the customer.



Fig.1.3.1 Customer Care Executive

1.3.2 Role and Importance of a Customer Care Executive

1. Customer Care Executives tries to handle the queries and issues of the customer (about their handset) as per the Standard Operating Procedures of the organization.
2. Customer Care Executives should listen, understand, analyse a problem, come up with the best solution, and make the customer feel that he/she has been suggested the right solution.

For example, in a Repair Centre, the Customer Care Executive will assist the customers by solving their problems on things like:

- Touch screen issues
- Phone not charging/not getting on
- Phone stops working during the call (goes into a hang)

In such cases, a Customer Care Executive must pay attention to customer's problems, log it in the system, and assign it to an engineer to get the phone checked and resolved.

1.3.3 Approach of an Effective CCE

An effective CCE understands that their role is critical to the success of the organisation and that they are responsible for the satisfaction of the customers. The best approach for a CCE to work with customers is the **CARING** approach *as the customer who feels cared for is a customer for life.*

C-Courteous

A- Active and Alert

R-Responsible and Responsive

H-Informative

N- Never say "No"

G-Guides Right

1.3.4 Specific Responsibilities of a Customer Care Executive in a (Repair Centre)

- Individuals in this job provide customer service by handling, following-up on, and resolving walk-in customers' queries, requests and complaints.
- Individuals in this job are responsible for managing themselves as well as the store.
- Individuals proactively recommend/sell organisation's products and services.
- Individuals are responsible for identifying issues/problem of handset and troubleshoot them.
- Individuals are responsible for co-ordinating with internal team and customers for replacement/repair.

1.3.5 Personal Attributes: Customer Care Executive (Repair Centre)

- Must possess strong communication skills
- Must possess the ability to form simple and rational sentences
- Must possess good problem-solving skills
- Must have strong customer service focus
- Must possess good listening and selling skills
- Must have the ability to work under pressure

Exhibit

Responsibilities of Customer Care Executives- Repair Centres

A CCE is an important face of the organisation and a connect between a client and organization. Given below are the main responsibilities of a CCE-RC:

1. Empathize with customers

Firstly, the CCE must restate and understand the customer's concerns. Talk to them with an empathetic tone so that it reflects your efforts to clearly understand their problem. If you can make the customers comfortable talking to you, they are more likely to explain their problems in detail. This will give them the confidence that you are listening to them with full involvement.

2. Effective Communication

A CCE must gather information about the needs and wants of the customers by communicating with them in an effective way. They can gather details of the problem only if he listens patiently and asks questions to the customer based on it.

A CCE who is effective, ensures that the problems of the customers are heard correctly and a suitable solution is provided for solving their issue. They can escalate the issues to their seniors if in case the problem is beyond their area of solving.

3. Handle Different Customers

The work of a CCE involves handling different kinds of customers. He/she must be able to tackle different types of customers by being polite to them, understanding their requirements and then assuring them that their problem will be resolved. Most importantly a CCE has to make sure that each customer is satisfied.

4. Be Courteous

Be polite and soft while receiving and talking to the customer. Use the language that the customer is comfortable with. Listen to them patiently and provide them with appropriate solution.

5. Make calls and follow up

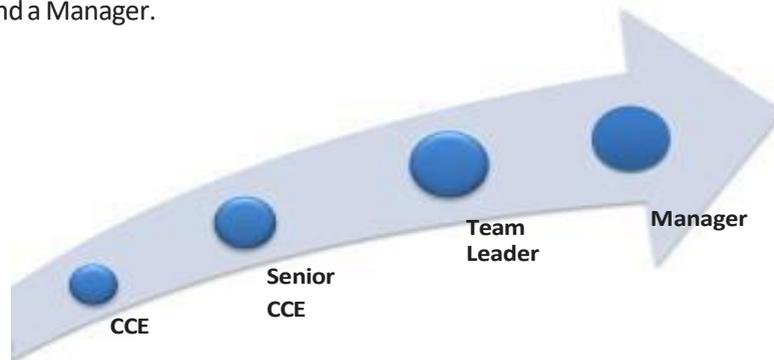
In a relationship centre a CCE is expected not only to handle incoming customers but also to sell company's products. Therefore, one of the main duties of a CCE is to make cold calls or call up old customers in order to sell a company's services and products to them

6. Always Maintain Good Telephone Etiquettes

A CCE is expected to maintain good telephone etiquettes. He/ she must talk politely, and must not disconnect the call abruptly. As a CCE you must know how to communicate over the telephone, so that when the customer talk to you, he/she must feel good about the call.

1.3.6 Career Ladder of a Customer Care Executive (Repair Centre)

The career ladder is a structured process that defines the promotional and role change opportunities for the Customer Care Executive. After spending the prescribed period of time in each role they can move up to a level of a Senior CCE, Team Leader and a Manager.



1.3.6CCE Career Ladder



Click the QR code to view the video of Roles and Responsibilities of a CCE-Repair Center



Exercise

1. List down the responsibilities of a Customer Care Executive in a repair centre.

2. Write down any three personal attributes of a Customer Care Executive in a repair centre.

Which of the following is the main responsibility of a Customer Care Executive?

- Being Courteous
- Not empathetic
- Untimely communication
- None of the above

UNIT 1.4: Basic Terminologies used in a Telecom Repair Center

Unit Objectives

At the end of this unit, you will be able to:

1. State the different terminologies used in a Telecom Repair Center

1.4.1 Basic Terms and their Meanings

1G -1G is the first-generation cellular network that existed in 1980s. It transferred data (only voice) via an analog wave.

2G- 2G is the second-generation technology which introduced the concept of digital modulation which meant converting voice (only) into digital code (in your phone) and analog signals. Being digital helped to overcome some of the limitations of 1G as it omitted the radio power from handsets thereby making life healthier and it had enhanced privacy too.

3G-3rd Generation in Mobile Telephony. It leads to use of speech and data services simultaneously. Up to 2 Mbps data rates are offered by it. 3G includes services like Video Calls, Mobile TV, Mobile Internet and Downloading. There are bunch of technologies which fall under 3G like WCDMA, EV-DO, HSPA and others.

4G- 4G is the latest generation of mobile data connectivity built on the foundations set by 3G. 4G offers a faster and more reliable connection. 4G offers features like downloading movies or music, streaming YouTube videos and uploading images to Facebook at a much faster speed than 3G. 4G is a quicker and easier technology as compared to earlier ones.

5G- is the fifth-generation technology standard and is the successor to the 4G for broad band cellular networks which began in 2019 worldwide. These networks will have higher download speed of up to 10gigabits per second and can connect different devices because of the higher bandwidth

AC: Alternate Current.

BSI: Battery Status Indicator

CDMA: Code Division Multiple Accesses

CPU: Central Processing Unit

DCT: Digital Core Technology

DC: Direct Current

ESD: Electro Static Discharge

FM: Frequency Modulation

GSM: Global System for Mobile phones

IC: Integrated Circuit

IMEI: The International Mobile Equipment Identity

LCD: Liquid Crystal Device

LED: Light Emitting Diode

MIC: Microphone

NFC: Near Field Communication

PDA: Personal Digital Assistance

PCB: Printed Circuit Board

PFO: Power Frequency Oscillator

RAM: Random Access Memory

RTC: Real Time Clock

SMD: Surface Mount Device

SIM: Subscriber identification module

Up-Sell: Up-selling is the action whereby a seller induces the customer to purchase more items, upgrades, or other add-ons in an attempt to make a more profitable sale.

Cross-Sell: The selling of additional products and services to the existing customers, established clients, traders, markets etc is referred to as cross-selling.

Customer Service: It refers to the provision of service to customers before, during and after a purchase. It is designed especially to enhance the level of customer satisfaction i.e. the feeling that the customer is happy and satisfied with the product or service.



Exercise

1. The full form of FM is:
 - Frequency Modulation
 - Frequent modulation
 - Fast Modulation
 - None of the above

2. The full form of BSI is
 - Battery Status Indicator
 - Battery Status Indication
 - Battery Structure Indication
 - Battery Structure Indicator

3. The full form of PFO is
 - Power Frequency Oscillation
 - Power Frequency Oscillator
 - Power Frequently Oscillator
 - None of the above

UNIT 1.5: Basics of a Mobile Handset

Unit Objectives

At the end of this unit, you will be able to:

1. Identify the different parts of a mobile handset
2. Demonstrate how to assemble and disassemble a handset

1.5.1 Introduction

A mobile cell phone is a handheld device that can perform several communication functions. Mobile technology has become one of the fastest growing technologies in the world.

1.5.2 Objectives

- Identify the parts of a mobile cell phone (External and Internal)
- Use the correct hardware tools to repair mobile cell phones
- Assembly and disassembly a mobile cell phone
- Recognise potential hazards in the repair of mobile cell phones

A mobile phone is a handheld device that allows you to make and receive telephone calls while you move around a wide geographical area. It supports several other functions, such as email and Internet access, text messaging, money transfer, online banking, photography and it can be used as a radio also.

1.5.3 Parts of a Mobile Phone

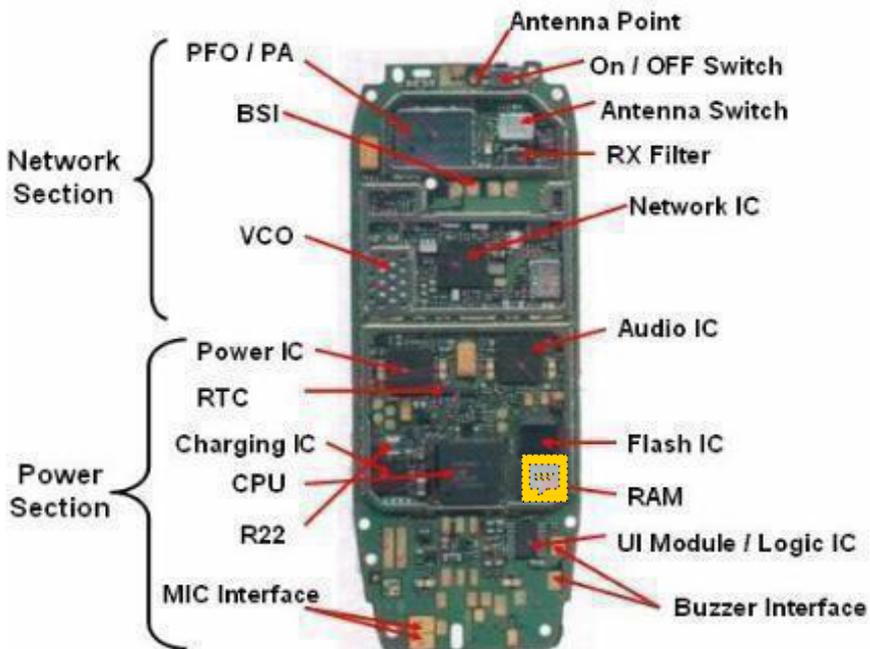
Mobile phone consists of several components. Let's have a look at each of them and functions of each of them. Given below is the table which explains the functions of the main parts

Parts of a mobile phone	Functions
Display	The most obvious component of a smart phone is its display. Two types are LCD and LED. These days LED are in use.
Battery	Batteries of phones typically use lithium-ion technology that is either removable or non-removable in mobile devices. You can charge the batteries with the help of a charger. It acts as a source of power for a mobile phone.
'System-on-a-chip' or SoC	SoC comprises the smartphone's CPU, GPU (Graphics Processing Unit), LTE (Long Term Evolution) modem, display processor, video processor, etc.
Memory and Storage	RAM is the area in the mobile which stores the operating system files and other system app files. Since the space in the RAM is limited, there are slots for external SD cards to store user files.
Power switch	It is used for switching on and switching off the mobile phone.
Modem	The modems help the smartphone to receive and send text messages and to make calls.

Camera	A smart phone has front and rear cameras. It has three parts, sensor, the lens and the image processor.
Sensors	There are five sensors in every smartphone to detect the orientation, rotation, and tilting of the phone, to navigate the direction, screen light sensors, proximity sensor to lock the screen to prevent unwanted touch of command buttons



1.5.3a Parts of a mobile phone
 Image source: <https://www.manualcentro.com/2016/07/zte-warp->



1.5.4 Internal parts of a mobile phone
<https://www.quora.com/Why-do-we-upgrade-smartphones-like-we-do-with->

1.5.4 Internal Parts of a Mobile

The table outlines the main sections of a mobile phone and how they are connected	
Internal Section	Description
SIM card section	SIM Card Interface section is directly connected with the CPU in most mobile cell phones. If there is no power supply in a mobile phone then the SIM section is connected with the CPU through the Power IC.
Memory card section	In most phones the micro-SD cardholder is connected through a 8 pin socket. The memory card section is found inside the CPU
Ear Speaker Section	<ul style="list-style-type: none"> ■ In modern mobile cellphones, which have a separate ear speaker, the speaker is directly connected to the CPU. ■ It receives sound via signals directly from the CPU or from the audio section inbuilt within the CPU. ■ In some mobile phones, these sound signals are received via coil / resistance. Some mobile phones have audio IC in the audio section, while others have audio amplifier.
Speaker/Ringer Section	<p>The ringer, buzzer or speaker in most mobile phones are connected to the audio amplifier IC to obtain loud sound.</p> <ul style="list-style-type: none"> ■ The amplifier IC amplifies the sound or audio signal received from the CPU of the audio section.
Key Backlight Section	<ul style="list-style-type: none"> ■ LED Lights are connected according to the parallel circuit in the key backlight section. Anode ends of all the LEDs are connected to each other and all the cathode ends to each other. 3 to 3.3 V is supplied for the functioning of these key LED Lights.
LCD Backlight Section	<ul style="list-style-type: none"> ■ LCD Backlight in mobile cell phones is made according to the series circuit. A Boost Voltage Generator section is built for the supply of high voltage (10 to 18V) for the functioning of the LCD LED. Boost coil, Boost Volt Driver IC, Rectifier Diode are present in this section.



Click on the QR code to view the video on different parts of a Smartphone

Vibrator Motor Section	Positive power supply is given to this section directly from the positive end of the battery. Negative power supply is given through a NPN transistor or from the ground of any circuit.
Network Section	Antenna, External Antenna Socket, RX-Band Pass Filter, RF Crystal, FEM, PFO, TX-Band Pass Filter, RF IC, CPU are connected in the Network Section.
Battery Charging Section	Charger and system interface connector is made together in most modern mobile phones. Regulator section is made separately for the battery charging section. In some mobile phones, the battery charging section is made inside the Power IC.
FM Radio Section	FM Radio Driver IC, FM Antenna, Signal and Supply Components are made in the FM Radio Section.
Bluetooth Section	Bluetooth Antenna, Bluetooth RF Signal Filter, Bluetooth Driver IC, Supply and Signal Components are found in this section. The Bluetooth section functions like the Network Section. The RF-CLK signal is given to the Bluetooth driver IC during signal processing.
Handsfree(Earphone) Section	The hands-free jack, hands free MIC, speaker signal component and hands-free audio amplifier are present in this section. Hands free symbol is displayed after connecting the Hands-free jack.

1.5.5 Potential Hazards Associated with Mobile Phone Repair

What is a hazard?

A thing that has the power to cause harm to you or anything around is known as hazard. Let us first discuss about some of the terms associated with hazards. There are quite a number of potential hazards that one can encounter when servicing or repairing a mobile phone. These are listed in Table 1 together with the preventive actions that you could take to avoid them.

The following are some of the hazards and preventive actions for them

Hazard	Preventive Actions
Burns	Use of well-insulated tools
	Use of gloves
	Keeping the soldering iron in the right place
	Unplugging equipment when not in use
Pricks by sharp objects	Appropriate storage of equipment
	Proper disposal of sharp objects
	Use of appropriate tools and equipment
Environmental pollution	Proper disposal of electronic wastes
Trailing electrical cables	Make sure electrical equipment is unplugged while not in use
	Safe storage of cables
Falls	Keep all tools, bins etc. in the right place

1.5.6 Disassembling a Mobile Phone

This is the beginning of all cell phone repairs. To be able to completely disassemble and reassemble any cell phone, you will be able to single out the root cause of the issue, and thus move on to repair it.

To disassemble is to take something apart or to break it down into pieces.

The following are the steps that you should take when disassembling a mobile phone:

- Switch off the phone
- Remove the battery cover
- Remove the battery, SIM card memory card (if any)
- Remove all the screws from the phone
- Lift back the cover with the help of a flat screwdriver
- Remove the strips (buzzer strip, display, camera, volume and speaker button strips)
- Remove the antennae wire from the outside
- Remove the motherboard and vibrator

You need to understand the internal sections of a mobile phone and how they are connected to the CPU, in order to successfully disassemble it.

This section is incredibly important due to the fact that after becoming familiar with the disassembling of phones and also the structure of certain phones and how they are made, you must be able to start identifying each part as you disassemble it. This is crucial in repairing phones considering diagnosing the phones relies heavily on the knowledge of the function and responsibility of each part.

1.5.7 Assembling a Mobile Phone

The Re-assembly is obviously just as important as the disassembly, considering this is where the replacement of faulty components takes place. Once again, practice makes a man perfect, eventually enabling you to freely tear and and re-construct any cell phone, replacing faulty components on the way.

The following are the steps that you should take when assembling a mobile phone:

- Fix the vibrator strips of speaker and volume button
- Fix the motherboard
- Connect the antenna with wire
- Place the camera and connect it
- Place the buzzer
- Put the camera cover
- Make sure that the LCD is working before you place the screen
- Put battery and battery cover

Exercise



1. _____ converts the electric signal to a sound signal

- Ear phone
- Key pad
- Battery
- Oscillator

2. _____ transmits sound from one phone to another

- Ear phone
- Keypad
- Battery
- Mouth piece

3. _____ takes power from the battery and supplies to all other

- Power IC
- Flash IC
- Charging IC
- CPU

4. _____ creates frequency during outgoing calls

- Ear phone
- Key pad
- Battery
- Oscillator

5. What are the potential hazards associated with mobile phone repair?

6. List down the steps involved in assembling the mobile phone.

Match Column A with Column B

S.No	Column A	Column B
1	Charging Slot	Mobile Batteries
2	First step in disassembling the phone	Helps the smartphone to receive and send messages and make call
3	Lithium	Prevent burns
4	Modem	Switch off the phone
5	Use of gloves	Connects the charging cable to the power point

Notes

2. Manage Work Area and maintain personal appearance



Unit 2.1- Maintain Personal Grooming and work area Unit

2.2 - Customer Service

Unit 2.3 - Understanding Ticket Management System Unit

2.4 - Understanding QRC

Unit 2.5- Objection Handling

Unit 2.6 - Time Management



Key Learning Outcomes



At the end of this module, you will be able to:

1. Identify principles of proper grooming and adhere to proper uniform guidelines
2. Explain the various ways to maintain personal health and hygiene
3. Describe customer service and explain the characteristics of excellent customer service
4. Understand the need and importance of tickets in a repair shop
5. Explain the Ticket Management Process and ticket lifecycle
6. Discuss about different types of tickets
7. Stock replenishment at the Repair Centre
8. Make entries in the CRM
9. Make entries in the CRM using intranet tools
10. Discuss what is query, request, complaint and effective way of handling it
11. Understand objection handling
12. Understand how to manage time in order to do work effectively

Unit 2.1 Maintain Personal Grooming and work area

Unit Objectives

At the end of this unit, you will be able to:

1. Identify principles of proper grooming and adhere to proper uniform guidelines
2. Demonstrate professional etiquettes and behaviour
3. Explain the various ways to maintain personal health and hygiene

2.1.1 Grooming for Call Centre Executive

When working at a Repair Centre, CCEs need to present a neat and professional appearance as they are the one who meet the customers first and leave an impression in their mind. The primary goal is to "feel good" about the way you look and project a positive image of self and the organisation. Being well-dressed is a compliment to customers you meet.

Once you enter your store/department you need to be dressed in full uniform as per company norms, and also properly groom yourself as per the service standards.

2.1.2 Appearance

The frontline person/team is the brand ambassador of the store. Customers visiting the stores are greeted by this team and are assisted by them. Hence, they are expected to present a neat and clean appearance.

You are the CCE and being a part of this team, you should:

- Follow organisational guidelines with respect to standard uniform and name badges
- Adhere to specified uniform/dress code and grooming guidelines
- Wear name badges as per organisational guidelines
- Have neat and clean fingernails, teeth, shoes, hair and face
- Demonstrate a positive attitude
- Maintain eye contact with the customers
- Shake hands firmly
- Neither interrupt nor argue with customers
- Remember to smile and be friendly

2.1.3 Specific Uniform Guidelines

Sl.No.	Specifically for Men	Specifically for Women
1	Uniform prescribed should be clean and ironed.	Women must tie their hair, if they have long hair. Not much oil should be applied.

2	Shoes should be clean and polished.	They should avoid bright coloured nail polish and long nails as they may distract customers or damage merchandise on display.
3	Hair must be short, clean and tidy.	Minimum, non-flashy jewellery should be worn
4	One is expected to have a clean shaven look.	Dangling earrings, noisy anklets & bangles must not be worn on the floor.
5	Beard and moustache must be trimmed, neat and tidy	Only very light make-up to be applied (lip-stick of very light shades only).
6	Nails should be cut/trimmed neatly at regular intervals.	Any type of earrings studs & bracelets are not to be worn on the floor during official hours.

Note: Every CCE is expected to be in uniform with their badge and ID card while at work.

2.1.4 Professional conduct

- **Be on time.** Being late impedes a company's operations and demonstrates a lack of consideration of the time concerns of others. If you are constantly late for work, meetings, or are always late with your reports and other tasks; it demonstrates to others that you are probably not executive material because you disregard the value of time.
- **Be discreet.** Keep company secrets such as new product designs, sales figures or any other confidences to yourself.
- **Be courteous, pleasant, and positive.** No matter how demanding your clients, customers, co-workers, or employees might be; always remain upbeat and positive. Projecting a positive company image has the same effect.
- **Be concerned with others, not just yourself.** Finding out a customer or client's point of view naturally helps you get ahead in any industry. Concern for others should include your superiors, co-workers and subordinates as well.
- **Dress appropriately.** Dress to be comfortable in your environment. Dressing poorly or too casually does not convey a good image, neither does overdressing, which breeds suspicion and mistrust, and will be seen as inappropriate.
- **Use proper written and spoken language.** People who can express themselves clearly are at an advantage. This goes beyond using good grammar, proper spelling, and appropriate diction in all your communications;
- you should also speak and write to the point.

2.1.5 Professional Behaviour

- **Integrity**
Consistent honesty; complete and accurate documentation of client information and activities; can be trusted with confidential information; being able to be trusted with the property of others.
- **Empathy**
Showing compassion for others; demonstrating a calm, compassionate and helpful demeanor toward those in need; responding appropriately to the emotional response of others and demonstrating respect for others; being supportive and reassuring to others, without getting emotionally involved.
- **Self-Motivation**
Taking initiative to complete assignments; taking initiative to improve and/ or correct behaviour; accepting and following tasks through which constant supervision; showing enthusiasm for learning and improvement

accepting constructive feedback in a positive manner; consistently striving for excellence in all aspects of your profession and professional activities; taking advantage of learning opportunities

- **Self-Confidence**

Exercising good personal judgement; demonstrating an awareness of strengths and limitations; demonstrating the ability to trust personal judgement.

- **Teamwork**

Showing respect for all team members; not undermining the team; placing the success of the team above self-interest; helping and supporting other team members; communicating with others to resolve problems; remaining flexible and open to change.

- **Respect**

Being polite to others; not using derogatory or demeaning terms; behaving in a manner that brings credit to your profession.

2.1.6 Personal Hygiene

Personal hygiene is keeping the body clean, and helps prevent the spread of germs. Maintaining good health also includes the following areas: Nutrition, Leisure/recreation opportunities, sleep, and exercise. There are many factors which contribute to feeling good and looking good. Both these things are important for each individual's emotional and physical well-being

2.1.7 Practicing Personal Hygiene

Under the basic health and safety measures comes personal hygiene.

Personal Hygiene is the set of practice to follow to preserve one's health.

- **Teeth:** Brush them twice a day with toothpaste, or toothpowder.
- **Bath:** Take shower every day.
- **Clothes:** Always wear washed and fresh clothes.
- **Hands:** Wash them before and after meal and after visiting the toilet.
- **Feet:** Scrub them and cut toe nails regularly.
- **Nails:** Keep them short and clean.
- **Home:** Clean every day.
- **Bad Habits:** None.



Fig 2.1.7 Personal Hygiene

2.1.8 Things to be avoided

There are certain habits that have severe ill-effects on one's health. Such habits should be avoided for a healthy life.



Fig 2.1.8a Things to say no to

Alcoholism:

It's the tendency in which one consumes alcohol to cope with difficulties or to avoid feeling bad.

It's effects on Health:

- It increases risk of heart diseases, cancer, impaired immune system, liver infection (Cirrhosis) etc.
- Reduced work focus and drop in performance
- Degradation in social and economic status
- Withdrawal symptoms like anxiety, trembling, fatigue, headache and depression etc.

Tobacco:

Tobacco is the second largest cause of death in the world. It claims one death in every six seconds.

It's effects on Health:

- It is the biggest reason for oral cancer which affects mouth, tongue, cheek, gums and lips
- Chewing tobacco lessens a person's sense of taste and ability to smell
- Smokers face a greater risk of suffering from lung cancer

Gutkha:

Each sachet of gutkha contains 4000 chemicals, including 50 that cause cancer such as betel nut, Tobacco, Flavoring etc.

Impact of Gutkha on health:

- Loss of sensation in tongue
- Disfigured mouth
- Increased sensitivity to heat, spices and cold
- Inability to open the mouth
- Swelling, lumps and rough spots on gums or in other places inside the mouth
- Unexplained bleeding in mouth
- Difficulty in swallowing
- Mouth Cancer

Healthy eating habits include:

- Always try to eat home-made food.
- Avoid oily food.
- Always cook and eat fresh food.
- Avoid junk food like burgers, carbonated drinks etc.
- Eat fruits regularly.
- Drink lots of water.



Fig 2.1.8b physical fitness and good nutrition

2.1.9 Physical Fitness

Apart from following these hygienic practices, one should also be physically fit. Physical fitness is an outcome of regular exercise. Exercise may be of many different forms like jogging, morning walk, weightlifting, swimming, cycling, yoga and many more.

Healthy Eating

- One can follow hygienic practices and exercise regularly, but what you eat has the biggest impact on your health. To be healthy, one has to eat healthy. Eating a healthy, balanced diet provides nutrients to the body. These nutrients give energy; keep your brain active and your muscles working.

2.1.10 Basic Safety and Precautionary Measures

A Customer Care Executive should understand and follow the subsequent measures while in the store:

- **Health and Hygiene:** Do not work with power tools when you are not well, under strong medication, have consumed alcohol. Do not smoke during working hours.
- **Proper Clothing:** Do not wear loosely-fitted clothes or jewellery that can get caught here and there. Do not wear clothes that are highly flammable. Do not wear sandals, open-toed or canvas shoes.
- **Clean Work Area:** Keep the floor free of oil or any other type of litter. The work area that is cluttered is prone to accidents. Sparks can ignite scraps, or wire shot. Water can conduct electricity. When you are working with electrical tools, do not stand on damp floor or in rain, as it can lead to a major accident. Keep hands and tools dry.
- **Working with Metals:** Secure the metal material with clamps when working with it, in order to prevent it from moving.

2.1.10 Things to be avoided

- **Tool Operations:** A power tool must not be used when it is coming to a stop point or it has reached operating speed. Do not force a tool by applying pressure. Allow the power tool to come to a stop when it has been turned off. Never force an object into moving parts to stop a machine.
- **Product Maintenance:** Always clean the handsets before putting them away. Put the handsets in their proper place before leaving the store
 - i. Appropriate lighting
 - ii. Good air quality

Exercise



1. List down the specific uniform guidelines for a CCE in a repair centre.

2. What are the six basic rules to be followed for a professional conduct?

3. What are the ill-effects of alcoholism on health?

4. What are the ill-effects of tobacco on health?

Notes



Unit 2.2 Customer Service

Unit Objectives

At the end of this unit, you will be able to:

1. Describe customer service and explain the characteristics of excellent customer service
2. Understand the importance of CRM in providing enriching customer service
3. Understand the open ended and closed ended conversations
4. Resolve customer queries and issues using CRM

2.2.1 Customer Service

Service is the commitment to provide a high quality of service to customers with a positive attitude, knowledge, technical support, in a timely manner.

As a CCE in a repair shop, customer orientation is that you want to make sure that you return a repaired device to the customer as quickly as possible, and in perfect working condition as if they have just taken it out of the box. You must understand how valuable the mobile device is to the customer.

Today we all use mobile phones in almost every aspect of our life-

- We use the camera to take photos of our family and relatives
- The calendar is to keep up and organize our daily activities and tasks
- The mail and message applications are used so that one can keep work on track

The convenience that the mobile device brings is something we have come to rely on every day. As a CCE in a cell repair shop you must appreciate this and try to repair customers phone in a timely manner.

2.2.2 Phases of Customer Service

1. Pre-Customer service
 - Putting products in order (in proper shelf, stacked together with similar products, cleaned regularly etc.)
 - Getting product knowledge (company, price, user instruction, etc.)
 - Information about competitors (which company is selling similar products, their price, comparative features, advantage of your own product etc.)
2. Customer Service
 - Attend to customers (Greet, understand needs, give information asked for like guarantee, features, advantages, discounts, etc.)
 - Offer the best solutions to the customer (help to make the best choice keeping all interests in mind to ensure that a sale can be closed as well as ensure that the need of the customer is fulfilled)
 - Handle customer queries, requests or complaints
 - Clear doubts or queries, if any about price, quality, features, and handle objections.
3. Post-Customer Service
 - Analyse what more service can be offered (check the current service offered and plan how the customer service can be made better)

2.2.3 Characteristics of Customer Service

The theory of customer service is based on identifying and satisfying your customers' needs and exceeding their expectations. In order to gain and retain customer loyalty, a company must be totally committed to delivering consistently high standards of service.

Some important characteristics of excellent customer service are:

1. Listening Skills

A customer service representative must pay attention to the needs of customers. This can only happen if they listen properly to what the customer is saying. Listening will help them find out the exact issue the customer is having and thus, he will be able to resolve it accordingly.

2. Probing Skills

A customer service executive knows the importance of asking the right questions as the answers of such questions help in resolving the problems and addressing the issues. Quality questions help to uncover the actual needs, goals, objectives and concerns of the customers so the representative can work to meet those needs and alleviate the concerns.

3. Responsible

One has to be responsible enough if he wants to work as a customer service executive. This responsibility is two-sided, as it covers the agents' responsibility in attendance, service, loyalty and attitude. It also covers the ability of the agent to take responsibility for mistakes and results--to know that their own actions determine the results in customer situations.

4. Responsive

Bypassing a question because the answer is not known can leave a customer feeling ignored, so it is very important to pay attention each and every question the customer asks. It is important to fully respond to one inquiry before moving to another as many service-related inquiries are multi-faceted.

4. Knowledgeable

A customer service agent must have complete knowledge about the the department/ product/ service for which they are responsible. Along with this knowledge comes confidence, which leads to customer satisfaction. If there is a situation in which the agent is unable to answer or is confused, he must not lose confidence and admit that he does not know the answer and transfer the call to a representative who can provide the correct answer to the question asked.

5. Complete

A customer service representative should work through a situation to its completion. Instead of being quick to hand off the problem or hesitant in working through a customer's needs, the agent should be thorough and work through each situation step-by-step until it is resolved.

6. Timely

Customer service is at its best when it provides quick response. Do not put customer on hold or make him wait for a longer period of time. Provide timely response to his request, question or problem.

2.2.4 Open-ended and close-ended conversation

A customer Care Executive at a Repair Center has to be good at questioning. The appropriate questions they ask a customer who is visiting the Repair Center, and the answers given by the customer will give them an idea about the nature of the problem with the phone, and accordingly, they can suggest a solution.

We often face a situation, where the questions we put, we expect a yes or no answer which is called close-ended questions. This does not provide a chance of prolonging the conversation, but in other situations, the questions may be open-ended where the responder gives an explanation that can prolong the conversation.

And thus, an **open-ended question opens up a topic for exploration and discussion**, Open-ended questions lead to qualitative answers. They are optimal when we need input, collaboration, ideas, teamwork, and innovative thoughts. It always starts with "what" or "how". E.g what is your budget? How would you like to go ahead?

while a closed-ended question leads to a closed-off conversational path. After "Yes" or "No" or the specific one-word answer to the question, the thread is done.

while closed-ended questions lead to quantitative answers. They just don't get you a lot of information. Closed-ended questions can be the most effective when asked at the end of a conversation to confirm commitment.

e.g Are you ready to buy? Is this the way you want to proceed?

Conversation between a Customer and CCE at the Repair Centre:

CCE: Good afternoon Sir. How can I help you?

Customer: Good Afternoon. I am having a problem with this phone. The screen is blank and I am not able to see who is calling. It does not show as its blank and black. CE: how long you have been using this phone sir... (*open ended Question*)

Customer: I am using this since the last three years. It was working fine. But suddenly facing a problem.

CCE: It looks like the display screen is damaged. Let me get this checked by our Engineer.

CCE to the Engineer (L2): Please get this screen checked. There is no display.

Engineer (L2): The screen got damaged. This can be replaced. The phone will work

CCE to the Customer: Sir, our Engineer checked this. He confirmed that the screen is damaged and this can be replaced. The parts are readily available with us. Can I proceed to change the screen sir? (*Close-ended Question*)

Customer: Yes..

After changing the screen the phone starts working the customer is happy and thanks the CCE for providing the right suggestion/solution. Happy Customer.

2.2.5 Effective Customer Service Management using CRM

- *Customer Relationship Management (CRM)* is a business approach that understands, anticipates, and manages the need of current and potential customers of an organization.
- It helps in integrating the people, processes, and technology of an organization.
- Effective use of information about a customer to maximize customer satisfaction as well as cost reduction and increased profitability for an organization.
- Before CRM came into use only 40% of customer issues got resolved, but after using CRM 90% of issues are getting resolved.

2.2.6 Resolving customer queries and issues using CRM

- Every customer who walks into the repair center has either some queries or some issues concerning their product
 - They visit the authorized repair center, approach the customer care executive, and explain their issue
 - The Customer Care Executive addresses the customer's concern as per the Standard Operating Procedures of the organization
 - The CCE handles the customer on a first cum first serve basis (according to the token system)
 - Every CCE and the Technicians are trained in the CRM. How to make entries, take reports, open tickets, close tickets, etc.
 - They move to the next customer in the queue after the previous customer's issue is addressed
 - Every problem is addressed keeping in mind the *Turn around* time(TAT). (The turnaround time is different for every problem). If the problem requires a thorough checking of the phones the customers may be asked to leave the phone with the center. In that case, the customer's sim is handed over to them and they will be asked to take a backup of all the crucial data
 - The backend support team thoroughly checks the phone and tells the actual problem and gives a solution whether the issue can be resolved by a small repair or changing of parts. If the damage is beyond repair, then they may suggest replacing the old phone with a new one.
 - Every person from CCE to Technicians is responsible for closing the customer issue with a Turn Around Time as defined in the Standard Operating Procedure
 - Once the problem is resolved, the ticket is closed and feedback is taken regarding the quality of the solution provided
- Note: Airtel uses the 1-CRM and Vodafone uses Siebel CRM for managing their Customer Information and service.**

Benefits of CRM

- Manage customer expectation
- Provide innovative products & services
- Make customer loyal

2.2.7 Stock Management for effective customer service

The Success of the product company greatly depends on its Stock management.

Stock management applies to every item a business uses to produce its products or services-from raw materials to finished goods. In other words, stock management covers every aspect of your business inventory.

There are many things to consider when it comes to stock that need to be addressed by the organizations. They need to check

- Whether the right products are in stock?
- How do you know when your stock levels are low?
- Have you ever lost sales because of the non-availability of stocks?
- Are you losing money due to an excess of stock?
- If you aren't managing your inventory effectively and holding up a lot of extra stock, it ties up a lot of cash.

Organizations need to set up an early warning system that can alert managers as to low inventories and other key business conditions. All these repair center, will manage the stocks using their CRM. The CRM keeps track of the stocks and sends an alert when a particular item is going below the minimum stock level.

Unit 2.3 Understanding Ticket Management Process

Unit Objectives

At the end of this unit, you will be able to:

1. Understand the need and importance of tickets in a repair shop
2. Explain the Ticket Management Process and ticket lifecycle.
3. Demonstrate how to create a ticket
4. Discuss different types of tickets

2.3.1 Introduction

India is the second-largest mobile handset market in the world with approximately 900 million subscribers. There is an increase in number of smart phones being sold daily.

There is one thing common on each phone sold. They are all fragile pieces of electronic equipment that can break easily. According to research 3 out of every 10 people crack their phone screen every year. This is where repair centers come in.

Front-line support people are the unsung heroes of every business. As a CCE in the repair center you have a critical role to play. As a Customer Care Executive in a mobile repair center your first responsibility is to manage queries/complaints of walk-in customers. In order to do so you must be able to:

- Service walk-in customers through token or ticket management
- Capture queries/complaints of walk-in customers in CRM, register or MS Excel

A ticket tracking is used in a mobile repair center to create, update, and resolve reported customer issues, problems, requests and complaints. A support ticket will include vital information for the account involved and the issue encountered.

2.3.2 Ticket Creation

A ticket is a transaction document that records all the information that is related to a request. The ticket fields contain information that is required to understand and fulfil the request from the end user. Once, a ticket is created in a repair shop it gets assigned to a technician depending on the level of repair required. Given below are few main aspects of ticket progression, which are used when building the work-flow process:

1. Log the issue with:
 - The customers details.
 - The details of the device: Device, Model, Colour, Network, Problem.
 - Details of problem being faced or experienced.
 - A unique identification number assigned to it, for tracking.
2. Categorise the issue
 - Classification of the problem into L1, L2, L3

1. Prioritise the issue:

- An urgency value is assigned to each issue, based on the overall importance of that issue. Issues that are not very urgent and are minor must be resolved as time permits.

2. Respond to the issue

- Allocate to an appropriate technician.
- Create a status message - Status refers to the current stage of the ticket in its lifecycle. They can be New, Queued, Active, Pending, Complete, Resolved, Closed. Fixed ticket statuses cannot be modified. A ticket can move from one status to another - not necessarily in a specific order.
- Reason Code: - The reason for why a ticket is in a given status or phase is assigned by reason code. For example, a ticket could be set into pending status for several reasons - like Pending Customer(password etc), Pending Supplies, Pending Information.
- Resolve and close the issue.

Fig 2.3.2. Ticket Creation

The work flow actions and ticket progression is managed by the combination of the ticket status and reason code. As a ticket progresses it grows to include activities toward resolving, fulfilling, and closing the request. Ticket progression also includes manual, automatic actions, and communications to and from the ticket.

2.3.3 Ticket Management Process

An example scenario is presented to show how the workflow in a repair shop would work:

1. Receiving a Request:

- A customer service technician receives a device from a walk-in customer for repair. You log in the incident.

2. Initial Diagnosis:

- The technician does a basic check to assess the problem and then assigns it for front-end (L1) or backend (L2, L3) repair.
- Some examples of L1 are: broken screen/battery/small components repair/data recovery
- Some examples of L2 and L3 are: Water damage/glass only (refurbishing) repair, Motherboard/components soldering repair
- Knowledge bases and diagnostic manuals are helpful tools at this step, too.
- If the incident or issue is resolved by the first-level service desk based on his or her own available knowledge and initial diagnosis, then the issue is resolved. Else, it's time to escalate.

3. Creating a Ticket:

- The technician will also make sure that adequate information about the problem is obtained from the customer. This information generally includes the environment of the customer, when and how the issue occurs, and all other relevant circumstances.
- The technician creates the ticket in the system by entering all relevant data as provided by the customer

4. Incident Escalation:

- As a front line support, you must be able to resolve a large number of the frequent incidents without escalating them.
- But for those you can't, the goal is to gather and log the right information to help second and third-level (more technical) support get up to speed quickly, so they can resolve the incident promptly.

5. Resolution:

- The technician updates the system with new data as soon as the work is done on that issue. Any attempt at fixing the problem should be noted in the issue system. Ticket status most likely will be changed from open to pending.
- The issue tracking system marks the issue as resolved after it has been completely addressed.

6. Incident closure:

- Then in order to close the issue, it is passed back to the service desk.
- Only service desk employees are allowed to close incidents, in order to maintain quality and ensure a smooth process.

2.3.4 Benefits of a Ticket System

Using the Ticket system to service customers effectively:

As a CCE with an effective ticket system in place you will be able to service the customers more effectively.

- A ticket system, is specifically designed to organize issues as they are reported and keeps track of all fixes made, acting as a issue tracking system.
- When a ticket is created it is then put into the hands of someone who has the ability to resolve the problem.
- All solutions are tracked on the ticket file and the customer and administrator is notified when the problem is fixed. This not only makes you and the customer aware that the problem has been addressed but also allows the technical team to keep a track of how well the problem was handled.
- It helps you communicate with customers via email or SMS directly through the system to keep them updated of the progress.
- A ticket once resolved can be archived by the system. Most systems deal with similar glitches and each resolved ticket is searchable. That means if a similar ticket comes in, the tech team can pull up past issues and see how other techs resolved them for a quicker and more efficient fix. The data from each ticket to can tracked for trends and other associated information with the help of this issue tracking strategy.
- A ticket system also helps maintain a record of daily number of walk-ins, units accepted for repair and replacement in the center.
- Customers records are centrally stored. Customer repair and purchases are easily accessible. Within a customer's record are the dates of each repair and sale, including the all IMEI's and serial numbers. These tools make assisting customers, even if they've lost their invoice, faster.

A good repair ticketing system for your cell phone repair shop should reduce the time you spend on managing the customer issues and enables you to spend more time on creating great customer experiences. Great customer experiences are the key element to growing your business. These experiences keep your customers returning back to you.

2.3.4 Ticket Types

Ticket Types: There are five types of tickets:

Service Request: A Service Request helps in logging and managing standard requests for information or access to systems and services. Service requests are handled using service request management workflow processes and is monitored for SLA compliance. For example, an end user seeks information about how to set up and configure work emails for mobile devices.

Incident Ticket:

In order to report and manage issues like unavailability, disruption, reduction in the quality of a system or service an incident ticket is used. The incident management workflow processes helps in handling incident tickets. The response and resolution of these tickets is monitored for SLA compliance. For example, a request is logged when the end user is unable to send or receive emails from the cell phone. This service is typically available to the requester; and the service has been disrupted. Identify the cause of service disruption, restore the service quickly, and communicate with the requester about the resolution.

Problem Ticket: A Problem Ticket is used to investigate, resolve, or mitigate major issues affecting many users. The problem tickets are handled using problem management workflow processes. Generally, root-cause analysis and resolution take time; and these tickets could or could not be monitored for SLA compliance.

Change Request:

A Change Request is used to log and manage a request for change to the IT Infrastructure or services. Some changes could affect only the requester (or a small group of users); while others affect many users. All change requests go through a change approval process. Based on the nature of the change, the approval process varies and is handled using the change management workflow processes. A change request could be monitored for SLA compliance. The time that is required to respond and resolve a change is based on factors like getting an approval.

Task Ticket:

The tracking and managing of smaller units of work toward the completion of another ticket is done by tasks tickets. A Task ticket is logged as a child to another ticket. A Task Ticket is usually a Change or a Problem ticket. Each task can be handled either at a time by different people; or in a set sequence.

A Task ticket is never logged as an independent ticket but as children of a request, incident, problem, or change. A Task ticket is always used to divide individual units of work that is done to resolve another ticket.

2.3.5 Maintaining Records

As a CCE you are also responsible for maintaining records of daily number of walk-ins, units accepted for repair and replacement in the job sheets. This helps the organisation in keeping track of its progress as well as customer preferences and trends in the industry A sample of a job sheet format is given below for your reference.

Repair Order Form

YOUR DETAILS:			
Name:			
Company name: (if applicable)			
Address:			
Suburb:		Postcode:	
Contact number(s):		Email:	
Preferred payment:		<input type="checkbox"/> Credit card / Eftpos <input type="checkbox"/> Direct deposit <input type="checkbox"/> Cheque <input type="checkbox"/> Cash <input type="checkbox"/> Cheque	
How did you hear about us?			
REPAIR DETAILS:			
Brand:		Model:	
Accessories sent in: (must be related to fault)			
Serial / Imei Number: (not compulsory)			
Is your phone protected with a password? (so we can test your phone after repair)		<input type="checkbox"/> No <input type="checkbox"/> Yes..... <input type="checkbox"/> Private (not recommended, we can't test your phone after repair)	
Service Provider:			
Did we quoted you? <input type="checkbox"/> No <input type="checkbox"/> Yes for \$.....			
Fault description:			
TERMS & CONDITIONS			
<ol style="list-style-type: none"> 1. If there are any changes to your original quote or when you haven't received a quote upfront, Fix My Mobile will contact you before commencing any work. 2. A non refundable service fee of \$ 20 will be charged in the event of your device is not repaired / repairable. 3. Fix My Mobile is not liable for any data loss. Fix My Mobile always recommends to make a back up before sending your device in for repair. 4. Please make sure that you have removed your sim card and/or memory card from your phone. Fix My Mobile does not accept responsibility for loss of these items. 5. If Fix My Mobile does not receive payment within 30 days after invoice date we recognize that you have agreed to forfeit your phone in lieu of payment and Fix My Mobile will reserve the right to recycle your device 			

I agree to all Terms and Conditions as advised by Fix My Mobile

Signature: _____ Date: _____

Unit 2.4 Understanding QRC

Unit Objectives

At the end of this unit, you will be able to:

1. Discuss what is QRC
2. Effectively handle customer's queries, requests and complaints

2.4.1 Addressing QRC

Another key task for a CCE at a repair centre is to respond to questions and inquiries, about products or services and, handle and resolve complaints.

As a CCE, you need to:

Categorise the nature of customer's interaction as a query, request or a complaint (QRC) and record it. Login to QRC by obtaining and addressing adequate information from the customer.

In this chapter we will learn about different types of customer's interaction at a Repair Centre and how to handle them. There are mainly three types of customer's interaction at a Repair Centre:

- Query
- Request
- Complaint

A CCE at the repair centre must be able to classify the concern of the customer as a query request or complaint.

He must make a ticket for every customer who come in the store and get it signed by him/her, in order to keep the record and present it to the supervisor when asked for.

2.4.2 Customer Query

A query is a question or inquiry. When the customer makes a query he/she is trying to get information about a product or service from the CCE.

General Queries at Repair Centre

- Billing enquiries
- Software Update
- How to use the features of new phone

Scenario:

CCE: Hello sir, how may I help you?

Customer: I have bought this new phone, and when I try to increase its volume, the phone gets off. I have tried increasing the volume number of times but it does not increase instead every time the phone gets off and I have to switch it on again and again, I miss most of my urgent calls because of this.

CCE: I completely understand your concern sir, just let me check your phone once. Customer: Ya Sure.

CCE: Sir, in order to increase the volume of the phone you just need to softly press the button at the right side of your phone. Do not press it for long or else your phone will get switched off.

Customer: Ok, so that is the reason my phone was getting switched off I use to press it for long in order to increase the volume.

CCE: Absolutely sir.

Customer: Thanks. How much should I pay you?

CCE: Your phone was in the warranty period so you don't need to pay anything. Customer: Oh great!

CCE: Thank you sir and have a wonderful day.

2.4.3 Customer Request

There exists a very thin line between a query and request, a customer makes a request for a product or a service.

A customer can request a CCE at repair centre to update his software, change his caller tune, reduce the brightness of his screen; open his phone which has got locked due to trying the password too many times etc.

Scenario:

CCE: Good morning sir, how can I help you?

Customer: My phone got locked because my son tried opening the lock of the phone and in the process tried the wrong password too many times

CCE: Oh! Don't worry sir, I will unlock your phone but before I do that can you provide me with some information. Customer: Ya sure.

CCE: Is your phone under warranty period Customer: No

CCE: So you will have to pay us Rs 100 sir, as your phone is not under warranty period

Customer: Ok I will. Can you increase the brightness of my phone too, nothing is visible on the when it's sunny? CCE: Ya sure sir

Customer: Will I be charged extra for that too CCE: No sir. Don't worry

Customer: Thanks.

2.4.4 Customer Complaint

In complaint, customer complaints against services which creates problem for them or become hindrance in their work. A CCE at the repair centre will have to handle various complaints some of them are,

- Cracked screen
- High price
- Waiting for long hours
- Volume issues in the phone

A CCE must be very polite while dealing with complaints. He must not lose his cool with customers as this will be problematic both for the CCE and the organisation.

Scenario:

CCE: Good morning, sir, how can I help you?

Customer: I got my phone repaired last week and I was charged an exorbitant amount but after four days again I had sound issues on my phone. I cannot hear the voice of the person who calls me up because of this I am missing out on various urgent calls

CCE: I really apologise for the mistake from our end sir. I would request you to kindly deposit you phone with us and we will repair it and give it to you by tomorrow.

Customer: Alright. But I will not pay anything for it

CCE: Ya sir, you will not have to pay anything as you had already paid

Customer:Ok. I will come and collect my phone tomorrow

2.4.5 Maintaining Records

As a CCE you are also responsible for maintaining records of daily number of walk-ins, units accepted for repair and replacement in the job sheets. This helps the organisation in keeping track of its progress as well as customer preferences and trends in the industry
 A sample of a job sheet format is given below for your reference.

Repair Order Form

YOUR DETAILS:			
Name:			
Company name: (if applicable)			
Address:			
Suburb:		Postcode:	
Contact number(s):		Email:	
Preferred payment:		<input type="checkbox"/> Credit card / Eftpos <input type="checkbox"/> Direct deposit <input type="checkbox"/> Cheque <input type="checkbox"/> Cash <input type="checkbox"/> Cheque	
How did you hear about us?			

REPAIR DETAILS:	
Brand:	Model:
Accessories sent in: (must be related to fault)	
Serial / Imei Number: (not compulsory)	
Is your phone protected with a password? (so we can test your phone after repair)	<input type="checkbox"/> No <input type="checkbox"/> Yes..... <input type="checkbox"/> Private (not recommended, we can't test your phone after repair)
Service Provider:	
Did we quoted you?	<input type="checkbox"/> No <input type="checkbox"/> Yes for \$.....
Fault description:	

TERMS & CONDITIONS
1. If there are any changes to your original quote or when you haven't received a quote upfront, Fix My Mobile will contact you before commencing any work.
2. A non refundable service fee of \$ 20 will be charged in the event of your device is not repaired / repairable.
3. Fix My Mobile is not liable for any data loss. Fix My Mobile always recommends to make a back up before sending your device in for repair.
4. Please make sure that you have removed your sim card and/or memory card from your phone. Fix My Mobile does not accept responsibility for loss of these items.
5. If Fix My Mobile does not receive payment within 30 days after invoice date we recognize that you have agreed to forfeit your phone in lieu of payment and Fix My Mobile will reserve the right to recycle your device

I agree to all Terms and Conditions as advised by Fix My Mobile

Signature: _____ Date: _____

Fig 2.4.5. Job Sheet Format

Unit 2.5 Objection Handling

Unit Objectives

At the end of this unit, you will be able to:

1. Explain what is an objection and handle objections with sensitivity
2. Empathize with customer's problems and criticism

2.5.1 Objection Handling

What is an Objection

An expression or feeling of disapproval or opposition is called objection.

When you are selling a product or service in your business, you need to be able to anticipate and handle your customer's objections/ reservations as they arise. Your business will also benefit from your ability to recognise, follow-up and convert good leads into sales.

2.5.2 Handling criticism with empathy

Empathy: Empathy is the ability to understand and share the feelings of the customer; you have to enter into the customer's shoe in order to understand his problem completely.

Customer Criticism/complain:

Customer's complaint is inevitable so as a CCE you have to learn how to deal with it rather than getting irritated or bogged down by it.

In a Repair centre the criticism or complain which the CCE will have to face is in relation to the price, trust, behaviour, timing of delivering the service. So as a CCE you will have to learn the ways to deal with it.

Ways/Steps to handle criticism/complaints

1. Listen

Whenever you set out to handle a customer complaint the first thing that you must do is listen. Listen to the customer to figure out why they are upset. Listen to what they want from you to resolve the issue. A refund or A replacement?

If you listen to the customer rather than defending yourself, you will be able to help the customer in a better way.

2. Understand

Next, put yourself in the shoes of the customer. Understand their point of view. Why did they come to you? Until you view the issue from their perspective you cannot have a complete picture of the reason for the complaint. So always think, if I was in their shoes how would I feel?

3. Elevate

Once you have heard the complaint and understood the basis for the same, elevate the customer to a supervisor or manager where possible.

4. No Fighting

Your job in handling the matter is to listen, understand, and then discuss with the customer their concerns in a calm and friendly manner while conducting an open discussion regarding the issues complained of and how they will be responded to. Fighting with the customer will never resolve the issue and will only lead to heightened aggression and anger on their part. Calmly defend your policies or personnel if you must but do not permit the conversation to erode into an argument at any point.

5. Resolution

Offer a resolution where possible. Once you have listened and understood the customer's complaint and have avoided fighting over the same divert the customer's focus to how you intend to resolve the matter.

6. Resolve

In every customer service situation you will ultimately come to a point of what you can and cannot do to address the issue. Most situations will be able to be addressed and the customer issue resolved to their satisfaction. Unfortunately, from time-to-time, there will be issues which simply cannot be resolved. Whether it is because the customer is requesting something that is outside of your stated policies on such matters or are simply being unreasonable in their requests. For these customers you must understand that despite your best reasonable efforts to offer a reasonable resolution they are unwilling to join you in reality and, accordingly, although our aim is always to please the customer if that which the customer demands cannot be satisfied you must maintain your best offered solution.

Let us see an example.

Scenario: Handling criticism with empathy

CCE: Good morning sir, I am Aman. How can I help you?

Customer: I bought this head phone from your shop a month ago. I used it for the first time yesterday and realised that one of the ear plugs are not working. I was assured that these head phones are original and will work properly till one year. You people fooled me and gave me a damaged head phone.

CCE: I apologise for this mistake from our side sir. Can you please tell me the name of the person from whom you bought these head phones?

Customer: Ya, its Ramesh.

CCE: Thanks sir, just give me two minutes, I will check with him.

After 2 minutes

CCE: I really apologise for the inconvenience caused to you sir, we will replace this head phone and provide you with a new piece.

Customer: Ok, please give the new piece to me.

2.5.3 Types of Objections/Reservations

Some common reservations arise because the customer doesn't feel satisfied with the price, the product, the store and its service, or the CCE.

Customers often resist making an immediate decision. A list of these reservations is given below. These reservations indicate that the customer isn't convinced with the service or the price. Also, some customers just don't like to make decisions. Reassurance works better than pressure with indecisive customers.

Types of Reservations

1. **Timing:** I haven't made up my mind
2. **CCE:** I don't like him
3. **Price:** This is too expensive
4. **Decision:** I will have to talk it over with my family or I think I'll wait awhile

Given below is the conversation between a CCE and customer which talks about reservation of time.

Scenario:

CCE: Good morning sir, how can I help you?

Customer: My phone is not getting charged from the past two days; because of this I miss most of my urgent calls

CCE: I can understand your problem sir, can you show me your phone please. Customer: Yes sure, here it is

CCE: Thank you sir, just give me two minutes to check what the issue is. Till then would you like to have some tea or coffee?

Customer: No, thanks. After two minutes

CCE: Sir we will have to repair you battery which will take around 3 days

Customer: What? I need it by tomorrow anyhow. How will I operate my phone till then?

CCE: I understand your concern sir, but I don't want to over commit and under deliver. It will take atleast three days to repair your battery. Till then if you want we can lend you a phone from the company's side so that your work is not hindered.

Customer: Ok, but my battery should be perfectly fine in three days CCE: Yes sir, please be rest assured

Customer: Ok so I will see you after three days.

CCE: Sure sir. Thanks for visiting our store, have a nice day.

Given below is the conversation between a CCE and customer which talks about reservation of price

Scenario:

CCE: Hello sir, how can I help you?

Customer: My phone has not been working properly from the past one month, it goes into hange very frequently. Can you please check what the issue is?

CCE: Ya sure sir. Just give me 5 minutes; I will check what the issue is.

Customer: Ok

After 5 minutes

CCE: Sir, you will have to leave your phone with us for two days as we need to open it and check what the issue is.

Customer: Two days? Can't you repair it today?

CCE: I am sorry sir, but it will take atleast to days.

Customer: Ok. So what are the repairing charges?

CCE: Sir it is Rs.1000

Customer: Oh god! It's very expensive.

CCE: Sir, it is the lowest we charge and we can assure you that after the repair you will not face any issues for atleast a year, if you do we will repair it free of cost.

Customer: Ok. So I will come and collect my phone after two days.

CCE: Sure sir. Thank you and have a nice day.

As a CCE you have to win the trust of the customer in order to build rapport. You have to be very polite with the customer. The customers will only give their expensive phone for repair to you if they trusts you; if they don't then they will not even enter the store. So it is very important to build the trust of the customer.

2.5.4 Methods for Handling Reservations

The best approach for handling reservations is to relax and listen. Allow customers to verbalise their feelings completely. Ask questions to clarify their reservations, but don't interrupt to provide an answer, even though the answer might seem obvious.

As a CCE, you need to respond to reservations in a way that won't start an argument. One way is to turn the customer's statement into a question. CCE should aim to soften the reservation by getting on the customer's side. This can be done by agreeing with and then countering the objection. The CCE should recognise that the objection is offered sincerely and respect the customer's view. After agreeing, the CCE should proceed to provide information the customer might not be aware of. Skill is necessary in stating the counter.

Given below is the conversation between a CCE and customer which talks about how to handle reservations.

Scenario:

CCE: Hello sir, how can I help you?

Customer: There is some issue with the speaker of my phone. When I call up someone, I am able to hear the person but the other person is not able to hear me.

CCE: Sir, would request you to give me two minutes to check your phone

Customer: Ya, sure.

After 2 minutes

CCE: Sir, issue you are talking about will get repaired we will require a day's time to repair it.

Customer: Ok, what are the charges.

CCE: Rs 1500 sir.

Customer: How can you charge so much, you just have to repair the speaker? I think I should go to some other centre to get it repair. You are asking too much

CCE: I agree sir that the price is high, but the kind of service we offer cannot be matched. I assure you sir that you will not feel that you have wasted your money, you will face no issues with the speaker for atleast two years. If you do, we will repair it for free.

Customer: Are you sure. I hope you won't back out. CCE:

Yes sir, I assure you that you will like our service

Customer: Ok the, i will come tomorrow and collect my phone

CCE: Sure sir, have a nice day.

So, as a CCE you will have to learn how handle objection and reservation of the customers and build a rapport with customers.

Unit 2.6 Time Management

Unit Objectives

At the end of this unit you will be able to:

1. Understand how to manage time in order to do your work effectively
2. Practice prioritising

2.6.1 What is Time Management

- Time Management refers to managing time effectively so that the right time is allocated to the right activity.
- Effective time management allows individuals to assign specific time slots to activities as per their importance.
- Time Management refers to making the best use of time as time is always limited.

Time Management includes:

- Effective planning
- Setting goals and objectives
- Setting deadlines
- Delegation of responsibilities
- Prioritizing activities as per their importance
- Spending the right time on the right activity

2.6.2 Importance of Time Management for a Customer Care Executive at Repair Centre

As a CCE (Repair Centre), you need to attend to walk-in customers and perform other tasks of the store. To carry out these functions, you need to:

- Manage time while performing multiple responsibilities of the store
- Manage one's own time and the customer's time by holding precise discussion and interactions
- Prepare job sheet within available time limits

2.6.3 Time Robbers

Time robbers are those activities which create interruptions at your workplace. These activities create a deviation from the objectives which needs to be achieved.

Time Robbers could be:

- Poor personal planning and scheduling. For example, lack of planning at the start of the day would result in non-completion of tasks assigned for the day and finally result in non-achievements of targets.

- Interruptions by other colleagues. For example, gossiping with peers at the store is one of the time robbers for a CCE.
- Spending lot of time on personal calls for eg: Being on personal call while the customer is waiting for the service
- Poor delegation of authority. For example, if the right task is not assigned to the right person then generally a task is not completed and this leads to wastage of time.

2.6.4 Prioritising: Urgent and Important Matrix

Let's learn about Urgent and Important Matrix. This matrix will help you plan and organize your targets and schedule to help you meet the company's expectation of you.

This matrix helps you understand:

1. What should be done
2. What should be planned
3. What should be resisted
4. What should be rejected

Urgent and Important Tasks	Non-Urgent but Important Tasks
<p>DO NOW</p> <p>Handle customer complaints and issues</p> <p>Demands from superiors</p> <p>Update CRM</p>	<p>PLAN TO DO THEM</p> <p>Planning and scheduling of next day activities</p> <p>Preparing or updating daily report</p> <p>Meetings with superiors</p>
Non-Important but Urgent Tasks	Non-Important and Non-Urgent Tasks
<p>Trivial requests from customers</p> <p>Apparent emergencies</p> <p>Misunderstandings appearing in work</p> <p>Routines or activities</p>	<p>Playing computer games</p> <p>Net surfing</p> <p>Excessive cigarette breaks</p> <p>Engage in chat, gossip, social communications</p> <p>Reading irrelevant and useless material</p>

Exercise



1. What is the importance of the time management?

- 2. Handle customer complaints and issues comes under
 - Urgent and Important Tasks
 - Non-Urgent but Important Tasks
 - Non-Important but Urgent Tasks
 - Non-Important and Non-Urgent Tasks

- 3. Preparing or updating daily report comes under
 - Urgent and Important Tasks
 - Non-Urgent but Important Tasks
 - Non-Important but Urgent Tasks
 - Non-Important and Non-Urgent Tasks

- 4. Engage in chat, gossip, social communications comes under
 - Urgent and Important Tasks
 - Non-Urgent but Important Tasks
 - Non-Important but Urgent Tasks
 - Non-Important and Non-Urgent Tasks

- 5. Planning and scheduling of next day activities comes under
 - Urgent and Important Tasks
 - Non-Urgent but Important Tasks
 - Non-Important but Urgent Tasks
 - Non-Important and Non-Urgent Tasks

Notes



3. Identify issues, troubleshoot and coordinate with Technical Team



Unit 3.1- Initial Diagnostic and Troubleshooting

Unit 3.2- Resolve Customer Complaints

Unit 3.3- Inter personal skills for effective Customer Service



Key Learning Outcomes



At the end of this module, you will be able to:

1. Explain about repair and replacement and various levels involved in it
2. Describe the techniques of up-selling and cross-selling of company's products and services
3. Practice upselling and cross selling
4. Coordination for Replacement and Repair
5. Empathize with customer's problems and criticism
6. Understand and practice reading, writing, speaking, and listening skills for a customer service executive

Unit 3.1 Initial Diagnostic and Trouble Shooting

Unit Objectives

At the end of this unit, you will be able to:

1. Identify handset repair requirements
2. Troubleshoot and repair/replace handsets

3.1.1 Introduction

As the first point of contact, the CCE's job is to give confidence to the customer that their problems can be solved. To do so, you must identify the problem of the customer correctly and classify it as a frontend or backend job.

A thorough diagnostic enables to quickly find the cause behind the problems the customer is experiencing with his phone. The problem may be

- Charging issues,
- Battery problems,
- Audio and visual issues,
- Water damage,
- Cracked or shattered screens,
- Software/Network problems etc

After running the appropriate diagnostics and determining the level of damage, you must recommend only the necessary repairs. You must be able to estimate whether it is better to make repairs to the phone's existing hardware or replace it.

If a replacement is required, inform the customer about the costs and the parts to be replaced so that the customer can make an informed decision.

As an example, a customer comes in and tells the CCE that he needs to get his iPad repaired because his tablet seems to be having an issue with the screen. The CCE will have a look at it, and advise the customer of his initial diagnosis. After the diagnosis he will explain why the screen was not working properly and what is the reason behind its failure. The CCE may advise that the screen be replaced, and will give the price for a new one.

3.1.2 Hardware & Software of a Mobile Phone

The mobile phone system is divided into two categories, software, and hardware. Hardware refers to the physical and visible parts of the Mobile phone like the display screen, battery, keyboard, and internal parts. Whereas the Software refers to the set of instructions that enable the hardware to perform specific tasks. Without the software, the hardware is of no use. The software must be installed in the system for the hardware to function properly and similarly, the hardware must be present for the software to be installed.

If there is damage to the hardware the software does not work. Similarly, if the software is corrupt the hardware does not function properly. Thus they both are interdependent, yet they are also different from each other.

3.1.3 What is an Operating System

A mobile operating system (OS) is software that allows smartphones to run applications and programs. A mobile OS typically starts up when a device powers on, presenting a screen with icons or tiles that present information and provide application access. It is a program that acts as an interface between the system hardware and the user and handles interaction between the software and the hardware

3.1.4 Types of Operating Systems for Mobile Phones

- Android (Google)
 - The Android OS is the most common mobile operating system. Android OS is developed by Google. It is an open-source i.e free operating system. Android 12 is the latest version of the OS.
- iOS (Apple)
 - Apple iOS is the second most famous OS after android. It is designed to run on Apple devices such as iPhones, iPad tablets, etc. iOS 15 is the latest version of the OS
- Blackberry OS (Research in Motion)
 - BlackBerry OS is a proprietary mobile operating system developed by Canadian company BlackBerry Limited for its BlackBerry line of smartphone handheld devices. The latest version is (10.3.2.2876)
- Windows OS (Microsoft)
 - Windows OS is developed by **Microsoft**. It is primarily designed for pocket PCs and smartphones. Moreover, it has the features of computer-based Windows OS and additional features for mobile phones. However, this OS is slowly becoming less popular in the market.
- Tizen (Samsung)
 - Tizen is a Linux-based mobile operating system backed by the Linux Foundation, mainly developed and used primarily by Samsung Electronics. Version 2.0 is the latest version of this OS. This is being widely used in wearable devices (smart watches) and SmartTV.

3.1.5 Functions of the Operating System

The operating system is an important part of any electronic device. It has a set of instructions that makes the hardware function and do the task they are designed for. Every device is preloaded with these instructions whenever you buy these devices.

An operating system performs various tasks. Let us study them. Several functions of OS are:

1. Memory Management

It is the management of the primary memory. Whenever we run an app, the instructions get loaded in the main memory. Therefore, there can be more than one program present at a time. Hence, it is required to manage the memory. This memory is also called RAM (i.e Random Access Memory). Another type of memory that stores the system files is called ROM i. e Read-Only Memory.

The operating system:

- Allocates and deallocates the memory.

- Keeps a record of which part of primary memory is used by whom and how much.

- Distributes the memory while multiprocessing.

2. Processor Management/Scheduling

When more than one process runs on the system the OS decides how and when a process will use the CPU. Hence, the name is also **CPU Scheduling**. The OS:

- Allocates and deallocates processor to the processes.

- Keeps record of CPU status.

3. Device Management

The processes may require devices for their use. This management is done by the OS. The OS:

- Allocates and deallocates devices to different processes through a concept called time slicing to keep records of the devices.

- Sets priority for the process to use the devices, on a first cum first serve basis.

4. File Management

The OS helps in managing our files stored in the different directories:

- keeps records of the status and locations of files.

- Allocates and deallocates resources.

5. Security

The OS keeps the system and programs safe and secure through authentication. A user id and password decide the authenticity of the user. For even unlocking a phone, the user will

1. Provide key codes
2. Use a pattern

Use face detection

Use fingerprints

These are the different ways using which we can prevent unauthorized users to access our devices.

Other Functions

Some other functions of the OS can be:

- Error detection.
- keeping a record of system performance.
- Communication between different software etc.

3.1.6 Mobile OS Updates

A vendor releases a new mobile OS update for various reasons. Some of the common reasons for releasing a mobile OS update are

Security patches: of late, there has been a few vulnerabilities detected in the device OS. Vendors release a new mobile OS update to fix the detected vulnerability. This is released in the form of new versions, and these updates are critical for the devices and should be installed immediately upon release.

New feature releases: Every OS provider is working on enhancing the user experience and device performance. To aid this, most vendors regularly release mobile OS updates to provide new features and device functionality and also enhance the existing features.

The mobile phone can stop working due to several reasons. It could be a problem with the hardware or software. The software problems can be resolved by uninstalling and reinstalling the software. This requires the help of an engineer in the Service/Repair Center. And for the hardware problem again we need the help of the engineers to open the phone and to diagnose the problem. There are few diagnostic tools available with these Repair centers using which they will analyze and tell exactly what the problem is.

3.1.7 What are Bugs and how they are solved

Smartphones have become an integral part of everybody's life and users are getting highly dependent on mobile applications for their daily needs. A lot of problems happening in millions of smartphone handsets that have led to significant user frustrations are due to bugs in the mobile OS and applications.

A bug is an error that occurs in a software program that causes unexpected malfunctioning of the device. Manual error is the reason behind these bugs and these errors are in design, coding, or architecture.

A program containing logical errors creates bugs, and these bugs interfere in the overall working of the applications. They either are slow, hang in between, or produce unexpected results. Bug reports provide a detailed description of the kind of bugs in a program. To resolve/rectify the bugs, the OS manufacturer releases patches, and they are made available to the users using push notifications. They install the patches and restart the device to make these updates work.

Exercise

Fill in the blanks:

- 1 A _____ is an error in the software that causes phones to stop working abruptly
2. Operating System updates are also called _____
3. IOS is the operating system for _____ phones
4. Android OS is developed by _____
5. Operating system functions are _____, _____ and _____

3.1.8 Initial Diagnostics

Diagnosing a phone is the first step towards fixing a phone. The best way to diagnose a phone is by understanding the phone's smallest components, and knowing what it's responsible for. For example, the front speaker is responsible for hearing the other person, whereas the microphone is responsible for them hearing you. So if a customer walks in and complains that people on the other side of the call are unable to hear him, you simply consider the potential issues that could be causing it.

- The customer needs to speak
- There is something covering the microphone

Then you logically rule out the ones that are unlikely. Most of cell phone repair is just process of elimination.

Diagnosis= Process of Elimination

It is simply being able to eliminate the things you knew is not causing the issue. Let us take the example of a phone not turning on. It could be

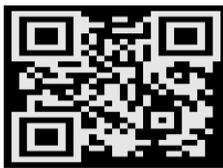
- A battery issue
- A motherboard issue

So where do you start. You start with the obvious

1. We take the phone for repair & take the battery out. And put a good battery there if the phone turns on then it was a battery issue.
2. If the phone still does not turn on then it is a more serious issue, we look for the watermark. Is the watermark sticker missing, It is red, It is white. If it is white then it means probably not water damage.

You also look for traces of water damage in the phone. If the phone has water damage you will see small water marks on the phone. You can change it and smell it, it will smell like it is burning, means there is a short circuit. Is this is how the process of elimination happens.

Basically, you disassemble a phone down to its motherboard and its micro-components, and determine which part is responsible for the defect at hand. Then you replace that part. If it's a software issue, you do a master reset. If it's a firmware issue, then you re-install the firmware.



Click/Scan this QR code to view the video on changing smartphone battery stepwise

Exhibit

In order to repair a phone first check the setting before you open the phone. Given below are some of the problems which a person might encounter while using a cell phone.

- Ringer or Loudspeaker of the Mobile Phone Not Working: In order to find out the problem related to the ringer and loudspeaker, you need to first check the setting of ringer and loudspeaker and then decide whether you need to open the cell phone so as to find out whether the ringer is at fault or not. Check if the phone is in silent mode or not. Set the required settings. If everything seems ok then open the mobile phone and check the ringer using a Multimeter. If the ringer is not faulty then it will give a buzz or beep sound and the value must be in the range of 8 to 10 Ohm. If the ringer is faulty then replace it with a new one.
- Vibrator of Mobile Cell Phone Not Working: To solve the problem, start by checking the vibrator settings. Check if it is ON or OFF.
- Earpiece or Speaker Problem: The first thing which needs to be checked is the settings. Go to settings and check the volume of speaker or ear piece. Increase the volume to the desired level if it is less.
- Microphone Problems: The person you are talking to will not be able to hear your voice if there is problem with the microphone. In order to resolve this issue, you need to first check the microphone setting or replace the old faulty microphone with a new one.
- Light Problem: If there is less light or some of the LED lights are not working or if there is no light at all, then start by checking the light and display settings. Adjust the light settings according to your requirement. If everything is OK and the problem is not solved then open the mobile phone and check all the LEDs. Change LED if it is faulty.
- Headphone Problem
- Display or Screen Problem
- SIM Problem: If you are not able to make or receive a phone call with a valid SIM card and your mobile phone is OK, then check settings first. See if the phone is on Flight Mode or not. If it is on Flight Mode then change the setting.
- Network Problem: Check the network setting if the mobile phone has less, weak or no network. Check the available networks and select the desired network provider. If the problem is not solved then there is problem with the Network Section of the Phone.
- Camera, Bluetooth, FM Radio: Check the setting first in order to find out the problem with the camera, bluetooth, FM radio.
- There are several other settings in a mobile cell phone. These include - Mode, Wi-Fi, VPN, Tethering and Portable Hotspot, Mobile Networks, Data Usage, Call Settings, Sound and Display Settings, Power Saving Settings, Storage Setting, Battery Setting, Settings for Applications, Accounts and Sync or Syncing, Location or GPS Services, Security Settings, Language and Input Setting, Back Up and Reset, Dock or Docking, Date and Time Settings, Accessibility, Motion Settings etc.

3.1.9 Diagnosing the Damage

You can diagnose the problem by a series of tests like a litmus test, physical damage checks, battery tests, etc., to troubleshoot handset/ accessory issues.

Litmus Test: This means to test the watermark for water damage. If the watermark is white it is ok, if it is red then it indicates water damage.

Physical Damage: Upon receiving a phone for the repair you must make do an initial screening to check for physical damage. For eg,

- A handset dropped onto a hard surface can jar components from the circuit board and crack-sensitive devices (LCD screen), which voids manufacturer and extended warranties. In some cases, physical damage is not externally visible.
- Excessive dust and dirt can have a detrimental effect to PCB's and components. Phones should be kept away from dusty, dirty conditions.
- Chewed or twisted antennas and heavily scratched or damaged casings can badly affect the protection the casings provide, allowing in dirt and moisture.



Fig.3.1.9a Cracked Screen



Fig3.1.9b Damaged Case

Battery test: If a phone is not powering on, the first test you do is a battery test. You put a good battery in place of the customer's battery and if the phone switches on, then you know it was a battery issue.

In the diagnosis you also have to determine what faults can be faced & what faults can't be faced. E.g. if someone buys a phone that has been run over by a car and you see now it only has a camera left. You can't repair that. You have to be able to draw the line what phones can be faced & what can't.



Click/Scan this QR code to view the video on changing cracked screen of a smartphone

3.1.10 Repairs and Replacement

A repair process is when a physical repair is undertaken on a device where spare parts are replaced in order to rectify the fault reported whether it is a Level 1, Level 2 or Level 3 repair.

The cellphones repairs are divided into three levels, they are:

Level 1. Common broken screen/battery/small components repair/data recovery

Level 2. Water damage/glass only (refurbishing) repair

Level 3. Motherboard/components soldering repair

As a CCE at a repair center you are responsible for booking in all repairs but doing only L1 repairs yourself.

The remaining L1 and L2 you have to book to relevant technicians.

When a software upgrade is performed this is loaded on the device as per the latest version made available by the relevant manufacturers. If you have a device that is under warranty, it will be upgraded to the latest software version at no cost, only once.

3.1.11 Level 1

It is the most common repair which is done for customers in most of the repair shops. Cracked screen is one of the most frequent and common issue with which the customers come to the repair shop. As a CCE, you need to

Equipment for Level 1 repair:

1. A wide range of different screwdrivers (at least including Pentalobe screwdriver, Torx 2-6 screwdriver, PH0, PH00, PH000 and small flathead screwdriver).



Fig3.1.11a Different screwdrivers

2. A bunch of separation tools, such as triangle plastic separation tool (or guitar picks) used for separating the frame, screen, front or back housing.
3. Spudgers: plastic spudger & metal spudger, the plastic one can be used to disconnect connectors, the metal one can be used for some separation works.

3. Sharp thin metal pry tool (also known as iSesamo Tool) for separation purposes.
4. Suction cup: dragging out the iPhone screen from the rest of the phone.
5. Heat gun: Most of the parts in a phone are glued by adhesive, some of the adhesives are really sticky. A good heat gun will definitely make your life easier.
6. Thermometer: the LCD screen/OLED is quite an expensive part, and improper heat will cause irreversible damage to the screen itself, so a thermometer with laser target could save you some potential damage (and it's quite cheap, why not have one).
7. A pair of heat resistant glove: Protect yourself from burn when grabbing the heated-up screen or any inner components.

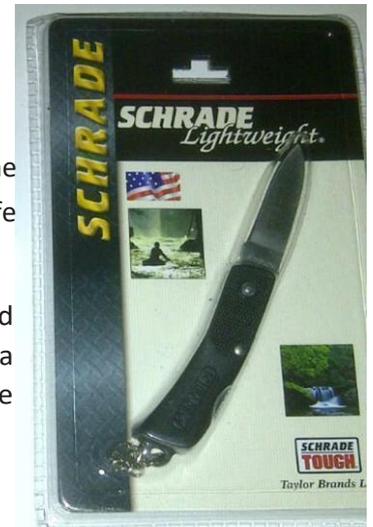


Fig3.1.11b Pry tool

8. Microfiber cleaning cloth & isopropyl alcohol: these could be used to clear the fingerprints and body oil on the screen and the adhesive residue.
9. Tweezers: separate some tiny and fragile components such as vibrating motor, power button, volume button and flex cables.
10. 3M adhesive: replace the old adhesive on the phone, better be pre-cut in different sizes.
11. A big roll of transparent tape: if the screens you are going to replace are badly shattered, place some transparent tape on it to protect yourself.
12. Magnetic screw mat: there are many tiny screws in an iPhone, which could be easily messed up. This could help you, better keep one.



Fig3.1.11c Magnetic screw mat

13. A computer: use for data recovery or restoring the device.
14. A pair of ear phone: testing the headphone jack.
17. Anti-static Electricity Strip: protect the devices & parts from static electricity.



Fig3.1.11d Anti-static electricity strip

17. USS/Lightingcable & charger:testing the charging port.

Diagnostic codes :

In order to get a closer look at the inner functionality of a phone, diagnostic codes are used. They are also called secret codes. Diagnostic codes are used by most of the mobile phone repairing technicians in order to troubleshoot mobile phones or smart phones.

Technicians are able to trace the exact problem with the help of diagnostic code. The list of such codes are present in the repair centers which can be used as an when required. There are a list of these diagnostic codes for Android phones, iPhone, China phones and other phones. Most manufacturers provide such list with their manual that comes with a new phone. The list of sample codes that diagnose mobile phone problems are given below. However be careful when using codes. Some codes can wipe OFF the firmware or delete the vendor-specific updates from the OS.

Mobile Phone Secret Diagnostic Codes

- iPhone - 3001#12345# * - This will display "Field Test" on your iPhone where you can easily test each part of the phone's functions.
- BlackBerry: TEST
- HTC: *#*#3423#*#*
- LG: 2945#*# or 2945*#01*#
- Motorola: ##7764726
- Nokia: ##3282
- Samsung: * #0011#
- Sony:904059+>

Mobile Phone Diagnosis

There are two methods that you can use to find out faulty or damaged components in a mobile phone. These are:

- The cold testing method
- The hot testing method

The Cold Testing Method:

When a multimeter is used to check the value of resistance at the time of repairing a fault in a mobile phone it is referred to as cold testing. Do not power the phone from any equipment while the testing is going on. You can find faults in the phone by using the diode range and beep sound from the multimeter. During cold testing, you should connect the red probe of the multimeter to the ground of the mobile phone PCB, and use the black probe to touch the testing points of the mobile phone.

Hot Testing:

When the fault cannot be found or when the cell phone cannot be repaired using the cold testing method, the hot testing method is used. This method checks the VOLTAGE of the damaged parts or components. The fault is found by powering the mobile phone with a battery which has a DC power supply. Select the DCV (DC Volt) range of the Multimeter, once you power the phone. Then connect the BLACK probe of the Multimeter to the ground of the phone's PCB and make sure that the RED Probe touches the Testing Points.

Repair of Common Mobile Phone Faults What is a fault?

A fault is referred to as a defect or failure in a circuit. Failures can be caused by any of the following:

- Excess temperature
- Excess current or voltage
- Stress or impact
- Contamination
- Short circuits
- Mechanical stress
- Ionizing radiation
- Mechanical shock
- Imperfect connections
- Poor insulation or wiring caused by grounding

There are three types of mobile phone faults:

- I. Hardware faults: occur due to hardware malfunctioning
- ii. Software faults: occur due to problems with software
- iii. Settings faults: occur due to wrong/invalid settings

Hardware Faults

In this section we will be discussing about some of the hardware faults which occur in a mobile phone.

- SIM issues

- Mobile phone battery problem (faults)
- Battery charging faults/problems
- Network issues
- Sound faults
- Overheating problem
- Earpiece, ringer and microphone problem
- Lighting or LED problems
- Touchscreen problems
- Display problems
- Keypad problems
- WiFi problem and internet connectivity problems

A) Battery Charging Faults/Problems

Battery charging faults manifest in a number of ways:

- The battery is not charge at all
- There is a sign of battery charging but the battery does not get charged.
- It shows 'Not charging' when the charger is inserted.
- It shows 'Bad Connecting Charging' when the charger is connected.
- The mobile phone gets hot when the charger is inserted.

Solutions to Battery charging faults

- i. Change the charger and check. The voltage must be between 5 and 7 Volts.
- ii. Clean, resold or change the charger Connector.
- iii. If the phone shows "FALSE CHARGING" then use a 3.6 Volt Zener Diode and do direct.
- iv. Change the battery and check again, if the problem is not solved.
- v. Use a Multimeter to check the voltage of the battery. The voltage should be between 1.5 and 3.7 Volts.
- vi. If there is no voltage in the connector check the track of the charging section. Refer to the diagram of the particular model of the mobile phone.
- vii. Check the fuse, coil and regulator one by one if the problem still persists, and change the faulty part.
- viii. Clean or change the charging IC, if the problem persists.

ix. Finally heat, re-ball or change the Power IC.

B) Mobile Phone Battery problem

A mobile cell phone can have any of the following battery problems:

- Low Battery
- Battery Drains Fast
- Battery Backup Low
- Battery Not charging

Solutions to Battery faults

- Check the battery connector and charger plug to see if there is any problem.
- Check for any broken pin or for dust or corrosion in the connector. Clean the points using IPA or cleaning swabs.
- Check the Interface Connector to see if there is any dust. If there is dust clean or replace the interface connector.
- Upgrade the software or operating system to latest version in order to solve the battery problem.
- Check the Mobile Phone PBA current consumption, if the problem is still not solved.
 - Check for any short circuit.
- If there is a serious problem at the board level then it is better to replace the whole Logic Board of the Mobile phone.

C) Network Not Working Problem

The common issues related to this problem include the following:

- There is no network in the mobile phone
- There is less or weak network signal
- Sometimes there is a signal and sometimes there is no network signal.

Solutions to Network fault

- i. Manually search for the network. If the 'no network problem' persists, then there is a problem with the Antenna Switch. Repair or replace it.
- ii. There is a problem with the PFO if after manual search the network resumes but the home network cannot be selected. Repair or change the PFO.
- iii. If the Network gets disconnected during phone calls then you should repair or change the Network IC.
- iv. Clean the antenna tips and point.

- v. If problem persists, heat or change the 26MHz Crystal Oscillator.
- vi. Heat or change the antenna switch if the problem is still not resolved. You can also jumper if the Antenna Switch is not available.
- vii. Heat, Change or Jumper the PFO if the problem still persists.
- viii. Heat, re-ball or change the Network IC.
- ix. Heat, re-ball or change the Power IC.
- x. Heat, re-ball or change the CPU.

D) Mobile Phone Overheating

A mobile phone may overheat either inside or on the body. To solve this problem, you should proceed as follows:

- Check if the mobile phone overheats when a particular application is running or if the overheating happens all the time.
- Upgrade the mobile phone software operating system to the latest version. This may solve the overheating problem.
- Smartphones overheat if too many applications are running at the same time. Close all the applications and try to run one application at a time.
- If overheating persists, then there is some internal hardware problem. In order to solve the heating problem, change the PCB or Logic Board.

F) Sound Faults

We shall consider the following types of sound faults:

- Earpiece or ear speaker problem
- Mobile phone speaker problem
- Ringer problem
- Vibration problem
- Microphone problem

The common problems associated with the ear speaker are:

- No sound during phone call
- Low sound during phone call
- Sound has interruptions.

How to Solve Earpiece or Speaker Fault

- i. Check the speaker volume during a phone call.
- ii. If speaker volume is fine, then check the earpiece by keeping the multimeter in buzzer mode. The value

Must be between 25~35 Ohm. If the value is not between 25~35 Ohm then change the earpiece.

- iii. If the problem is not solved then check the Circuit Track of the earpiece section. Do jumper wherever required.
- iv. If the problem persists heat, reball or change the UEM/Audio IC.
- v. If the problem is still not solved then heat, reball or change the CPU.

The following are the types of problems associated with the ringer:

- Ringer not working
- Low sound from the Ringer
- Sound coming from Ringer but with interruption
- Sound not clear

How to Solve Ringer Faults

- i. Check the ringer settings in the mobile phone. Check Ringer volume and silent mode. Adjust or change the volume and /or mode if required.
- ii. If the problem is not solved then open the mobile phone and clean the ringer point and ringer connector.
- iii. If the problem is not solved then check the ringer by keeping the multimeter in buzzer mode. The value must be between 8 ~ 10 Ohm. If the value is not between 8~10 Ohm then change the Ringer. Check the track of ringer section, if the problem is not resolved. Do jumper wherever required. 5. If the problem is not solved then check the Ringer IC. Heat or change the IC.
- iv. If the problem is not solved then heat, reball or change the UEM/ Logic IC.
- v. If the problem is still not solved then heat, reball or change the CPU.

An electronic device that generates vibrations is the vibrator. It is controlled by the Logic IC or Power IC. The common types of faults associated with the vibrator are:

- Vibrator not working
- Vibration has an interruption
- Vibration Hangs.

How to solve Mobile Vibrator faults

- Check the Vibrator settings in the mobile phone. Check if the Vibrator is ON or OFF.
- If the problem is not solved then open the mobile cell phone and clean the vibrator tips and connector.
- If the problem is not solved then check the vibrator with the multimeter in Buzzer Mode. The value must be between 8~16 Ohm. If the value is not between 8~16 Ohm then change the Vibrator or Motor.
- If the problem is not solved then check the track of the vibrator section. Do jumper wherever required.

Microphone Problem

The Microphone is an electronic component that helps to transmit sound during phone call. The common types of problems associated with the microphone are:

- Low sound during phone call
- Sound has interruption
- Change in sound.

How to Solve Microphone Fault

- i. Check the Microphone settings.
- ii. If all the settings are normal, then check and clean the Microphone tips and connector.
- iii. If the problem is not solved then check the Microphone with the multimeter in Buzzer Mode. The value must be between 600~1800 Ohm. If the value is not in between that range, then change the Microphone. Note that only one side will give a value.
- iv. Check the track of microphone section if the problem is not resolved. Do Jumper wherever required.
- v. If the problem is not solved then heat or change the Microphone IC.
- vi. If the problem is not solved then heat, reball, or change the UEM/ Audio IC/ Power IC.
- vii. If the problem is still not solved then heat, reball or change the CPU.

f) Display Not Working

This is the part that displays information in a mobile phone. It is controlled by the CPU. The following are the common types of problems associated with the display:

- Display is blank.
- Display not working properly.
- When the mobile phone is switched ON, the Logo appears and then the display disappears
- Only half the display works.
- White display.

How to Solve Display Faults in a Mobile Cell Phone

- i. Clean the display tips and display connector.
- ii. Resold the display connector.
- iii. Change the display.
- iv. Check the display Track.
- v. Resold or change the display IC.
- vi. Heat, reball or change the CPU.

F) Mobile Light or LED Problem and Solution

The LED is the electronic component that generates light in the mobile phone. Given below are the two types of connections in the light section of a mobile phone:

- Series Connection;
- Parallel Connection

The common symptoms of LED problems are:

- No Light.
- Light only in the Keypad or Display.
- Some lights not working

How to Solve a LED problem

- Check the light settings.
- If the settings are normal then resold all the LED.
- If the problem is not solved then change the display or the screen.
- Next check all the LEDs with the multimeter on Buzzer mode. If the LED is good, then it will glow. If the LED is faulty then it will not glow.
- Change the LED or jumper if required.
- If the problem is not solved then check the Track of the light section of the PCB and jumper if required.
- Next check the Boosting Coil and change if required.
- Heat or change the Light IC, if the problem is not resolved.
- If the problem is still not solved then heat, reball or change the Power IC.

I) Phone Touch Screen (PDA) fault

A Touch Screen (PDA) is an electronic component that allows you to input data or control your mobile phone by touching the screen.

It normally has 4 Points namely:

- (+)
- (-)
- (RX)
- (TX)

How to Solve Touch Screen (PDA) Faults

- Check the settings if the mobile phone has both a keypad and a touch screen.
- Clean and resold the PDA Tips and PDA connector.
-

- iv. Change the PDA.
- v. Check the Track of the PDA section and Jumper if required.
- vi. Heat or change the PDA IC 6. Heat, reball or change the CPU

J) Keypad Problems

The keypad enables you to enter data, such as, phone numbers and names in your mobile phone. The main types of problems associated with the keypad are:

- Some keys not working.
- Keys need more pressure to work.
- When a key is pressed it works continuously.
- When one key is pressed, some other key works
- When one key is pressed, some other key works simultaneously.

How to Solve a Keypad Faults

- i. Check the facial of the keypad.
- ii. Clean the keypad and keypad points
- iii. Using the multimeter in Buzzer Mode and check the Row and Column of the Keypad. If there is a beeping sound, then the keypad is working.
- iv. If there is no improvement, heat or change the Keypad IC or the Interface IC.
- v. If still no change, heat, reball or change the CPU.

K) Mobile Phone SIM faults

A Subscriber Identify Module (SIM) card is an integrated circuit that securely stores information about the number of the cell phone line, password, and information related to your local network service. It has a unique serial number.

The following are the common problems associated with the SIM card:

- SIM is inserted but still there is a message saying "Insert SIM".
- When the SIM card is inserted, the mobile phone goes OFFLINE.
- The SIM works for some time and then stops working.
- There is a message that says "Invalid SIM"

How to Solve SIM Card Fault

- i. Check settings and see if the mobile phone is in Flight Mode. If it is in "Flight Mode" then change it to Normal mode.
- ii. Clean the SIM Card Tips and SIM Connector.
- iii. If the problem is not solved then change the SIM card and check.

- v. Check the Track of the SIM section, if you still do not find a solution to the problem.
- vi. If the problem is still not solved then heat or change the SIM IC.
- vii. Finally, if there is no change, heat, reball or change the Power IC.

l) Mobile Wi-Fi Wireless Internet Connection Problem:

This problem may present in the following ways:

- No
- Low Wi-fi Signal
- Wi-fi Cannot be

How to Solve Wi-Fi problem

- i. Enable Wi-Fi and check if it is working or not. Make sure you are connected to a wireless network. Make sure the password is correct.
- ii. If the Wi-Fi cannot be enabled and you are not able to use or access the internet, then there could be a problem with the mobile phone PCB and you may have to replace it.
- iii. If the Wi-Fi can be enabled then there is no problem with the PCB. Just upgrade the software of the mobile phone to the latest version.

Software Faults

A software is a set of programs, routines and symbolic language that control the functions of hardware and directs its operations. The common software problems are:

- Display
- No signal message
- Dead phone set
- Phone on test mode Phone not charging
- Phone has message to contact service
- Provider

How to solve these problem:

- i. Check the downloaded applications and note when the problem happened.
- ii. Note whether the problem is happening when a certain application is running.
- iii. Remove the application that is causing the problem

If the problem is still not solved then reset the factory settings of the mobile phone and update the software.

3.1.12 Level 2

Water damage takes up to 15% of the total repairs for an independent repair shop. In most circumstances, this repair is not that complicated if the phone was treated correctly. At the same time, water damage is also more lucrative than the cracked screen repairs. So does the glass only repair/screen refurbishing. If you are skillful enough, and want to be more competitive in the local competition, these repairs would be of help. Equipment for level 2 repairs:

1. **Ultrasonic Cleaner:** This machine is used to wash any possible corruptions on the motherboard (IC chips & connectors).
2. **Soft toothbrush:** Manually brush the lightly water damaged motherboard with isopropyl alcohol sometime may solve the problem. However, this can also make the situation even worse. We recommend you to use more specific equipment to solve the problem.
3. **LCD Separation Machine:** A machine which can be used to heat the adhesive in between the glass and the digitizer and fasten the broken screen on it.
4. **Molybdenum string:** A very thin but a strong string which can be used to separate the broken glass.
5. **LOCA/OCA:** These are two different adhesives used to bond the new glass and the digitizer. The main difference between these two adhesives is, OCA is much more strong and expensive, while LOCA is cheaper and less sticky. If you use OCA for refurbishing screens, sometimes you'll find it's difficult to reuse the display, when someone breaks the screen for the second time.
6. **UV light:** This is for drying the LOCA/OCA.
7. **Vacuum Bubble Remove Autoclave:** This machine is used to remove the left air bubbles in between the glass and the digitizer (recommended for professional refurbishes).

3.1.13 Level 3

Sometimes, things may get worse for your customers' phone. Some chips may get electric short circuit and need to be replaced, or the corruptions on chips of motherboard cannot be cleaned and need to be changed.

Sometimes it is the charging port sealed to the mainboard that needs to be replaced. These are the most complicated situations you may face during the repair.

Equipment for Level 3 repairs:

1. **Soldering SMD Rework Station:** Soldering iron together with heat gun, best tools for soldering work.
2. **Soldering Paste:** Essential equipment for soldering work.
3. **Magnifying Glass Station:** IC chips are quite tiny, this tool will definitely make the work easier to be handled.



Click/Scan this QR code to view the video on changing defective camera in a smartphone

Unit 3.2 Resolve Customer Complaints

Unit Objectives

At the end of this unit, you will be able to:

1. Describe what is a warranty period and things covered under mobile phone warranty
2. Explain the meaning of dead-on arrival with regard to repair centre
3. Discuss about turnaround time in a repair centre

3.2.1 Introduction

As a CCE you must check-in a repair item, select service, set a task finish date & time, assign an employee, add customer record, collect a deposit and print repair ticket label, full invoice or receipt.

In customer service, a ticketing system or support ticket system takes incoming customer requests for support and automatically generates a customer service ticket.

Agents are able to help the customers in solving their problems with the help of ticket management. Some things to keep in mind when taking in a phone for repair:

- You must ask the customer to provide original proof of purchase when you're booking their device in for repairs. This will then serve as their implied warranty initiation date.
- Ask for details if the phone has a lock code or security code.
Before any warranty decisions are made for replacements or exchanges, especially within the first six months from the purchase date, keep the physical condition of device in mind.
- Make sure you collect accurate contact details so you can send status updates and then notification to collect.
- Watch out for signs of physical damage: any signs of neglect due to physical abuse, liquid damage, screen scratches, dents or marks.

3.2.2 Warranty

Mobile phones are generally designed to withstand wear and tear and are normally quite tough, however, physical damage can occur through everyday use and, whether intentional or not, will void the warranty. Take charging the phone for example. The connection can be damaged or bent and warranty voided if the cable is not inserted or removed correctly.

To help protect a phone from physical damage, give the following tips to your customers to assist with keeping their phone in a warranty condition:

- Use a protective cover or
- Don't throw your phone
- Don't force the charger into the connector
- Avoid putting the phone in your back pocket, or front
- Avoid extremely dusty or dirty

A warranty is a manufacturer's guarantee to repair your phone or tablet if something goes wrong with it that isn't your fault.

Most mobile phones and electronic devices carry a 1 year manufacturer's warranty. However, anything considered as a 'consumable' item - such as battery, charger, USB cable or headset - will have a much shorter warranty. In many cases this is just 6 months, or sometimes even less. The reason for this is that the expected lifespan for items such as batteries can vary greatly depending on where and how they are used.

Do not forget that most manufacturer's warranties apply only to the original purchase i.e. they are not transferable-and a proof of purchase is usually required to obtain warranty service.

- The phone manufacturer warranty is valid for your phone for one year from the date of purchase for most handsets.
- If the phone is faulty and in warranty and the Repair Center is unable to repair the phone it may be replaced at no additional cost.
- If a replacement is made within the year of warranty, the warranty does not restart afresh. The remainder of the one-year warranty period will continue to run from the initial date of purchase until the one year expiry date.

Workmanship Warranty

Most repair shops give a 30-day Workmanship Warranty on any repairs completed by the Repair Center from the day the phone was collected by the customer.

The Warranty for a Phone Does Not Cover

- Defects or damage resulting from any misuse or other usage contrary to the instructions set out in the manufacturer's phone manual.
- Defects or damage from accidents or negligence by the customer.
- Defects or damage resulting from improper testing, operation, maintenance, installation and adjustment by any unauthorized personnel or persons.
- Alterations or modifications caused from repairs performed by any unauthorized personnel or persons.
- Breakage or damage to antennas, screens and displays.
- Phones where the product serial numbers have been removed or made illegible.
- Batteries not charged by the charger specified by the manufacturer for use with that phone.
- Batteries that are damaged or show signs of tampering.
- Defects or damage caused by food or liquid.
- All plastic surfaces and all exterior parts scratched or damaged due to normal use.
- A phone that shows signs of attempts to open, alter or repair.
- Also note that the usage of non-approved accessories will void the warranty.
- Accessories including headsets, chargers and memory cards.
- Physical damage and/or misuse or abuse, liquid damage, repairs and/or product modifications and alterations that have been executed by unauthorised third parties.

- Modifying the exterior of the device by gluing, pasting or sticking 'decorative' images on the device can void the warranty if such attachments impact the interior mechanics of the device. Such attachments can also influence the strength of the network connectivity on the device.
- The downloading of illegal software, alteration of the IMEI number on the device, whether it has been deleted, removed or made illegible, or if the internal data of the device doesn't comply with the proof of purchase.
- Failing to properly follow the installation process and instructions for use, or if the client uses products or accessories that aren't compatible with the device - such as generic accessories and other contaminated auxiliary devices.

When you receive a phone for repair, you as the CCE must confirm the fault and identify whether or not it is covered by the manufacturer's warranty. If it is, you will repair your phone and return it to the customer. If the phone or this issue are not covered by the manufacturer's warranty, then issue a quote for the repair. This quote will be available in the booking system, where it can also be paid.

Exhibit

What is covered by mobile phone warranty

Warranty covers the device if it breaks down through no fault of your own. There are different examples of what is and isn't covered under the warranty.

Given below is information on the various scenarios where a device may need repair, and whether it's covered under the warranty or not.

Hardware issues

"I dropped/smashed my device"

- The warranty will not cover for accidental damage. This involves any damage to the phone or screen in general which is caused due to the phone being dropped or knocked against anything.
- Cosmetic wear and tear is also not covered

"My phone or tablet got wet"

- A wet device is an unhappy device. Any kind of water, liquid or moisture damage will void the warranty - even if the device was still working for a while after the exposure occurred.
- This is because moisture damage is not always immediate, and can take months to affect the device. These days most of the devices have moisture indicator inside them that helps the manufacturer in checking for water damage.
- With devices that feature a removable back cover, there is a small white sticker on the battery and the device itself. If this turns pink, it means the phone has come into contact with moisture - and the warranty is void.

"My phone won't turn on!"

- A lot of the time when your phone won't turn on, it's because the device has simply crashed rather than there being any real damage. There are a few steps you can take to try and get your phone back on, so try these first:

- Remove the back and take out the battery, if it is possible on your phone. Leave it out for a full minute, then pop the battery back in and replace the back cover. Press the power button and the device should (hopefully) turn on.
- Hold down the power button for at least 15-20 seconds, if you have a phone with a non-removable battery, this will often trigger a 'soft reset', causing the phone to restart.
- For an Apple iPhone or iPad, try a 2-button reset. Press and hold both the power button and home button for 10 to 15 seconds until you see an Apple logo. Wait for it to turn back on.
- Waterproof Sony devices (the M, X and Z series) have a small red reset button underneath the SIM card cover. Press this with a pin for 10 to 15 seconds and see if the device comes back on.
- Finally, the battery may simply be low on power. Leave the device plugged in to charge for at least an hour, then try turning it on again. Try to do this with an alternative charging cable if you can - faulty cables can sometimes cause charging issues.
- If the device does not respond after so much efforts, it means that the fault lies with its internal system and it needs replacement. The loss is covered under warranty as long as there are no signs of physical damage to the device or its screen.

"I want to modify my phone"

- A lot of companies offer custom modifications to your phone- e.g. different-coloured glass or outer casings on their device.
- Unlike a standard case, which you would simply put the phone into, custom modifications actually change or replace the outer parts of your phone. This shouldn't really be attempted if you want to keep the warranty.
- Inside the device are tamper-evident labels that will break or tear upon attempts to open up the phone-and once these are broken, the warranty becomes void.
- Sometimes these are on the outer casing to prevent the device being taken apart at all, whereas some allow minor things like battery replacement. Fitting a new case will almost certainly break these seals-and void the warranty.

Software issues

- "Does unlocking the device so it can be used on a different network void my warranty?"
- This is a tricky one-as it all depends on how the device is unlocked, and by whom.
- The easiest solution is to contact the network and get the unlock code from them, this is the best way to unlock your device and maintain warranty. This is 'official' and therefore maintains your warranty-but you should definitely double-check and ask the network.
- Your warranty terms might get violated if you get your phone unlocked by an unofficial retailer, market stall or independent local shop.

"My device keeps crashing!"

- This can sometimes be caused by faulty software on the device, a glitch or a piece of corrupt memory -and often this can be solved by resetting or updating your phone's software.
- A phone with corrupt software is normally covered under the manufacturer's warranty and can usually be repaired by a service centre reinstalling the phone's operating system - so there shouldn't be any costs involved with this kind of repair.

3.2.3 Dead On Arrival Process

Dead on Arrival-DOA

Most Handset Companies follow a policy for handset returns if a customer receives a new handset that does not work (Dead on Arrival or DOA), or if the phone becomes faulty early in its life (Early Life Failure or ELF).

Dead on Arrival (DOA)

- DOA is valid when a fault is detected within the 30 days of purchase of a handset.
- The fault is caused due to handset issue.
- Customers who do not want to take advantage of handset policy get their money refunded. After following the return process, faulty DOA Pre- Paid handset is refunded.

Most companies have a return process that is to be followed if you receive a handset and it is determined to be a Dead on Arrival (DOA) and therefore requires a Replacement or a Credit Refund.

For a handset that was purchased in-store:

- If a new handset exhibits faults within 30 days, the customer must contact an authorised store of purchase as soon as possible to advise them of this.
- The customer must take the handset including all packaging and accessories provided with phone to the store of purchase
- For approval of handset, it needs to be sent to authorised assessment centre. Customer receives a replaced handset once approval is provided.
- Handset misuses such as physical or liquid ingress may void the DOA Policy.
- The authorized store reserves the right to charge for any additional costs incurred as a result of returning damaged or incomplete goods.

3.2.4 DOA/DAP Policy of Samsung Mobile

A. DOA (Dead on Arrival)

"Any Samsung mobile phone, which has developed a functional Defect, at the point of sale, and is within 90 Days from RDS Invoice to dealer/retailer, will be termed as Dead.

On Arrival (here-in referred as DOA)." Note:

3.2.4.1 DOA shall not be considered under the following conditions -

- 3.2.4.1.1 In case the defect is not reproduced at SVC Center.
- 3.2.4.1.2 Issues related to Network Service provider.
- 3.2.4.1.3 Any Software related issues.
- 3.2.4.1.4 Issues related to all kind of Accessories

3.2.4.2 Logic of "Within 90 days from RDS Invoice" - Can be verified via DMS system. (Guidelines on how to check DMS system will be communicated shortly. In the mean time, ESC can check RDS Invoice and mandatorily attach scan copy of Invoice in GSPN-RH Call)

Example: A retailer takes out the unit from the box for selling to the customer and at the point of selling they observe some functional defect such as Blank Display or no sound etc. the retailer shall keep this box unit aside and sell another handset to the customer. Such defective units can be termed as DOA provided the defect is reproduced at SVC center & the unit is within 90 Days from RDS's billing date to dealer/retailer.

B. DAP (Dead After Purchase)

"Any Samsung mobile phone, which has developed a functional Defect within 4 Days of purchase by the end customer, will be termed as Dead After Purchase (here-in referred as DAP)."

Note:

3.2.4.2 DAP shall not be considered under the following conditions-

- 3.2.4.2.1 In case the defect is not reproduced at SVC Center.
- 3.2.4.2.2 Issues related to Network Service provider.
- 3.2.4.2.3 Any Software related issues.
- 3.2.4.2.4 Issues related to all kinds of Accessories

3.2.4.3 ESC to attach Customer's Purchase Proof and MCSScreenshot in GSPN-RH Cwall (Mandatory)

For DAP cases - Customer SIM activation date (This is the date when the SIM was inserted in the handset) and Purchase Date both will be evaluated. Please refer to the below example for better understanding of the same.

1. Proposed Process:

DOA/DAP Approval Process:

- Through DOA/DAP certificate
- Dealer to paste mandatorily "C" IMEI sticker on the Invoice copy at the time of sale to the customer.
- Customer/Dealer approaches Authorized Service Centre with the alleged defective handset along with Box and all accessories.
- Checks for any permanent functional defect within 4 Working days of Purchase by the customer.
- ASC/FSC checks DOA/DAP conditions as per the guidelines & issues DOA/DAP certificate. ASC/FSC Checks for Availability of all Accessories and seals with box
- with DOA/DAP Seal. Customer visits dealer with DOA/DAP Certificate and sealed box unit.
- Dealer replaces the defective handset after taking DOA/DAP Certificate, Invoice copy & sealed defective set.

*Note: For CDMA operator tie-up models (co-branded)- DOA/DAP policy will remain same as 7 days of the purchase.

Settlement Process:

- Dealer to send all the sealed defective sets along with DOA/DAP certificate/ Invoice copy to RDS/ Billing Distributor & claim - Refer Annexure A for timelines
- SRD(RDS) to send the same to respective SPD (ND/FD) or Zonal Distributor or any Direct Billing Party & claim - Refer Annexure A for timelines
- SPD (ND/FD)/ZD to send to SIEL SVC office along with all documents and details - Refer Annexure A for timelines

- Defective Piece received by SIEL office and verified for DOA/DAP
- Approval is raised by Samsung Branch Service Team.
- Once approved by Management the sets are sent to logistics ware house. Ware House receives the units and documents and credit is paid
- SPD (ND/FD) within 21days of submission of DOA/DAP handsets at SIEL service branch

3.2.5 Rules of Service: Turn Around Time

TAT can be defined as 'The time from customer service request to problem resolution'.

- TAT is measured in time units. Depending on the specifics of the industry sector the measurement unit could be in seconds, hours, days, weeks or months.
- A repair company is likely to measure TAT from the point of arrival of the defective item to its shipment
- The timeframe for a repairor service depends on the type of handset, the problem and what's required to conduct the repair- most are completed within 5-10 business days.

Some in-store repairs can be completed in Repair Centers as the customer waits or within 24 hours. These repairs may include:

- i. Software updates
- ii. Device unlock/reset
- iii. Antenna replacement
- iv. Routine maintenance
- v. Phonebook swaps

An indicative repair TAT is :

- 2 Hours for Part replacement faults
- 24 Hoursfor Hardware related faults
- For pick drop service, there will be an additional.
- Sometimes it may take longer due to some complex hardware problems or non-availability of spares. To be effective in your service role your responsibilities include:
 - Confirming resolution Turn Around Time with the customer ad getting his approval for the proposed repair.
 - Resolving device issues in co-ordination with L2 & L3 technicians as necessary.
 - Handing over the handset with accessories along with the job sheet to backend within TAT (Turn Around Time)
 - Informing the customer through phone, SMS or mail about the TAT and progress, repair charges for collection of repaired/replaced handset/accessory and repair charges
 - Obtaining handset with accessories handover from backend
 - Handing over repaired/replaced handset/accessory to customer within TAT (Turn Around Time) and collecting payment, as applicable

When returning a repaired phone to the customer as a CCE please complete the following checks to ensure thatis phone is working properly:

- Ensure that all components are in
- Use the power key to turn the phone on and off.
- Press all the keys on the keypad to ensure that they work.
- Make and receive a call and ensure that both parties can hear each other clearly.
- Make sure the battery is charging; this should begin within 30 seconds of the phone being plugged in.

Remember the impression you create on the customer as you close the ticket is as important



Exercise

1. Which of the following is the correct option that helps to protect the phone from physical damage?
 - Throw your phone around
 - Force the charger into the connector
 - Use a protective cover or pouch
 - None of the above
2. The warranty for a phone does not include
 - Defects or damage resulting from any misuse or other usage contrary to the instructions set out in the manufacturer's phone manual.
 - Alterations or modifications caused from repairs performed by any unauthorized personnel or persons
 - Breakage or damage to antennas, screens and displays.
 - All of the above
3. DOA (Dead on arrival) shall not be considered under which of the following conditions
 - In case the defect is not reproduced at SVC Center.
 - Issues related to Network Service provider.
 - Any Software related issues.
 - All of the above

4. What do you understand by TAT? 5.

Unit 3.3 Interpersonal Skills for effective Customer Service

Unit Objectives

At the end of this unit, you will be able to:

1. Explain the importance of Interpersonal Skills
2. Describe the steps involved in dealing with angry customers
3. Practice the process of dealing with angry customers
4. Explain the need of building rapport with customers
5. Describe the technique involved in building rapport

3.3.1 Interpersonal Skills

Case 1

Vivek was a new employee in a telecom store. He had some ideas about how to improve the Store's Layout. On his first attempt to explain his ideas at a company meeting, none of his words came out right. Everyone was confused.

Vivek asked for a second chance. Before his second attempt, Vivek wrote everything out. He drew a diagram to help everyone follow his logic. He practiced his talk. His second attempt went much better. There was much discussion.

People understood his concerns and suggestions, but the company decided not to implement his ideas. However, Vivek's boss was so impressed with how well he communicated his ideas that he put him in charge of communicating with all the prospective clients.

1. If you were in Vivek's place would you have given it a second try or would have just thought yourself to be inefficient to communicate your ideas?

Case 2

Rina was a customer service representative at a phone company. She and her friends frequently e-mailed each other during work. Rina sent her friend Suman an e-mail about her co-worker, Geeta. She told Suman many unpleasant things about Geeta. Unfortunately for Rina, she accidentally sent the e-mail to several people in the phone company, and they reported Rina's attack on Geeta to Rina's supervisor. Rina was asked to leave for her disloyal behaviour and her poor judgment. In addition, Rina's e-mail friends at the phone company who had been using company e-mail for private use were placed on suspension.

1. If you were in Rina's friend's place would you have continued chatting with Rina or reported her disloyal behaviour to supervisor?

3.3.2 Interpersonal Skills

These competencies are what we call Interpersonal skills. Interpersonal skills are those life skills which we use every day to communicate and interact with other people, both individually and in groups. In order to be successful in life, one must possess a strong interpersonal skills.

In a Customer Centric culture such as at a Repair Centre interpersonal skills are the key to positive customer experiences. As a CCE (Repair Centre) you are required to attend the walk-in customers, convince them to buy company's products/ services, handle and resolve their issues.

In order to do so you must present:

- A pleasant personality and enjoy communicating with people
- Be sensitive to other's feelings and calmly resolve conflicts
- Switch over to customer's language to create comfort
- Create a win-win situation with the customer, in case of disputes
- Through awareness of how you interact with others - and with practice - you can improve your interpersonal skills.

3.3.3 Developing Interpersonal Skills

1. Learn to Listen

- Listening is not the same as hearing; learn to listen not only to the words being spoken but how they are being spoken and the non-verbal messages sent with them. Use techniques of clarification and reflection to confirm what the other person has said and avoid any confusion. Try not to think about what to say next whilst listening; instead clear your mind and focus on the message being received.

2. Be Aware of Others' Emotions

- Be sympathetic to other people's emotions. Make and maintain eye contact and use first names where appropriate. Do not be afraid to ask others for their opinions as this will help to make them feel valued. Consider the emotional effect of what you are saying and communicate within the norms of behaviour acceptable to the other person.

3. Empathise

- Empathy is trying to see things from the point-of-view of others. When communicating with others, try not to be judgemental or biased by preconceived ideas or beliefs - instead view situations and responses from the other person's perspective. Stay in tune with your own emotions to help enable you to understand the emotions of others.
- If appropriate, offer your personal viewpoint clearly and honestly to avoid confusion. Bear in mind that some subjects might be taboo or too emotionally stressful for others to discuss.

4. Encourage

- Offer words and actions of encouragement, as well as praise, to others. Make other people feel welcome, wanted, valued and appreciated in your communications.

3.3.4 Dealing with Unhappy Customers

easel

One of Roshan's most important clients has just walked into his office, unannounced. Roshan stands up with a smile on his face, ready to greet him, when the dam bursts - his client explodes into an angry tirade because Roshan's store has failed to activate a service on time. Because of this, the client was unable to demonstrate a key product, which meant that he lost an important sale. Roshan does his best to reason with his client, but nothing he says helps the situation. The client only gets angrier, shouting accusations and spiralling further into a rage. Within a few minutes he walks out, vowing never to do business with Roshan's organisation again.

1. How would you behave if you were in Roshan's place?

3.3.5 Managing Angry Customers

Let us explore how to deal with angry or difficult customers and see how a CCE can smooth things over, so that the customer feels satisfied.

STEP 1: Adjust Your Mind Set

Once you are aware that your client is unhappy then your first priority is to put yourself into a customer service mind set. This means that you set aside any feelings you might have that the situation is not your fault, or that your client has made a mistake, or that he or she is giving you unfair criticism.

All that matters is that you realize that your customer or client is upset, and that it's up to you to solve the problem. Adjust your mind set so that you are giving 100 percent of your focus to your client, and to the current situation.

STEP 2: Listen Actively

The most important step in the whole of this process is listening actively to what your client or customer is saying- he wants to be heard, and to air his grievances.

Start the dialogue with a neutral statement, such as, "Let's go over what happened," or "Please tell me why you're upset." This subtly creates a partnership between you and your client, and lets him know that you're ready to listen. Resist the temptation to try to solve the situation right away, or to jump to conclusions about what happened. Instead, let your client tell you his story. As he is talking, do not plan out what you are going to say when he is done- this is not active listening!

Also, do not allow anything to interrupt this conversation. Give your client all of your attention.

STEP 3: Repeat Their Concerns

Once he has had time to explain why he is upset, repeat his concerns so that you are sure that you are addressing the right issue. If you need to, ask questions to make sure that you have identified the problem correctly.

Use calm, objective wording. For example, "As I understand it, you are, quite rightly, upset because we were not able to enable solve your problem that we promised you last week."

Repeating the problem shows the customer you were listening, which can help lower his anger and stress levels.

More than this, it helps you agree on the problem that needs to be solved.

STEP 4 Be empathetic and apologize

Once you are sure that you understand your client's concerns, be empathetic. Show him/her you understand why he/ she is upset. And, make sure that your body language also communicates this understanding and empathy.

For example, you could say, "I understand why you're upset. I would be too. I'm very sorry that we didn't get the service to you on time."

STEP 5: Present a Solution

Now you need to present him/her with a solution. There are two ways to do this.

If you feel that you know what will make your client happy, tell her how you would like to correct the situation.

If you are not sure about what your client wants from you, or if they resist your proposed solution, then give her the power to resolve things. Ask her to identify what will make her happy.

For instance, you could say, "If my solution doesn't work for you, I'd love to hear what will make you happy. If it's in my power I'll get it done, and if it's not possible, we can work on another solution together."

STEP 6: Take Action and Follow-up

Once you've both agreed on a solution, you need to take action immediately. Explain every step that you're going to take to fix the problem to your client.

Once the situation has been resolved, follow up with your client over the next few days to make sure that she is happy with the resolution. Whenever you can, go above and beyond her expectations. For instance, you could send her a gift certificate, give her a great discount on her next purchase, or send her a hand-written apology.

STEP 7: Use the Feedback

Your last step is to reduce the risk of the situation happening again.

If you have not already done so, identify how the problem started in the first place. Was there a bottleneck that slowed the implementation?

Find the root cause of the problem and make sure it is fixed immediately.

STEP 8: Above all stay calm

Occasionally a client or customer may become verbally abusive towards you or your team. Know in advance what you will tolerate, and what you will not. If things escalate, you may need to be assertive and stand up for yourself, or even walk away from the situation to give the client time to cool down.

Dealing with difficult customers can be challenging. But if you handle the situation well, you may even be able to improve your relationship, and create further opportunities.

Make sure that you listen actively to his problems or complaints, and resist the urge to interrupt or solve the problem right away. Be empathetic and understanding, and make sure that your body language communicates this.

If you are not sure how to fix the situation, then ask your client what will make him happy. If it is in your power, then get it done as soon as possible. Follow up with your customer to make sure he was happy with how the situation was resolved.

4. Plan Work Effectively, Optimise Resources and Implement Safety Practices



Unit 4.1 - Workplace Health & Safety

Unit 4.2 - Different types of Health Hazards

Unit 4.3 - Importance of Safe Working Practices

Unit 4.4 - Reporting Safety Hazards

Unit 4.5 - Waste Management

Unit 4.6 - Organizations' Focus on the Greening of jobs



Key Learning Outcomes

At the end of this module, you will be able to:

1. Explain about the work place health and safety
2. Differentiate various health hazards
3. Demonstrate various first aid techniques
4. Importance of safety at workplace
5. Understand Basic hygiene Practices and hand washing techniques
6. Explain the need for social distancing
7. Understand the reporting of hazards at workplace
8. Explain e-waste and process of disposing them
9. Explain Greening of jobs

UNIT 4.1: Workplace health & safety

Unit Objectives



At the end of this unit, you will be able to:

- Understand about workplace health and safety
- Explain tips to design a safe workplace
- Explain precautions to be taken at a workplace

4.1.1 Safety: Tips to Design a Safe Workplace

Workplace health and safety policy defines the best possible work conditions and safety for the employees. Employees have a right to feel safe in their workplace. Hence the organizations create and follow legal standards and ensure a hazard-free workplace.

Every organization is obligated to ensure that the workplace follows the highest possible safety protocol. When setting up a business some tips to remember:

- Use ergonomically designed furniture and equipment to avoid stooping and twisting
- Provide mechanical aids to avoid lifting or carrying heavy objects
- Have protective equipment on hand for hazardous jobs
- Ensure presence of emergency exits and they are easily accessible
- Set down health codes and ensure they are implemented
- Follow the practice of regular safety inspections in and around the workplace
- Get expert advice on workplace safety and follow it
- Get regular inspection of electrical wiring and also the electrical switches and gadgets
- Install fire extinguishers and fire alarms.

4.1.2 Precautions to be taken while at work

Every employee is obligated to follow all safety protocols put in place by the organization.

All employees must make it a habit to:

- Immediately report unsafe conditions to the supervisor
- Recognize and report safety hazards that could lead to slips, trips and falls
- Report all injuries and accidents to the supervisor
- Wear the correct protective equipment when required
- Learn how to correctly use equipment provided for safety purposes
- Be aware of and avoid actions that could endanger other people
- Always be alert
- Educate the employees about the first/emergency exits on the floor, and also where the fire extinguishers are kept.

Tips



- Be aware of what emergency number to call at the time of a workplace emergency
- Practice evacuation drills regularly to avoid chaotic evacuations

UNIT 4.2: Different types of Health hazards

4.2.1 First Aid

Illness, injuries, and pain are part of human life. This can happen anyway. Every individual is prone to illness and injuries at anytime and anywhere.

In case of any of these, some kind of immediate medical attention or treatment is needed to reduce the discomfort, pain, and deterioration of the condition. The medical attention that is given at the first instance before seeking professional medical help is called “First Aid”. First aid is the immediate and temporary treatment given to the victim of an accident or sudden illness while awaiting the arrival of “Medical Aid”. First Aid means providing the initial treatment and life support for people with an injury or illness. However, First Aid has its limitations and does not take the place of professional medical treatment. Proper early assistance given by First Aider helps in saving the life of a patient.

Illness and injuries can happen anywhere, be at home, the workplace, or in the market place. Whatever safety measures we adopt, we are all prone to illness sometime or the other.

Some common injuries and their rescue techniques:

4.2.2 First Aid Techniques

- Direct pressure must be applied to the cut or wound with a clean cloth, tissue, or piece of gauze, until bleeding stops.
- If blood soaks through the material, it is highly recommended not to remove it.
- More cloth or gauze must be put on top of it, and pressure must be continued.
- If the wound is on the arm or leg, the limb must be raised above the heart to help slow the bleeding.
- Hands must be washed again after giving first aid and before cleaning and dressing the wound.
- A tourniquet must not be applied unless the bleeding is severe and not stopped with direct pressure.



Fig. 4.2.2a: Clean cut or wound

Clean cut or wound

- The wound must be cleaned with soap and lukewarm water.
- To prevent irritation and burning sensation, the soap solution must be rinsed out of the wound.
- Hydrogen peroxide or iodine must not be used to clean or treat the wound since they are corrosive and can damage live tissues.



Fig. 5.2.2b: apply hydrogen peroxide or iodine

Protect the wound

- Antiseptic cream or solution must be applied to the wound to reduce the risk of infection.
- Then the wound must be gently covered with a sterile bandage.
- Till the wound heals, the bandage must be changed (dressed) daily to keep the wound clean and dry.



Fig. 5.2.2c: Protect the wound

Call the Emergency Helpline if:

- The bleeding is severe and deep
- You suspect Internal Bleeding
- Abdominal or Chest wound exists
- Bleeding continues even after 10 minutes of firm and steady pressure

For Burns:

- Immediately put the burnt area under cold water for a minimum of 10 minutes
- If the burned area is covered, take clean scissors, cut and remove the fabric covering the area
- In case clothing is stuck to the burned area, leave it as it is
- Before sterile dressing application, remove jewellery (if any)
- It is better to leave the burned area open
- Do not apply any medication or ointment
- Breaking a blister – it is an absolute no-no!



Fig. 4.2.2d: Put Burnt Area under Water

For Broken Bones and Fractures

- **Protruding bone must be left alone**
 - If a bone has broken through the skin, it must not be pushed back into place.
 - The area must be covered with a clean bandage and immediate medical attention must be sought.
- **Bleeding must be stopped**
 - Steady and direct pressure must be applied with a clean piece of cloth for 15 minutes and the wound must be elevated.
 - If a blood soaks through, one must apply another cloth over the first and seek immediate medical attention.
- **Swelling must be controlled**
 1. The RICE (Rest, Ice, Compression and Elevation) therapy must be applied to control and reduce swelling.
 2. Rest the injured part by having the person stay off of it.
 3. Ice must be applied on the area with the help of an ice pack or by wrapping the ice in a clean cloth. Ice must not be directly placed against the skin.

For Heart Attack/Stroke

- Think FAST. Face: is there weakness on one side of the face? Arms: can they raise both arms? Speech: is their speech easily understood? Time: to call Emergency helpline
- Immediately call medical/ambulance helpline or get someone else to do it

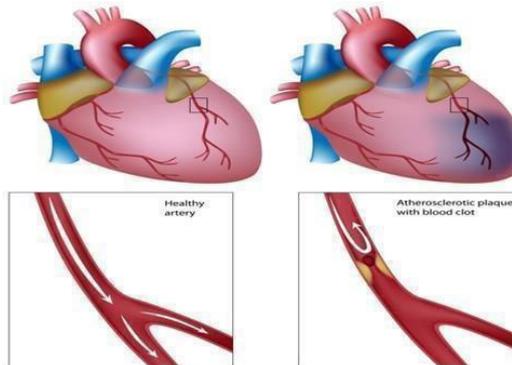


Fig 4.2.2e: Anatomy of Heart Attack

For Head Injury

- Ask the victim to rest and apply a cold compress to the injury (e.g. ice bag)
- If the victim becomes drowsy or vomits, call Medical helpline or get someone else to do it

Steps of using breathing apparatus:



Check the parts of the breathing apparatus thoroughly.



Check the bypass knob (red). Close it if you see it open. After this, press the reset button (area above bypass knob – black)



Inspect the facemask to see that it is



Lift the cylinder ensuring that on the top the cylinder valve should be present. The back plate of the cylinder should face the wearer. Wear the breathing apparatus on the shoulder like a bag pack and by the neck strap, hang the face mask.



After wearing the breathing apparatus tighten shoulder straps and fasten the waist belt.



The cylinder valve should be opened slowly to inspect the pressure gauge.



Make sure that 80% of the cylinder is full.



Wear the mask slowly by resting your chin in the resting cusp and pull the head strap slowly over your head.

Pull the head straps for a snug but comfortable fit.



Breathe in and normally to see if you can breathe normally or not.



Now insert a finger sideways of the face mask for easy outward airflow.



Slowly close the cylinder valve without leaving the knob.

Be steady for 10 minutes and hold your breath or extremely slow to listen to any wheezing sound.

Also, check the pressure gauge for any dip in the pressure.



Normally Breathe to vent system
Listen for a whistle alarm while observing the pressure gauge
at 55 bar (+/-5 bar)

Briefing and Guidance for Fire Fighters

There are basically three methods with the help of which people can be rescued from a building engulfed in a blazing fire. To ensure on-site reception, here are two of the important steps that we will discuss now. These come under the best safe lifting and carrying practices.

Conventional Technique: This is a good method if there is an open area close by. The first rescuers will make the victim sit reach under their armpits and finally, grab their wrist. The other rescuer will cross the ankle (victim), pull up that person's legs on his shoulder. Finally, on the count of 3, both will lift the person up and move out.



Fig. 4.2.1f: Fast Strap

Fast Strap: In case the victim is completely incapable of moving out of the fire zone. The rescuers should follow this method. One of the rescuers will place their knee between victim's shoulder and head. Pin the loop of webbing to the ground with the help of the knee. This acts as an anchor. With the non-dominant hand hold the other end of the webbing and make a loop. With steady hands, pull the victim's hand in from the loop, tie it securely and finally clip the webbing loops.



Fig. 4.2.2g: Fast Strap

Essentials for Smooth Evacuation: The following are essential to have a smooth evacuation during an outbreak:

- 4 Clear passageways to all escape routes
- 5 Signage indicating escape routes should be clearly marked
- 6 Enough exits and routes should be present to allow a large number of people to be evacuated quickly
- 7 Emergency doors that open easily
- 8 Emergency lighting where needed
- 9 Training for all employees to know and use the escape routes
- 10 A safe meeting point or assembly area for staff
- 11 Instructions on not using the Elevator during a fire

Special Evacuation Requirements For Specially Abled Persons

12 The Visually Impaired

- Announce the type of emergency
- Offer your arm for help

With Impaired Hearing

- Turn lights on/off to gain the person's attention, or indicate directions with gestures, or write a note with evacuation directions

People with Prosthetic Limbs, Crutches, Canes, Walkers

- Evacuate these individuals as injured persons.
- Assist and accompany to evacuation site if possible.
- Use a sturdy chair, or a wheeled one, to move the person to an enclosed stairwell
- Notify emergency crew of their location

UNIT 4.3: Importance of Safe Working Practices

Unit Objectives



At the end of this unit, you will be able to:

1. Explain Basic Hygiene Practices
2. Understand the importance of Social Distancing
3. Demonstrate the safe working practices

4.3.1 Basic Hygiene Practices

We are living in an environment with millions of germs and viruses. And our body can be a breeding space for these microbial organisms. They grow and multiply and cause many diseases which sometimes can prove to be fatal for the human beings. These disease-causing microbial organisms kill over 17 million people every year. Some simple hacks and little changes of basic personal hygiene habits can bring amazing changes to all of us. We can prevent contracting these diseases if we follow these hygiene practices every day.

Personal Hygiene

Personal hygiene is all about managing your body hygiene, essentially caring for your well-being incorporating some physical hygiene habits. Also, there are mental health benefits as well, as they affect each other immensely.

What are good personal hygiene habits?

Good personal hygiene includes but not limited to-

- Take regular shower
- Maintain oral hygiene
- Wash your hands frequently
- Wash your genitals
- Keep your clothes and surrounding dry and clean

These habits should be practiced on a regular basis, at home, at work, basically where you are!

That's the whole idea of preventing your body system collapse over a tiny microbe

Personal Hygiene Practices at Home

Your home should be the most comfortable and convenient for you to keep up your personal hygiene level to a standard, yet, we find ourselves procrastinating over hygiene issues when we are at home. Even though some of these tasks barely take a minute.

1. Take Regular shower

Do not wait up to feel the dried sweat in your body to feel the urge to take shower, make it a routine, you have the choice to either take them before you head to work or after the long day or even before you head to sleep, whichever one suits your routine. Make sure to rinse your body thoroughly, especially the genitals and underarms as they produce more sweat and are more prone to fungal activities.

2. Wash your hands frequently

We use our hands to do our most physical acts, from picking up the keys, browsing through our phones, cooking or eating to attending our pets. While we agree and accept the importance of washing hands before eating and after visiting the toilet, it is also **important to wash our hands** with soap or sanitizer every now and then. The pandemic covid-19 which crippled the life all over the world has taught us an important lesson that sanitizing our hands regularly is the only way we can avoid transmission of the disease. Use **alcohol-based sanitizer** to wash hands well to prevent the spread of communicable diseases

3. Maintain oral hygiene practices

It is very important to take care of the teeth and gum, to prevent tooth decay and bad odour. Just brushing them twice a day is not enough, but using fluoride toothpaste and brushing properly is very essential. And wash it well with water to remove any food particles that is stuck in the gap in between the teeth. It is advised to wash the teeth everyday twice to maintain healthy teeth and gum.

4. Nails and hairs hygiene

The cleanliness of nails and hair is also very important. They store dirt and grease. And even the microbes could be in there stuck and spreading. If the nail is not clean they can cause severe food poisoning, as we use our hands to eat food. Trim the nails once in a fortnight and wash hair at least twice a week with a shampoo to keep them healthy

5. Nose and ears hygiene

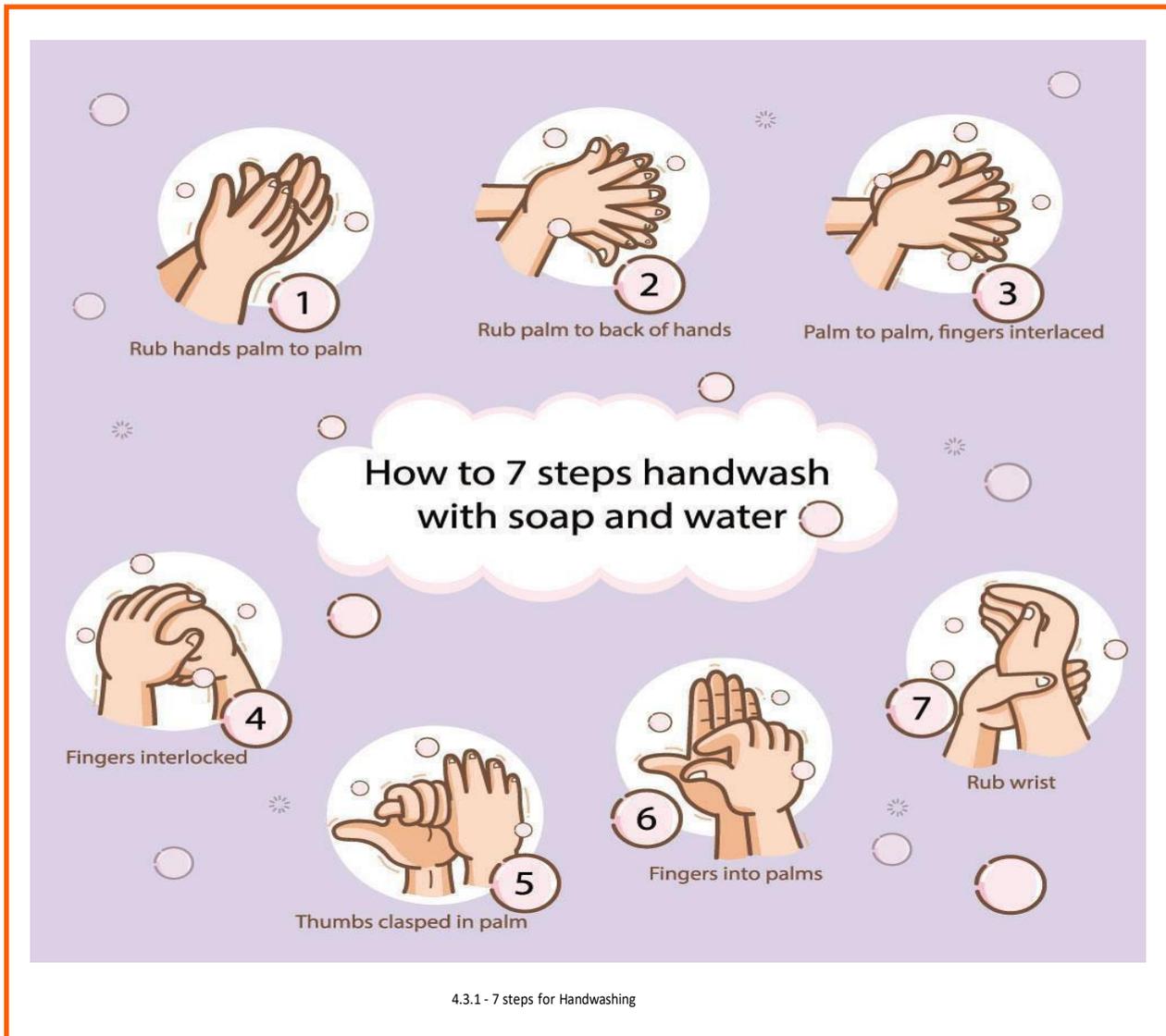
Wherever we are most likely to breathe in some pollutants, and most of the particles are bound to be stuck in the nasal hair. So, rinse the nose and ear with warm water once you return from outside.

6. Wear fresh and clean clothes

Changing into neat and clean clothes will prevent many infectious diseases. It will also give the mental effect immediately and it will boost the mind. Wash clothes with a good detergent every day and dry it in the sun. This will ward off any microbes attached to the clothes. If possible, Dettol can be used while rinsing which is an anti-disinfectant.

7. Food hygiene

You can get severely sick from food-borne diseases, as most of your foods are raw, purchased from outside, they risk being cross-contaminated with harmful microbes. Food hygiene is basically the idea of better storage, handling, and preparation of food to prevent contamination and to prevent food poisoning.



4.3.2 Importance of Social Distancing

Preventing communicable diseases:

All these above practices will help us to prevent communicable diseases. These diseases are highly infectious and contagious and spread through air, urine, feaces, saliva, skin (through touch) and using same towels and utensils.

Social Distancing and isolation, Self-Quarantine:

Ever since the spread of the pandemic covid-19, several health organisations have been insisting on following social distancing and isolation. Communicable diseases mainly spread through coming close to the infected individual and through physical touch. If a person is infected with diseases like normal flu or cold and spread it to others, the symptoms and may remain with the infected person for a day or two. The virus may be destroyed by taking an antibiotic. But in severe cases like corona virus the infection is severe and can prove fatal to the affected people. To prevent the spread of the virus, the entire world adopted lockdown, **social distancing** and compulsory face mask. And the infected person has to be in **self isolation** and **quarantine** till the time the symptoms are over. This was the advisory from the World Health Organisation, and the entire world followed it to prevent the rapid spread of the virus. The same can be applicable to all types of communicable diseases that are spread mainly through air and touch.

As communities reopen and people are more often in public after the pandemic, the term “physical distancing” (instead of social distancing) is being used to reinforce the need to stay at least 6 feet from others, as well as wearing face masks. Historically, social distancing was also used interchangeably to indicate physical distancing which is defined below. However, social distancing is a strategy distinct from the physical distancing behavior.

What is self-quarantine?

Self quarantine was imposed on people who have been exposed to the new covid-19 and who are at risk for getting infected with the virus were recommended to practice **self-quarantine**. Health experts advised the self- quarantine for 14 days or two weeks. Two weeks provides enough time for them to know whether or not they will become ill and be contagious to other people.

self-quarantine was also recommended for people who have recently returned from traveling to a part of the country or the world where COVID-19 was spreading rapidly, or if a person has knowingly been exposed to an infected person.

Self-quarantine involves:

- Using standard hygiene and washing hands frequently
- Not sharing things like towels and utensils
- Staying at home
- Not having visitors
- Staying at least 6 feet away from other people in your household

Once your quarantine period has ended, if the symptoms are not there, then the person may return to normal routine as per doctor’s advice.

What is isolation?

Anybody who is infected with a contagious disease needs to practice isolation in order to prevent the spread of the germs to their near and dear ones. This became very popular and was strictly adhered to during the covid-19 pandemic. People who were confirmed to have COVID-19, **isolation** was mandatory. Isolation is a health care term that means keeping people who are infected with a contagious illness away from those who are not infected. Isolation can take place at home or at a hospital or care facility. Special personal protective equipment will be used to care for these patients in health care settings. They are attended by well trained nurses and specialised doctors. And these people have to be in the PPE kits all through their presence in the hospital.

Complete PPE Kit



4.3.2 Complete PPE Kit

Disposing off the PPE Kits

The PPE kits are worn by health workers and doctors who are attending to patients with highly infectious diseases and who are kept in isolation in order to arrest the spread. They have to wear it every time they go near the patient and have to remove it once their duty is over. Most of the PPE components are used for single use, however the face mask and goggles can be reused provided they are sanitised properly. The PPE kits have to be disposed off safely as they might have contaminants stuck to them and they may infect the healthy person if they are not discarded properly. The health workers may be all the more vulnerable to contact the disease.

4.3.3 Safe Workplace Practices

Every company has the provision of first aid box. As you have already read about the types of injuries that technicians can receive in their field of work, it is imperative for the companies to have appropriate first aid accessories.

The basic first aid supplies and accessories that a first aid box should have are:



4.3.1 First Aid Tools



Gauze roller bandage



Adhesive bandages



Gauze pads

Antiseptic cleansing
wipes

Burn cream or gel

Eyewash
liquid

CPR Kit

Chemical hazards are caused by toxic materials, which are poisonous. And being poisonous in nature, they can either be fatal or cause serious damages in case the preventive actions are not taken on time. Now, the exposure to chemicals can be in 3 forms.

They can be:

- Inhaled (**entering the** body through nose)
- Directly in contact with skin
- Ingested (consumed)

The symptoms, in this case, will be:

- Seizures
- Partial or complete loss of responsiveness
- Burning sensation
- Stomach Cramping with bouts of excruciating pain
- Nausea
- Vomiting (and in times with blood-stains)



Now, where there are problem, their solutions come side by side. In such situations, the person giving first aid requires to be calm and take certain preventative actions.

Some of the essential actions are:

- Using insulated equipment
- Wearing protective clothing, goggles, masks, shoes and gloves
- Ensuring the place has enough ample ventilation

Remedial action

- The foremost thing that one should do is to provide immediate first aid. However, it is to be remembered that the victim should not be given any kind of fluid (water, milk) until doctors from Poison control unit gives a green signal.
- Aside from this, there are a few things a person can perform to the victim of toxic material exposure.
- Remove the victim from the toxic zone or vicinity
- Call for an ambulance
- Remove contaminated clothing
- Splash water in the eyes
- If ingested, do not try to make the victim puke (vomit)
- Wash their mouth with water



Fig. 4.3.3: CPR

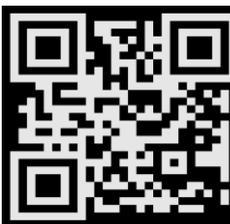
- In case the victim's breathing has stopped, give CPR (Cardiopulmonary resuscitation)
- In case of burning due to toxic material, apply burn gel or water gel on that area.
- Avoid any cream based or oil-based lotion or ointment

Even though giving first aid is the right thing to do in the first place, it is also important to report the incident to their supervisor.

Exercise



1. Burnt area should be kept under _____ for a minimum of 10 minutes
2. _____ exits should be easily accessible in case of fire.
3. _____ or _____ must be applied to the wound to reduce the risk of infection
4. The RICE which is _____ and _____ therapy must be applied to control and reduce swelling.
5. CPR is _____.



Click on the QR code to view the video on hand washing Techniques



Click/Scan this QR code to view the video First Aid at workplace



Click/Scan this QR code to view the video on CPR procedure

UNIT 4.4: Reporting Safety Hazards

Unit Objectives

At the end of this unit, you will be able to:

- Discuss the process of reporting in case of emergency (safety hazards)
- Understand methods of reporting hazards

4.4.1 Methods of Reporting Safety Hazards

Every organization, from every industry, has a standard reporting protocol, comprising the details of people in the reporting hierarchy as well as the guidelines to be followed to report emergencies. However, the structure of this reporting hierarchy varies between organizations, but the basic purpose behind the reporting procedure remains same.

The general highlights of the Organizational Reporting Protocol, commonly known as the 6Cs, are:

- **Communicate First**
 - The first source of information during emergency is the preferred source.
 - Crises situations are time-bound and hence it is important to communicate promptly.
- **Communicate Rightly**
 - Distortion of information due to panic must be avoided.
 - Proper, accurate information must be provided to concerned authorities and this can save lives.
- **Communicate Credibly**
 - Integrity and truthfulness must never be forgotten during emergencies.
- **Communicate empathetically**
 - One must wear the shoes of the victims while communicating emergencies.
- **Communicate to instigate appropriate action**
 - Communicating to the right authorities help in taking the necessary action.
- **Communicate to promote respect**
 - Communicating with the victims with respect help in earning their trust and thus eases the disaster management process.

Hazards and potential risks / threats can be identified and then reported to supervisors or other authorized persons in the following ways:

While identifying and reporting a hazard / potential threat / potential risk, one must describe the following:



Part A: To be completed by the Worker Details Required:

- Name of Worker
- Designation
- Date of filling up the form
- Time of incident / accident
- Supervisor / Manager Name
- Work Location / Address
- Description of the hazard / what happened (Includes area, task, equipment, tools and people involved)
- Possible solutions to prevent recurrence (Suggestions)

Part B: To be completed by the supervisor / Manager Details Required:

- Results of Investigation (Comment on if the hazard is severe enough to cause an injury and mention the causes of the incident / accident)

Part C: To be completed by the Supervisor / Manager Details Required:

- Actions taken / Measures adopted (Identify and devise actions to prevent further injury, illness and casualty)

Action	Responsibility	Completion Date

Any job role and any occupation in this world have some hazards, in varying severity, associated with it. These are called Occupational Hazards. Occupational Hazard can be defined as “a risk accepted as a consequence of a particular occupation”. According to the Collins English Dictionary, it is defined as “something unpleasant that one may suffer or experience as a result of doing his or her job”. Occupational Hazards are caused by the following:

Hazard Report Form	
Name:	Date:
Location:	
Tool/Equipment:	
Description of the hazards:	
Suggested corrective action:	
Signature:	
Supercisor's remarks:	
Corrective action taken:	
Signature of Supervisor:	Date:

UNIT 4.5: Waste Management

Unit Objectives

At the end of this unit, you will be able to:

- Understand what is e-waste
- Understand the concept of waste management
- Explain the process of recycling of e-waste

4.5.1 Introduction to E-Waste

Electrical and electronic products are all around us. We can't imagine a world without these gadgets. Our life is indispensable without electricity and electronic devices. Growth in the IT and communication sectors has increased the usage of electronic equipment immensely. Frequent change on the technological features of electronic products is forcing consumers to discard their old electronic products very quickly, which, in turn, adds to e-waste to the solid waste pool. What this translates to is mountainous masses of electrical and electronic waste which has a high potential to pollute the environment. This growing menace of e-waste calls for a greater focus on recycling e-waste and better e-waste management.

E-waste means electrical and electronic equipment, whole or in part discarded as waste by the consumer or bulk consumer as well as rejects from manufacturing, refurbishment, and repair processes. E-waste usually is made up of usable and non-usable material. Some of the waste if left unattended will be destructive to the environment. E-waste is made up of hazardous substances like lead, mercury, toxic material, and gases.

There are many companies these days who are engaged in the collection, handling, and disposal of this e-waste in a safer and more secure place to protect the environment.

4.5.2 What is E-Waste?

The amount of e-wastes comprising computers and computer parts, electronic devices, mobile phones, entertainment electronics, refrigerators, microwaves, TV, fridges, and industrial electronics that are obsolete or that have become unserviceable is growing. All these electronic devices contain plastics, ceramics, glass, and metals such as copper, lead, beryllium, cadmium, and mercury and all these metals are harmful to humans, animals, and the earth. Improper disposal only leads to poisoning the Earth and water and therefore all life forms. Our effort is meant to preserve the environment and prevent pollution by proper handling of e-waste. While it will take a lot of effort to educate people to dispose of such wastes in the right way, we are doing our part by providing a channel to collect e-wastes and dispose off them in a sustainably safe manner. We convert waste to usable resources.

The electronic industry is not only the world's largest industry but also a fast-growing manufacturing industry. It has been instrumental in the socio-economic and technological growth of the developing society of India.

At the same time, it poses a major threat in the form of e-waste or electronics waste which is causing harmful effects on the whole nation

e-waste is creating a new challenge to the already suffering Solid waste management, which is already a critical task in India.

4.5.3 Electronic goods/gadgets are classified under three major heads:

White goods: Household appliances,

Brown goods: TVs, camcorders, cameras etc.,

Grey goods: Computers, printers, fax machines, scanners etc.

The complete process is carried out as per the government guidelines.

- Collection of e-waste from all the electronic stores, manufacturing companies, etc.
- Transport of e-waste to the disposal units
- Segregation of e-waste at the disposal unit
- Manual dismantling of e-waste to segregate components into various types such as metal, plastics and ceramics
- Convert into raw material (recycle and reuse)
- Supply recovered raw material to processors and electrical/electronic industries
- Dispatch hazardous e-waste for safe disposal

4.5.4 E-Waste Management Process (contd.)

Waste management is carried out to ensure that all types of waste and garbage are collected, transported, and disposed of properly. It also includes recycling waste so that it can be used again



4.5.5 Recyclable and Non-Recyclable waste

Recyclable waste is **renewable or can be reused**. This means that the waste product is converted into new products or raw material, like paper, corrugated cardboard (OCC), glass, plastics containers and bags, hard plastic, metal, wood products, e-waste, textile, etc

Recycling not only conserves important areas in our landfills but also assists decrease greenhouse gas emissions.

Contrary to this, Non-recyclable waste cannot be recycled and cause a major threat to the environment.

The following items cannot be recycled:

Shredded paper, aerosol cans, paper coffee cups, milk and juice cans, used baby diapers, and bottle caps.

Recycling is one of the best ways to have a favorable influence on the world where we live.

Recycling will greatly help us to save both the environment and us from pollution. If we take immediate action, we can control this, as the quantity of waste we are accumulating is increasing all the time.



Click/Scan this QR code to view the video on Waste Management

4.5.6 Colour codes of waste collecting bins

Waste collecting bins colour code

India's urban population of 429 million citizens produce a whopping 62 million tonnes of garbage every year. Out of this, 5.6 million tonnes is the plastic waste, 0.17 million tonnes is the biomedical waste, 7.90 million tonnes is hazardous waste and 15 lakh tonnes is e-waste.

According to an estimate, 40% of municipal waste in the city is 'wet' waste, which can easily be composted and used as manure. Nearly 30% of the municipal waste comprises of plastic and metal, which can be sent to an authorized dealer for recycling, and about 20% of it is e-waste, from which precious metals can be taken apart and recycled. However, out of the total municipal waste collected, 94% is dumped on land and only 5% is composted. To gather the garbage two color bin system was suggested. Green bin for wet waste and blue for dry waste. However, there is a drawback in that system. People do through the sanitary napkins and children's diaper along with wet waste causing the contamination of things. Hence the government has come up with three colored garbage collection bins



4.9.6 Tricolored Bins

1. Green Bin

The green coloured bin is used to dump biodegradable waste. This bin could be used to dispose off wet/organic material including cooked food/leftover food, vegetable/fruit peels, egg shell, rotten eggs, chicken/fish bones, tea bags/coffee grinds, coconut shells and garden waste including fallen leaves/twigs or the puja flowers/garlands will all go into the green bin.

2. Blue bin

The blue coloured bin is used for segregating dry or recyclable left over. This category includes waste like plastic covers, bottles, boxes, cups, toffee wrappers, soap or chocolate wrapper and paper waste including magazines, newspapers, tetra packs, cardboard cartons, pizza boxes or paper cups/plates will have to be thrown into the white bin. Metallic items like tins/cans foil paper and containers and even the dry waste including cosmetics, hair, rubber/thermocool (polystyrene), old mops/dusters/sponges.

4.5.7 Waste disposal methods:

- Incineration: Combusting waste in a controlled manner to minimize incombustible matter like waste gas and ash.
- Waste Compaction: Waste materials are compacted in blocks and are further sent away for recycling.
- Landfill: Waste that can't be recycled or reused can be thinly spread out in the low-lying areas of the city.
- Composting: Decay of organic material over time by microorganisms.
- Biogas Generation: With the help of fungi, bacteria, and microbes, biodegradable waste is converted to biogas in bio-degradation plants.
- Vermicomposting: Transforming the organic waste into nutrient-rich manure by degradation through worms.

4.5.8 Sources of Waste

Construction waste – waste coming from construction or demolition of buildings.

Commercial waste from commercial enterprises

Household waste- garbage from households is either organic or inorganic

Medical or clinical waste -wastes from the medical facilities- like used needles and syringes, surgical wastes, blood, wound dressing

Agricultural waste- Waste generated by agricultural activities that include empty pesticide containers, old silage packages, obsolete medicines, used tires, extra milk, cocoa pods, wheat husks, chemical fertilizers, etc.

Industrial waste-The waste from manufacturing and processing industries like cement plants, chemical plants, textile, and power plants

Electronic waste-The defective, non-working electronic appliances are referred to as electronic waste. These are also called e-waste. Some e-waste (such as televisions) contains lead, mercury, and cadmium, which are harmful to humans and the environment

Mining waste- chemical gases emitted in mine blasting pollutes the environment. And the mining activity greatly alters the environment and nature.

Chemical waste-waste from the chemical substance is called chemical waste.

Radioactive waste: radioactive waste includes nuclear reactors, extraction of radioactive materials, and atomic explosions.

4.5.9 Sources of Pollution

All these above-mentioned waste also adds to environmental pollution. The contaminants that cause detrimental change to the environment are called pollution. It is one of the most serious problems faced by humanity and other life forms on our planet. The earth's physical and biological components have been affected to such an extent that normal environmental processes could not be carried out properly

4.5.10 Types of Pollution

Types of Pollution	Detail/Pollutants involved
Air pollution	<ul style="list-style-type: none"> ▪ Solid particles and gases mixed in the air cause air pollution ▪ Pollutants: emissions from the car, factories emitting chemical dust, and pollen
Water pollution	<ul style="list-style-type: none"> ▪ Water gets polluted when toxic substances enter water bodies such as lakes, rivers, oceans, and so on. They get dissolved in it and cause it unfit for consumption. ▪ Pollutants that contaminate the water are discharges of untreated sewage, and chemical contaminants, release of waste and contaminants into surface
Soil pollution	<ul style="list-style-type: none"> ▪ It is the presence of toxic chemicals (pollutants or contaminants) in soil, in high enough concentrations to pose a risk to human health and/or the ecosystem ▪ Sources of soil pollution include metals, inorganic ions, and salts (e.g. phosphates, carbonates, sulfates, nitrates),
Noise pollution	<ul style="list-style-type: none"> ▪ Noise pollution happens when the sound coming from planes, industry or other sources reaches harmful levels ▪ Underwater noise pollution coming from ships has been shown to upset whales' navigation systems and kill other species that depend on the natural underwater world
Light pollution	<ul style="list-style-type: none"> ▪ Light pollution is the excess amount of light in the night sky. ▪ Light pollution, also called photo pollution, is almost always found in urban areas. ▪ Light pollution can disrupt ecosystems by confusing the distinction between night and day.

UNIT 4.6: Organizations' focus on the Greening of jobs

Unit Objectives

At the end of this unit, you will be able to:

- Understand the concept of ESG
- Explain the different factors of ESG

4.6.1 What is ESG?

The ESG is the short form of environmental, social, and governance. ESG guidelines are used to evaluate businesses on how well they control emissions, governance, human rights, and other factors of their business.

Several companies audit these companies for ESG compliance. They will let the companies know how well the ESG policies are implemented in their company hat let companies know how well their ESG policy is working.

Every business enterprise is deeply intertwined with Environmental, Social, and Governance (ESG) issues. ESG has been looked at seriously by the corporate, government establishments and stakeholders.

ESG is important as it creates high value, drives long-term returns, and global stakeholders are paying attention to the topic.

ESG is said to have created high value, and focuses on long-term returns, and stakeholders are focusing more on this concept.

4.6.2 Factors of ESG

Several factors are used to determine how well a business is doing in maintaining its ESG policies. For creating the ESG Policy, thorough knowledge of these factors are critical.

The factors are divided into three categories; environmental, social, and governance. Knowing about these factors come a long way in designing the effective ESG policy.

Environmental

Environmental factors relate to a business's impact on the environment. Examples include:

- Usage of renewable energy
- Effective waste management
- Policies for protecting and preserving the environment

Social

Social factors relate to the people of the organization. How they are treated in the organization is what it focuses on. The major entities are the stakeholders, employees, and customers. Examples include:

- diversity and inclusion
- proper work conditions and labor standards
- relationships with the community

Governance

Governance factors relate to the company policies for effectively running it. They include:

- tax strategies
- structure of the company
- relationship with stakeholders
- payments to the employees and CEO

Every factor is important and matters a lot to the overall rating of the company in ESG compliance. Ignoring one aspect in favor of another can affect the rating and in turn the reputation of the company.

The companies make a clear communication about these policies to all the employees, and to the public, they should mention what their various activities are that will protect the environment, people, and the governing factors.

Exercise

1. ESG stand for _____, _____, _____.
2. Governance factors include _____, _____, _____, _____.
3. The three causes of air pollution _____, _____ and _____.
4. Mining waste includes _____.
5. Landfill is a _____.
6. _____, _____ and _____ coloured bins are used for disposing the waste.
7. The plastics cans are trashed in _____ coloured bin.
8. _____, _____ and _____ are considered as e-Waste
9. _____ part of e-waste is recycled and used again
10. E-waste is made up of hazardous substances like _____, _____, _____ and _____



5. Communication and Interpersonal Skills



- Unit 5.1 – Discuss how to communicate effectively and develop interpersonal skills
- Unit 5.2 – Explain the importance of developing sensitivity towards Differently abled people



Key Learning Outcomes

At the end of this module, you would be able to

- Understand what is communication and the importance of communication in the workplace
- Understand effective communication and communicate effectively for success
- Discuss types of communication - verbal and non-verbal
- Communicate at workplace
- Communicate effectively with superiors
- Communicate effectively with colleagues and customers using different modes viz face-to face, telephonic and email communication
- Understand the hurdles for effective communication
- Conduct professionally at work place
- Respect differences in gender and ability
- Communicate effectively with person with disabilities
- Respect for disabled people

UNIT 5.1: Interaction with supervisor, peers and customers and differently abled people

Unit Objectives

At the end of this unit, you will be able to:

1. Understand the importance of communication
2. Understand types of communication

5.1.1 Why is Communication Important?

- Communication Skills are more important than ever, for all fields of endeavor.
- Whatever the role a person is holding in the organization, having a firm grasp of effective communication will undoubtedly be a key role in the individual's as well as the organization's success
- Oftentimes, people with excellent technical skills don't get promoted to higher roles because of their inability to communicate effectively
- Hence one fundamental skill everybody should be proficient along with the technical skill is **Communication Skills**
- Effective communication help us to build rapport with the customer both internal and external and help us *resolve issues* and *conflicts* easily and quickly.

5.1.2 What is Communication?

- Communication is the process of sending and receiving information among people.
- It is imparting or exchanging of information by speaking, writing, or using some other medium
- The purpose of communication is to convey your thoughts and opinions to others.
- Communication is said to be successful only when both the sender and the receiver perceive it in the same way.
- In your personal and professional life, you would be communicating with the following people-
 - Colleagues
 - Customers
 - Friends
 - Parents
 - Relatives

5.1.3 Effective Communication

Effective communication is the process of delivering messages to a target audience in a way that guarantees satisfactory reception and understanding. If the communication is effective, both the sender and the receiver will share the same information at the end of the process. Effective communication is about more than just exchanging information. It's about understanding the emotion and intentions behind the information



Click this QR code to access the video on Types of communication

5.1.4 Effective Communication for Success

Effective Communication is critical to a business's success. From top to bottom, among colleagues, from subordinates to superiors, and from the organization to the outside, several messages are delivered daily. All the people must communicate these messages properly. Content, language, remarks, tone of voice, and non-verbal communication are elements that affect the effectiveness of messages

Clear and effective communication will

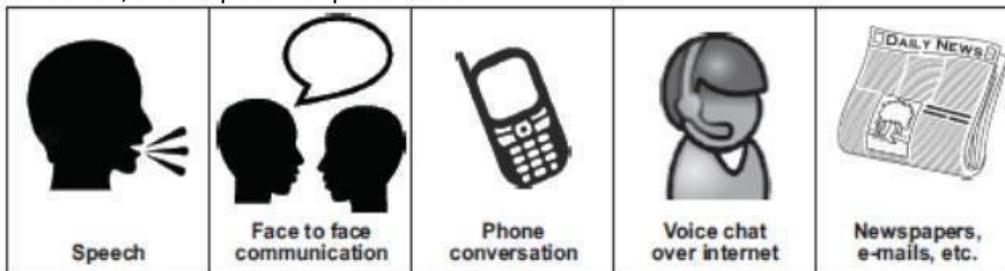
1. Increase customer satisfaction
2. Bring more business to the company
3. Increase productivity among team members

5.1.5 Types of Communication

Communication has been divided into two types:-

- Verbal Communication
- Non-Verbal Communication

Verbal communication takes place when people exchange words with each other, either spoken or written. It includes the **choice and use of words and language to convey a message**. Examples of verbal communication are face-to-face conversation, telephonic conversation, and a speech or presentation.



5.1.5a Ways of Verbal Communication



Click/Scan this QR code to view the video on Effective Telephone Communication

Speech has certain characteristics which will affect the message that is being spoken:

- Volume – loud speech may sound bossy, very quiet speech cannot be heard.
- Tone – use warm tones without sounding over-friendly. Cool tones are very unwelcoming.
- Pace – fast speech is not easy to follow. Speak at a reasonable pace so that the other person has a chance to understand.

Correct body language also plays an important role in effective communication. For example, a warm smile accompanying 'Have a nice day' or looking directly at the person who is being spoken to give a positive image of the organisation.

Non –Verbal Communication

Non-verbal communication includes the overall body language of a person. There are two kinds of non-verbal communication:

1. **Signs and symbols:** for example, pictures, or notices, or signboards, or even photographs, sketches and paintings. Here are some examples of different signs and symbols:



Fig 5.1.5a Non-Verbal Communication

2. **Gestures and expressions:** hand signs, facial expressions, body postures or body language that can help to convey a message. You can learn to communicate better with others if you learn to recognise some of these.

Facial expressions - A smile or a frown

Gestures - movements of hands and body to help explain or emphasize the verbal message

Body posture - how we stand or sit. Maintain a good posture. When you are talking to a colleague or guest, remember to stand up straight, look professional and be positive. Do not slouch, lean against something or fidget with equipment or your hands.

Orientation - whether we face the other person or turn away

Eye contact - whether we look at the other person and for how long

Proximity - the distance we are from a person

Head nods - for encouragement, indication of agreement or disagreement

Appearance - dress and grooming

Non-verbal aspects of speech - tone and pitch of voice



Fig 5.1.5b Gestures and Expressions

These non-verbal clues are important as they can be used to improve the quality of communication. They can be used to reinforce any verbal communication; for example, leaning forward and looking at the person you are speaking to and smiling naturally. Your expressions, posture and appearance must be appropriate and should tell the guest that you are professional, competent and willing to help.

Communication takes place in mainly three different ways:

1. **Talking and listening** face-to-face and on the telephone
2. **Writing and reading** messages, forms, report etc.
3. **Through body language** including facial expression, gestures, eye contact or looking away/looking at the floor and how close you are to a person.

5.1.6 Communication at workplace

In every situation, while interacting with people, we make use of both verbal and Non-Verbal Communication. It is the key to the success of any organization. Be it communication with customers, supervisors, or peers. In today's scenario having technical skills alone is not enough to get the work done, but communication skill is also equally important. Completing the task must require the support of the whole team, and without proper communication, it cannot happen. Effective Communication helps managers to perform their jobs and responsibilities and it serves as a foundation for planning.



Click/Scan this QR code to view the video communication with customer and colleagues

5.1.7 Communication with supervisors

Effective and open communication within a team will build a common purpose among team members that will allow them to reach their goals. Team leaders know that group communication enhances organizational efficiency. The team members should always follow the communication guidelines. Some of the points to remember while interacting with supervisors:

1. Be aware of the communication guidelines of the organization.
2. Understand and interpret clearly, the work requirements from the supervisor.
3. Keep the supervisor informed about the progress of the task assigned.
4. Participate in all the discussions which call for decision-making, and provide facts and figures
5. Give/ accept suggestions during the discussions.
6. Accept the feedback positively and work towards rectifying errors if any. Make sure the same mistakes are not repeated.

5.1.8 Communication with colleagues & customers

- The main responsibility of a Customer Care Executive is to handle customers' concerns.
- Interaction with colleagues/peers is also equally essential and it enhances productivity in the workplace.
- Be polite in speaking to your peers at the office.
- Value other people's time as much as you value your own.
- Before you begin discussing something, ask your coworker if it is the right time to talk, and give a true picture of how much time you expect to take. Always start the conversation
- Communication with colleagues/customers can be through face-to-face, telephonic, or email.
- Keeping a few points in mind while communicating will make the interaction pleasant and fruitful.

5.1.9 Face-to-face Communication

This is an important medium of oral communication, wherein two or more persons talk to each other and see each other physically. This form of communication is direct and straight.

Things to remember while you are communicating face to face

1. Adjust the tone of voice, don't be too loud
2. Make eye contact
3. Use appropriate language
4. Maintain adequate distance
5. Acknowledge, nod during interaction
6. Use appropriate non-verbal gestures to communicate with persons with disabilities

Benefits of face-to-face communication

1. Instant feedback
2. Information conveyed clearly

5.1.10 Telephonic Communication

Another widely adopted mode of communication is through the telephone. This is the person-to-person conversation where nobody sees others but hears each other and interacts instantly. Nowadays mobile phones are becoming more popular along with landlines as a mechanical media of oral communication.

The following suggestions are recommended to follow while making telephone calls-

1. Make the call at the appropriate time
2. Provide details about your identity like name, company, department, etc.
3. Discuss the purpose of the call
4. Think about the tone of your voice
5. Listen carefully
6. Speak clearly
7. If you don't understand something, ask
8. Use please, thank you, sorry wherever necessary
9. Follow the organization's policies and procedures while interacting on the telephone

5.1.11 Email Communication

Email or Electronic mail is a method of exchanging messages using electronic media. The official or business communication between colleagues or inter-department communication usually happens through email. The advantage of email is you can send communication to many people at the same time.

Points to remember in email communication

1. Be clear and concise
2. Keep the content short and to the point
3. Avoid using jargon and short forms
4. Re-read the message, before sending it for grammar and spelling mistakes
5. The subject line should describe the main mail content
6. Use readable font size (don't keep it too small)
7. Add signature at the bottom of the mail body
8. Check the attachments for viruses before sending

5.1.12 Importance of timely completion of tasks

Time is a major factor that evaluates **the success or failure of a project**. Even when the whole team has done a wonderful job and produced high-quality results, with half the cost allotted to the project, everything will be a waste if it was not delivered on time. Any deviation from the timeline will call for a penalty and sometimes may result in losing the project and eventually the customer. So adhering to the timeline is important when it comes to any organization who are into products and services.

Benefits of adhering to timelines:

1. Increased and improved customer satisfaction
2. Increased productivity and efficiency of the individual
3. Team feels motivated
4. Sense of adhering to the SLA's and Standard Operating Procedures
5. Shows the commitment toward the work and the organization
6. Good word of mouth from the customers

5.1.13 Standard Operating Procedure

A **Standard Operating Procedure (SOP)** is a standardized process that outlines a set of detailed instructions to help workers perform complex tasks properly and safely. The main objective of standard operating procedures is to develop an effective quality system and comply with industry-specific regulations and standards. Failure to follow SOPs can cause significant errors in operations and services.

For a mobile repairing center, the SOP defines the different process of operations, namely handling customer, repairs, sales and interaction among the staff within the repair center.

SOP also clearly defines the responsibility of each and every designated person in the organisation and what is expected from them. It further defines what the various levels of engineers will handle with respect to the handsets coming for repair.

The escalation matrix specifies how the different levels escalate the issue to the next level and adhere to the timelines for repair and communication to the customer.

SOPs are created keeping in mind the customer satisfaction as a main motive.

Each and every person in the organisation is expected to read the SOP thoroughly and work accordingly. Because every customer when they go for purchasing a product, one of the main things they see is the post-sales Support. If they find the brands deliver good service support then they don't mind even spending few extra moneys.

5.1.14 Escalation Matrix

Escalation matrix is made up of several levels of contact based on the specific problem at hand. This is being followed by all who are working on that product and have to adhere to the service guidelines. And the problem has to be closed at a minimum turnaround time, and for any reason the repair is taking time proper reason has to be mentioned and notified to all the people concerned including the customer.

5.1.15 Escalation Mechanism

Customer service is a very important aspect of a typical service industry. Giving committed service to customers every time and on time is very crucial for the success of the brand. In recent times, customers do research on how the after-sales support of a product is, and based on that rating they will decide which brand to buy. If the customer service is not good, they will not go for that product even though the product is very good. Hence customer service is a second important aspect of a product and services organization.

The resolution time matters a lot, all these technology has become indispensable for business and people. Their business cannot function without that. Hence too much downtime is also not good. Once the complaint is raised the service center allocates it to the technicians who are trained to handle any kind of technical issues. The L1 support level looks into the problem and try to resolve it. If it's beyond their area of resolution the same is escalated to the next level. Every organization has **Standard Operating Procedures** clearly state the workflow for the customer service and Technical support for their business. Every individual working there must be aware of the same and adhere to the deadline for faster service and enriched customer satisfaction.

5.1.16 Escalation through CRM

Customer Relationship Management is a software, through which most of these companies who are into customer service, manage their customers. The customer details are entered in the system and also the services which are logged against a particular customer. This is the automated system, which takes a particular action after a period of time. For example, if a service request is assigned to an engineer for rectifying a problem of a client, and if the engineer does not update the status of the service in the system within a specified period of time, the problem is automatically escalated to the next level for resolution. Then the new engineer who is responsible for resolving pick it and try to find a solution. This system helps to maintain a track of a particular problem and the current status which will help the organization in effectively managing the customer queries. The complete escalation route is mentioned in the SOP and the same is implemented through the CRM software. This eases the manual escalation procedure which is time consuming and slow.

5.1.17 Escalation issues at work

Whether an issue arises among team members or with customers, sometimes the severity of the circumstance requires an escalation to management. Understanding how to approach an escalation can help you better find a solution when conflicts arise. We explore what it means to escalate an issue in the workplace and provide tips for how to do so successfully.

What does it mean to escalate an issue at work?

Escalating an issue in the workplace is the process of bypassing those involved by contacting upper/senior management. It involves raising awareness of the context to the right people in order to resolve a challenging situation. Typically, escalation occurs when there is an issue that the current staff working on the problem can't resolve and requires assistance from those with more authority and resources

When should you escalate an issue at work?

Deciding when to escalate an issue depends on the amount of risk it can bring to the company. Because escalating an issue can lead to difficult meetings and cause disruptions in work, you should reserve them for issues that truly require escalation. You can often avoid escalating an issue by solving the problem with the individual first.

However, some issues require support from those with higher authority. Consider escalating an issue at work when:

You have already tried other strategies but that did not work.

Resolving may incur additional cost to the company or the customer, while rectifying the problem.

Because of the non-availability of certain parts, the repair work is taking longer than usual.

The engineer broke another part while repairing a part. So escalation is required to get the approval to replace the broken part by the company.

5.1.18 Hurdles for Effective Communication

Following are factors contribute to communication not being effective.

Stress and out-of-control emotion. When you are stressed or emotionally disturbed, you're more likely to misread other people and send confusing non-verbal signals. Calm down before continuing the conversation.

Lack of focus. You can't communicate effectively when you're multitasking. If you're checking your phone, planning what you're going to say next, or daydreaming, you're almost certain to miss nonverbal cues in the conversation. To communicate effectively, you need to avoid distractions and stay focused.

Inconsistent body language. Nonverbal communication should support what is being said, not contradict it. If you say one thing, but your body language says something else, your listener will likely feel that you're being dishonest. For example, you can't say "yes" while shaking your head no.

Negative body language. If you disagree with or dislike what's being said, you might use negative body language to ignore the other person's message, such as crossing your arms, avoiding eye contact, or tapping your feet. You don't have to agree with, or even like what's being said, but to communicate effectively and not put the other person on the defensive, it's important to avoid sending negative signals.

5.1.19 Professional Conduct

There are six basic rules to be followed for professional conduct:

- **Be on time:** Being late impedes a company's operations and demonstrates a lack of consideration of the time concerns of others. If you are constantly late for work, meetings, or are always late with your reports and other tasks; it demonstrates to others that you are probably not executive material because you disregard the value of time.
- **Be discreet:** Keep company secrets such as new product designs, sales figures or any other confidences to yourself.
- **Be courteous, pleasant, and positive:** No matter how demanding your clients, customers, co-workers or employees might be; always remain upbeat and positive. Projecting a positive company image has the same effect.
- **Be concerned with others, not just yourself:** Finding out a customer or client's point of view naturally helps you get ahead in any industry. Concern for others should include your superiors, co-workers and subordinates as well.
- **Dress appropriately:** Dress to be comfortable in your environment. Dressing poorly or too casually does not convey a good image, neither does overdressing, which breeds suspicion and mistrust, and will be seen as inappropriate.
- **Use proper written and spoken language:** People who can express themselves clearly are at an advantage. This goes beyond using good grammar, proper spelling, and appropriate diction in all your communications; you should also speak and write to the point.

Unit 5.2: Explain the importance of developing sensitivity towards disabled

Unit Objectives

At the end of the unit, you will be able to

- Respect differences in gender and ability
- Communicate effectively with person with disabilities
- Respect people with disability at work

5.2.1 Communication with disabled person

A **disability** is any condition that makes it more difficult for a person to do certain tasks or interact with the people around them (socially or materially). These conditions, or defects, may be cognitive, developmental, intellectual, mental, physical, sensory, or a combination of multiple conditions. Defects may be present from birth or can be acquired during a person's lifetime. Often, disabled people are excluded from full participation in any activity." But things are changing, every organization has allotted some percentage of employees from this section of the society. They are also allowed to exhibit their skills in a few jobs which they can perform without putting their life at risk

General tips for communication with disabled people

Keep these points in mind while interacting with people with a hearing problem

- Draw the person's attention before you speak. Give a gentle tap on their shoulder, a wave of some other visual signal to the person's attention
- Stand in front of the person and maintain eye contact
- Don't cover their mouth while talking. They can figure out what is being said by just looking at the lip movement
- Speak at a normal pace don't speak fast or slow
- Choose the words wisely
- Use short sentence
- Be gentle while speaking do not raise the tone

5.2.2. Communicating with people with a hearing impairment

Keep these points in mind while interacting with people with a hearing problem

- Draw the person's attention before you speak. Give a gentle tap on their shoulder, a wave of some other visual signal to the person's attention
- Stand in front of the person and maintain eye contact
- Don't cover the mouth while talking. They can figure out what is being said by just looking at the lip movement
- Speak at a normal pace don't speak fast or slow
- Choose the words wisely
- Use short sentence

5.2.3. Respect people with disability

Learn the proper way to act and speak around someone with a disability.

- Do not use offensive or derogatory words like 'handicapped', 'crippled', and retarded etc.
- Don't criticize or blame them. Don't shout at them or use abusive language
- Talk slowly with a low tone. Pause while talking
- Avoid excessive whispering, joking and laughing unnecessarily
- Assuming things about them or their situation.
- Don't make jokes about their condition or be sarcastic
- Don't look down upon them because of their disability
- Appreciate them for their efforts and work, and motivate them to perform better

5.2.4 Safety at workplace for people with disability

Disabilities of all types affect employees and can pose various mental or physical challenges. In many situations, a disability may impact the amount of time it takes for an employee to complete a task or get from one part of a facility to another. Some disabilities may be known while others remain unknown to an employer.

Health and safety legislation should not prevent disabled people from finding or staying in employment so it should not be used as an excuse to justify discrimination against them. Disabled people and those with health conditions, including mental health conditions, should be given the opportunity to both get into and stay in work.

Responsibilities of an employer towards disabled people

The employer is responsible for the health, safety and welfare of all of their employees, whether they have a disability or not. Disability is not always obvious so one might not realise a worker is disabled or they might choose not to tell you, particularly if their disability has no impact on their ability to do their job. Workers do not have to tell anybody unless they have a disability that could foreseeably affect the safety of themselves or anyone else connected to their work. If they do not reveal and there are no obvious indicators of any disability, then the organization are not under any obligation to make workplace adjustments. Periodically, consult with the employees (whether directly or through their representatives) on issues relating to health and safety. These discussions reflect good safety practice because employees have day-to-day understanding of the job, so they are likely to have good ideas on keeping themselves and others safe.

5.2.5 Workplace adaptation for people with disability

Few changes in the workplace to make it a safe place for the disabled people will go a long way in the employee satisfaction for an organisation.

Workplace Adaptations

Workplace should be easily accessible for these people with special needs. One major compliance concern deals with accessibility. For example, if workplaces have been adjusted or created more accessible entrances and exits to their facilities, allowing more independence for persons in wheelchairs, would be a great idea. Other subtle changes may include the width of bathroom stalls, hand rails inside the stalls and long ramps instead of stairs. The path of travel that employees take should never be obstructed; there should be no barriers to prevent someone from getting to safety in an emergency.

Workstations easily can be adapted to follow this universal design. Many companies now use slide out keyboard trays and monitors on swinging arms to allow employees to adjust to their needs. Desks can accommodate wheelchairs in place of regular chairs, and general work spaces can be lowered to allow easier access. The main goal is to remove all barriers and allow everyone to concentrate more on completing their tasks.

The biggest challenge with universal design is accommodating the multitude of challenges that different disabilities present. Not all disabilities are the same, and not all will present the same challenges for employees. Some employees may have issues with their right hand while others have issues with their left. For some, it may involve not being able to stand or sit. Some may need low lighting, while others need bright lighting. Designing a facility to accommodate all is always going to be a challenge.

Complying with government guidelines can be more difficult in regards to employees with disabilities. This difficulty lies with ensuring that employees are aware of all hazards in the workplace. Multiple disabilities will create multiple reasons that may keep employees from recognizing hazards. Employees with impaired vision, for example, must have other means of identifying hazards. This may be remedied with audible alarms or touch-activated devices that warn employees not to go in an area. Other employees may have difficulties reading and may benefit from shapes or colors to further identify hazardous areas.

For workers who lack hearing ability, employers can utilize signs to demonstrate hazards or use flashing strobes to identify when employees need to evacuate an area and head to safety. Every organization has to make few adaptations in order to make it a better place to work even for people with dis-ability. It should provide an environment where they feel they are safe and can carry out their work rather than worrying about their safety.

Exercise



1. What are the three points you will focus on when you talk to people face to face?

Fill in the blanks

1. Before sending the mail it's important to check the _____ and of the content.
2. When you interact through phone, provide your identity details like , _____ and _____
3. Add your _____ at the bottom of your mail.
4. The Customer Care Executive is mainly responsible for handling _____.

Notes



A large rectangular area with a thin orange border, containing 18 horizontal lines for writing notes.

Chapter No	Unit No	Topic Name	Page No	QR Code
1	1.3	Role of a Customer Care Executive (Repair Center)	18	 <p>Click/Scan this QR code to view the video on Roles and Responsibilities of a CCE-Repair Center</p>
2	1.5	Basics of a Handset	24	 <p>Click/Scan this QR code to view the video on different parts of a Smartphone</p>
3	3.1	Initial Diagnostic and Troubleshooting	69	 <p>Click/Scan this QR code to view the video on changing smartphone battery stepwise</p>
4	3.1	Initial Diagnostic and Troubleshooting	70	 <p>Click/Scan this QR code to view the video on changing cracked screen of a smartphone</p>
5	3.1	Initial Diagnostic and Troubleshooting	83	 <p>Click/Scan this QR code to view the video on changing defective camera in a smartphone</p>

6	4.3	Importance of safe working practices	119	 <p>Click/Scan this QR code to view the video on hand washing techniques</p>
7	4.3	Importance of safe working practices	120	 <p>Click/Scan this QR code to view the video First Aid at work place</p>
8	4.3	Importance of safe working practices	120	 <p>Click/Scan this QR code to view the video on CPR Techniques</p>
9	4.5	Waste Management	127	 <p>Click/Scan this QR code to view the video on Waste Management</p>
10	5.1	Types of Communication	138	 <p>Click/Scan this QR code to view the video on Types of Communication</p>
11	5.1	Types of Communication	139	 <p>Click/Scan this QR code to view the video on Effective Telephone Communication</p>
12	5.1	Types of Communication	141	 <p>Click/Scan this QR code to view the video communication with customer and colleagues</p>

Chapter No	Topic Name	QR Code
12	Employability Skills	 <p data-bbox="1010 539 1477 600">Click/Scan the QR code to access e-Book on Employability Skills</p>



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