

**MAA OMWATI DEGREE COLLEGE HASSANPUR
(PALWAL)**

NOTES

B.Com 2nd SEM

DIGITAL FLUENCY IN BUSINESS

Unit-1

Data: Definition and Meaning


Data refers to raw, unorganized facts and figures without any context. It can be numbers, text, images, audio, or video that do not convey any meaning until processed.

- **Examples of Data:**
 - Temperature readings like "35, 36, 38"
 - Survey answers such as "Yes", "No", "Maybe"
 - Words: "John", "Math", "90", "A+"

Information: Definition and Meaning

Information is processed, structured, and meaningful data that is useful for decision-making.

- **Examples:**
 - “The average temperature this week is 36°C” (processed data)
 - “John scored an A+ in Math” (interpreted student performance)

 **Data becomes Information** when it is organized and contextualized to have meaning and relevance.

Data Processing

Data processing is the transformation of raw data into meaningful information through a sequence of operations.

Stages of Data Processing:

1. **Collection** – Gathering raw data from various sources.
 2. **Preparation** – Cleaning and validating the data.
 3. **Input** – Entering the data into the system.
 4. **Processing** – Performing computations or transformations.
 5. **Storage** – Saving the data or information for future use.
 6. **Output** – Presenting the processed information.
 7. **Distribution** – Delivering information to end-users.
-

◆ Levels or Types of Information

1. Strategic Information

- Used by top management for long-term planning.
- Example: Market trends, forecasts, annual reports.

2. Tactical Information

- Used by middle management to make medium-term decisions.
- Example: Monthly sales performance, production reports.

3. Operational Information

- Used by lower-level staff for day-to-day operations.
 - Example: Employee schedules, inventory levels.
-

◆ Uses of Information

- **Decision Making:** Helps in choosing the best course of action.
- **Planning and Forecasting:** Predicting future trends.
- **Performance Monitoring:** Evaluating staff or system efficiency.
- **Problem Solving:** Identifying and addressing issues.

- **Communication:** Sharing knowledge within or outside the organization.
-

◆ Business Data Processing Cycle

The **Business Data Processing Cycle** refers to the repetitive sequence of steps involved in handling data to support business operations.

📌 Steps in the Cycle:

1. **Data Collection:** Acquiring data from business activities (sales, HR, inventory).
 2. **Data Input:** Entering the collected data into a system.
 3. **Data Processing:** Sorting, calculating, summarizing the data.
 4. **Data Storage:** Saving processed data for later use.
 5. **Data Output:** Generating reports, invoices, dashboards.
 6. **Data Distribution:** Sharing the results with stakeholders.
 7. **Feedback & Updates:** Adjusting processes based on new insights.
-

◆ Communication

◆ Basic Elements of a Communication System

A communication system enables the transfer of data between two or more devices.

📌 Basic Elements:

1. **Sender** – The device/person who initiates the communication.
2. **Message** – The actual data/information to be communicated.

3. **Medium** – The physical path through which the message travels.
 4. **Receiver** – The device/person who receives the message.
 5. **Feedback** – A response confirming the receipt or understanding of the message.
-

◆ Forms of Data Transmission

- **Analog Transmission:** Continuous signal representing physical measurements (e.g., voice, temperature).
 - **Digital Transmission:** Data sent in binary format (1s and 0s), used in computers and digital devices.
-

◆ Data Transmission Speed

Measured in **bits per second (bps)**.

- **Kilobits per second (Kbps)** = 1,000 bps
- **Megabits per second (Mbps)** = 1,000,000 bps
- **Gigabits per second (Gbps)** = 1,000,000,000 bps

Factors affecting speed include:

- Type of medium
 - Distance
 - Noise/interference
 - Bandwidth availability
-

◆ Modes of Data Transmission

- ✓ 1. **Simplex**

- One-way communication only.
- Example: TV broadcasting.

✓ 2. Half-Duplex

- Two-way communication, but only one direction at a time.
- Example: Walkie-talkies.

✓ 3. Full-Duplex

- Two-way communication simultaneously.
- Example: Telephone.

◆ Analog vs. Digital Data Transmission

Feature	Analog	Digital
Signal Type	Continuous	Discrete (Binary)
Transmission	Voice, music	Data, text, video
Noise Resistance	Less	More
Bandwidth Usage	Higher	Efficient

◆ Data Transmission Media

✓ 1. Wired (Guided Media)

- **Twisted Pair Cables:** Telephone lines, LANs
- **Coaxial Cables:** TV cables
- **Fiber Optic Cables:** High-speed internet, long-distance communication

✓ 2. Wireless (Unguided Media)

- **Radio Waves:** Short-distance wireless communication.
 - **Microwaves:** Used in mobile networks and satellites.
 - **Infrared:** Remote control systems.
 - **Satellite Communication:** Long-distance global communication.
-

◆ Microwave Transmission

- Uses high-frequency radio waves.
 - Line-of-sight communication.
 - Widely used in telecommunication towers and satellite communication.
-

◆ Fiber Optics

- Uses light pulses to transmit data.
 - Extremely high speed and bandwidth.
 - Immune to electromagnetic interference.
 - Common in internet backbones and modern broadband.
-

◆ Communication Satellites

- Orbit Earth and relay communication signals.
- Used for:
 - TV broadcasting
 - Weather forecasting
 - GPS
 - Military and research

◆ Computer Network

📌 Definition

A **Computer Network** is a collection of interconnected computers and devices that share data, resources, and applications.

◆ Advantages of Networking

- **Resource Sharing:** Printers, storage, and internet.
 - **File Sharing:** Easy sharing of files and documents.
 - **Centralized Data Management:** Simplified backup and security.
 - **Remote Access:** Access systems from different locations.
 - **Cost-Efficiency:** Reduces hardware and software redundancy.
 - **Scalability:** Easy to add new devices.
-

◆ Types of Computer Networks

✓ 1. LAN (Local Area Network)

- Covers a small geographical area (e.g., an office).
- High-speed and low latency.
- Example: School or office computer lab.

✓ 2. MAN (Metropolitan Area Network)

- Covers a city or campus.
- Interconnects multiple LANs.

- Example: University network.

✓ 3. WAN (Wide Area Network)

- Covers a large geographical area (country or globe).
- Uses leased telecommunication lines.
- Example: The Internet.

✓ 4. Public Network

- Open for public use (e.g., Internet).
- Less secure.
- Shared infrastructure.

✓ 5. Private Network

- Restricted access for specific users.
 - Secure and controlled.
 - Used by companies and governments.
-

◆ Network Topologies

A topology is the arrangement of elements in a network.

✓ 1. Bus Topology

- All devices connected to a single cable.
- Simple but failure in cable disrupts network.

✓ 2. Star Topology

- Devices connected to a central hub or switch.
- Easy to manage and scalable.

✓ 3. Ring Topology

- Each device connects to two others forming a ring.
- Data travels in one direction.

✓ 4. Mesh Topology

- Every device is connected to every other device.
- High redundancy and fault tolerance.

✓ 5. Tree Topology

- Hierarchical star-bus hybrid.
- Scalable for large networks.

Unit-2

Meaning of E-Commerce

E-commerce (Electronic Commerce) refers to the buying and selling of goods and services using electronic systems, primarily the internet. It involves online transactions between businesses, consumers, and governments, where information and payments are exchanged digitally.

- In simpler terms, **E-Commerce** means **conducting commercial transactions over electronic networks**, particularly the Internet.
-

Features of E-Commerce

1. **Global Reach:** E-commerce enables businesses to reach customers across the world 24/7.
2. **Digital Transactions:** Everything from product display to payment is handled digitally.
3. **Interactivity:** Users can interact with websites, chatbots, and customer service.
4. **Personalization:** Recommendations are based on user preferences and behavior.
5. **Automation:** Inventory, billing, and logistics are often automated.
6. **Accessibility:** Available through various devices—mobile, laptop, tablets.
7. **Reduced Costs:** Lower operational costs due to reduced need for physical infrastructure.

8. **Paperless Transactions:** All transactions are digitally documented.
 9. **Data Analytics:** Businesses can track and analyze customer behavior in real-time.
-

Benefits of E-Commerce

1. **Convenience:** Customers can shop anytime, anywhere.
 2. **Wider Product Range:** E-commerce platforms often offer more products than physical stores.
 3. **Price Comparisons:** Consumers can easily compare prices and features.
 4. **Time Saving:** Reduces time for travel, waiting, and checkout.
 5. **Lower Costs for Businesses:** No physical stores mean reduced overhead costs.
 6. **Customer Data Insights:** Helps in better targeting through analytics.
 7. **Scalability:** Easy to scale up or down without major infrastructure changes.
 8. **Faster Transactions:** Real-time payments and order confirmations.
 9. **Paperless Workflow:** Environmentally friendly and efficient.
 10. **Global Expansion:** Sell products internationally with minimal extra cost.
-

E-Commerce vs Traditional Commerce

Aspect	E-Commerce	Traditional Commerce
Accessibility	24/7, Global	Limited by time and location
Cost	Lower setup and operation costs	Higher costs for rent, utilities, staff
Inventory Management	Often automated	Manual and physical
Interaction	Digital (chat, reviews)	Physical (face-to-face)
Transaction Speed	Instantaneous	Time-consuming
Reach	Global	Local or regional
Marketing	Digital channels (SEO, social media)	Print, media, local ads
Personalization	Algorithm-based recommendations	Limited personal service
Delivery	Needs logistics partners	Immediate handover
Customer Feedback	Quick and visible	Limited or private

Need for E-Commerce

- Growing internet penetration and smartphone usage.
- Demand for convenience and fast services.
- COVID-19 accelerated digital adoption.
- Desire for digital payments and contactless transactions.

- Expansion of small businesses to global markets.
 - Integration with logistics and payment gateways.
 - Competitive edge over physical-only businesses.
-

Elements of E-Commerce

1. **Website or Online Store:** The digital storefront.
 2. **Product Catalog:** List of items for sale with details.
 3. **Shopping Cart:** Temporary storage of selected items.
 4. **Payment Gateway:** Secure digital payment processing.
 5. **Logistics and Delivery System:** Ensures timely delivery.
 6. **Customer Support:** Chat, FAQs, ticketing systems.
 7. **Security Protocols:** SSL, HTTPS, firewalls, encryption.
 8. **Marketing Tools:** SEO, email marketing, ads.
 9. **User Accounts:** Personalized dashboards for users.
-

Applications of E-Commerce

- **Retail and Wholesale**
- **Online Banking**
- **Travel and Tourism Booking**
- **Digital Content Delivery**
- **Online Education and E-learning**
- **Stock and Share Trading**
- **Real Estate Portals**
- **Food and Grocery Delivery**

- **Online Auctions (eBay, etc.)**
 - **Healthcare and Telemedicine**
-

Types of E-Commerce Systems

1. B2B (Business to Business)

- Transactions between businesses.
- Example: Manufacturer selling to wholesaler.

2. B2C (Business to Consumer)

- Most common model.
- Example: Amazon selling to customers.

3. C2C (Consumer to Consumer)

- Transactions between consumers.
- Example: OLX, eBay.

4. C2B (Consumer to Business)

- Consumers offer services/products to businesses.
- Example: Freelancers on Fiverr.

5. B2G (Business to Government)

- Businesses providing products/services to government.
- Example: Tendering systems.

6. G2C (Government to Citizen)

- Government services provided to citizens online.
 - Example: Online tax filing, digital ID systems.
-

E-Payment System

Meaning of E-Payment System

Electronic Payment (E-payment) is the process of paying for goods or services over digital platforms. It involves the transfer of payment information and funds electronically without the use of physical cash or cheques.

E-Payment vs Traditional Payment

Feature	E-Payment System	Traditional Payment System
Mode	Digital (online, cards, UPI)	Physical (cash, cheques)
Speed	Instant	Time-consuming
Accessibility	24/7	Limited by business hours
Security	Encrypted and password-protected	Depends on physical safety
Record Keeping	Automatic logs and receipts	Manual bookkeeping
Reach	Global	Limited
Contactless	Yes	No
Cost	Lower transaction cost	Handling and storage cost

Types of E-Payment Systems

1. Electronic Clearing Services (ECS)

- Used for bulk transactions like salaries, pensions.
- Debit and credit instructions processed electronically.

✓ 2. Credit and Debit Card Payments

- Credit Card: Borrowed money from the bank to pay.
- Debit Card: Direct deduction from the bank account.

✓ 3. Contactless Cards

- Use NFC (Near Field Communication).
- Tap-and-pay functionality for small transactions.

✓ 4. RuPay Cards

- India's indigenous card scheme by NPCI.
- Accepted widely for domestic transactions.

✓ 5. UPI (Unified Payments Interface)

- Real-time mobile payment system in India.
- Linked directly to bank accounts.
- Examples: PhonePe, Google Pay, Paytm.

✓ 6. RTGS (Real-Time Gross Settlement)

- High-value real-time transfer system.
- Minimum transaction limit usually INR 2 Lakhs.

✓ 7. NEFT (National Electronic Funds Transfer)

- Batch-processed fund transfer system.
- Settlements take place in half-hourly batches.

✓ 8. IMPS (Immediate Payment Service)

- Real-time fund transfer 24/7.

- Suitable for small transactions instantly.

✓ 9. E-Money (Digital Wallets)

- Prepaid digital balance.
 - Examples: Paytm Wallet, Amazon Pay, PayPal.
-

✓ Benefits of E-Payment Systems

- **Convenient and Fast**
 - **24/7 Accessibility**
 - **Lower Transaction Costs**
 - **Paperless**
 - **Global Acceptance**
 - **Improved Customer Satisfaction**
 - **Better Record Keeping**
 - **Encourages Financial Inclusion**
-

✗ Limitations of E-Payment Systems

- **Security Risks**
 - **Requires Internet Access**
 - **Digital Literacy Required**
 - **Technical Issues**
 - **Cyber Frauds and Scams**
 - **Dependency on Third-party Providers**
-

🔒 Threats to E-Payment Systems

- 1. Phishing Attacks**
 - 2. Identity Theft**
 - 3. Hacking and Malware**
 - 4. Data Breaches**
 - 5. Man-in-the-Middle Attacks**
 - 6. Denial of Service (DoS) Attacks**
-

Security Schemes in E-Payment

- 1. SSL Certificates (HTTPS)**
- 2. OTP Verification**
- 3. Encryption Techniques**
- 4. Two-Factor Authentication**
- 5. PCI-DSS Compliance**
- 6. Tokenization**
- 7. Biometric Verification (Face ID, Fingerprint)**
- 8. Secure Payment Gateways (e.g., Razorpay, Stripe)**

Unit-3

Introduction to Spreadsheets

A **spreadsheet** is a digital tool for organizing, analyzing, and storing data in tabular form. It consists of rows and columns that form cells where users can input data, perform calculations, and apply formatting and logic. Popular spreadsheet applications include:

- **Microsoft Excel**
- **Google Sheets**
- **LibreOffice Calc**

Spreadsheets are widely used in data analysis, finance, budgeting, statistics, inventory management, and administrative tasks.

Features of Spreadsheets

1. **Grid Layout:** Organized in rows and columns.
2. **Formulas and Functions:** Perform calculations automatically.
3. **Data Formatting:** Change the look of text and numbers.
4. **Charts and Graphs:** Visualize data.
5. **Sorting and Filtering:** Organize and search data efficiently.
6. **Cell Referencing:** Use data from other cells dynamically.
7. **Data Validation:** Limit types of input in cells.
8. **Auto Fill and Auto Complete:** Speeds up repetitive data entry.
9. **Multiple Worksheets:** Handle different datasets in one file.
10. **Conditional Formatting:** Automatically apply formatting based on cell values.

Components of a Worksheet

1. **Cell:** The basic unit where data is entered. Identified by its column letter and row number (e.g., A1).
2. **Row:** A horizontal series of cells identified by numbers (1, 2, 3...).
3. **Column:** A vertical series of cells identified by letters (A, B, C...).
4. **Worksheet:** A single spreadsheet page in a workbook.
5. **Workbook:** A file containing multiple worksheets.
6. **Formula Bar:** Displays the contents of the active cell, including formulas.
7. **Name Box:** Shows the address of the currently selected cell.
8. **Menu Bar / Ribbon:** Provides access to commands and tools (like formatting, charts, functions).
9. **Status Bar:** Shows information such as sum, average, and count when multiple cells are selected.
10. **Scroll Bars:** Navigate through the worksheet.

Working with Worksheets

◆ Entering Data in Cells

- Click on a cell and start typing to enter data.
- Press Enter to move to the cell below.
- Press Tab to move to the next cell on the right.

◆ Editing Cell Data

- Double-click a cell to edit.
- Or select the cell and type in the formula bar.

◆ Moving and Copying Cells

- **Cut (Ctrl+X):** Removes data from the original location.
- **Copy (Ctrl+C):** Copies data.
- **Paste (Ctrl+V):** Pastes data into selected location.

◆ Inserting/Deleting

- **Rows/Columns:** Right-click on a row/column number and select Insert/Delete.
 - **Cells:** Right-click a cell and choose insert/delete with shift options.
-

Basic Text and Cell Formatting

- **Font:** Change size, color, and style (bold, italic, underline).
 - **Cell Color:** Apply background colors.
 - **Alignment:** Align text left, center, right, top, or bottom.
 - **Borders:** Add cell borders.
 - **Wrap Text:** Display content on multiple lines.
 - **Merge Cells:** Combine multiple cells into one.
-

Basic Arithmetic Calculations

Formulas start with an equals sign =.

- =A1 + A2 — Adds values in A1 and A2.
- =B1 - B2 — Subtracts B2 from B1.
- =C1 * C2 — Multiplies C1 and C2.
- =D1 / D2 — Divides D1 by D2.

Use **cell referencing** to make formulas dynamic.

Special Paste Options

- **Paste Values:** Pastes only the result, not the formula.
 - **Paste Formatting:** Pastes only formatting.
 - **Transpose:** Converts rows to columns and vice versa.
-

Freeze Pane

- Keeps header rows/columns visible while scrolling.
 - Found under the “View” tab: **Freeze Top Row**, **Freeze First Column**, or custom options.
-

Auto Completion of Series

- Enter a value like "1" or "Monday" in a cell.
 - Drag the **fill handle** (bottom right of cell) to auto-complete numbers, dates, weekdays, etc.
-

Sort and Filter

- **Sort:** Arrange data in ascending or descending order.
 - **Filter:** Hide rows that don't meet specific criteria.
 - Accessed via the “Data” tab.
-

Creating and Editing Charts

Types of Charts

Chart Type Usage

Column Chart Compare values across categories

Bar Chart Same as column but horizontal

Line Chart Show trends over time

Pie Chart Show parts of a whole

Scatter Plot Show relationships between data sets

Area Chart Highlight magnitude of change over time

◆ **Creating a Chart**

- Select data → Click **Insert** tab → Choose a chart.
 - Customize title, labels, axis, legend, colors.
-

Print the Worksheet

Steps to print:

1. Go to the **File** tab → Click on **Print**.
 2. Set preferences:
 - **Print Area**
 - **Orientation**
 - **Margins**
 - **Fit to Page**
 3. Preview before printing.
-

Perform Calculations Using Built-In Functions

◆ **SUM Function**

Adds a range of numbers.

- =SUM(A1:A5)

◆ **MIN and MAX Functions**

- =MIN(A1:A10) — Finds the smallest number.
- =MAX(A1:A10) — Finds the largest number.

◆ **COUNT Function**

- =COUNT(A1:A10) — Counts how many cells contain numbers.

◆ **AVERAGE Function**

- =AVERAGE(B1:B5) — Returns the mean value.
-

Logical Operations

◆ **IF Function**

Performs a conditional test.

- =IF(A1>50, "Pass", "Fail")
- Syntax: IF(condition, value_if_true, value_if_false)

◆ **SUMIF Function**

Adds values that meet a condition.

- =SUMIF(A1:A10, ">100") — Sums only values greater than 100.

◆ **AVERAGEIF Function**

Averages values that meet a condition.

- =AVERAGEIF(A1:A10, ">50") — Averages values > 50.

Unit-4

Introduction to PowerPoint

Microsoft PowerPoint is a part of the Microsoft Office suite used for **creating presentations** in the form of slides. A **presentation** is a collection of individual slides that contain information like **text, images, charts, animations, audio, and video** to deliver messages visually and interactively. PowerPoint is widely used in academic, business, and professional settings.

Features of PowerPoint

1. **User-Friendly Interface** – Intuitive drag-and-drop slide design.
2. **Templates and Themes** – Professionally designed templates to style presentations.
3. **Slide Master** – Ensures consistency of design throughout the slides.
4. **Multimedia Integration** – Allows embedding images, audio, video, charts, and animations.
5. **SmartArt and Charts** – For visually enhanced data representation.
6. **Animations and Transitions** – Brings motion to content and enhances viewer engagement.
7. **Collaboration Tools** – Supports co-editing and commenting in real-time (especially in MS 365 and Google Slides).
8. **Presenter View** – Displays speaker notes while presenting.
9. **Slide Show Tools** – Include pointers, pen tools, and timers.

10. **Export Options** – Save presentation as PDF, video, or even images.
-

Creating Presentations the Easy Way

Creating a presentation in PowerPoint is a **step-by-step process**:

1. **Launch PowerPoint** – Start the software from the Start Menu or application menu.
 2. **Choose a Template** – Select from pre-built templates or create from a blank presentation.
 3. **Add Title Slide** – Typically includes the title and subtitle of the presentation.
 4. **Add New Slides** – Click on “New Slide” and select layout (Title and Content, Two Content, Comparison, etc.)
 5. **Enter Content** – Add text, bullet points, media, and visual elements.
 6. **Design the Look** – Apply a theme and background design.
 7. **Review and Animate** – Apply transitions, animations, and preview the slideshow.
 8. **Save and Present** – Save the file, connect to a projector or screen share, and present.
-

Basic PowerPoint Interface Components

Title Bar

- Located at the top.
- Displays the name of the open presentation.
- Includes standard window controls (minimize, maximize, close).

Menu Bar (Ribbon)

- Houses different **tabs**: Home, Insert, Design, Transitions, Animations, Slide Show, Review, View, etc.
- Each tab contains **groups of tools** related to specific tasks.

Toolbars (Quick Access Toolbar)

- Customizable toolbar above the ribbon for frequently used commands like **Save, Undo, Redo**.
 - Can be modified to include additional commands.
-

Creating, Opening, Saving, and Closing Presentations

Creating a New Presentation

- Click **File > New** → Choose blank or template.
- You can also use Ctrl + N for a new file.

Opening a Presentation

- Go to **File > Open**.
- Use Ctrl + O to quickly open files.

Saving a Presentation

- First-time save: **File > Save As** → Choose location and enter a file name.
- Quick Save: Ctrl + S
- You can save in formats like .pptx, .pdf, .mp4 (video), or .jpg/.png (images).

Closing a Presentation

- Click **File > Close**, or press Ctrl + W.

Print Preview and Printing

- **Print Preview:** View how slides will appear on paper.
 - Go to **File > Print**.
 - Choose options like print **full slides, notes pages, handouts** (multiple slides per page).
- **Printing:** Select printer, set copies, choose slide range, then click **Print**.

Cut, Copy, Paste Operations

- **Cut (Ctrl + X):** Remove selected text or objects.
- **Copy (Ctrl + C):** Duplicate content.
- **Paste (Ctrl + V):** Insert copied/cut content into the new location.

These operations work for **text, slides, images, shapes, and other content**.

Font, Color, Style, and Size Selection

Font Tools (on Home tab)

- Change font style (Arial, Times New Roman, etc.)
- Font size adjustment
- Font color selection
- Bold, Italic, Underline
- Text shadow, reflection, glow effects

Color and Style

- Apply text highlighting
 - Use **Themes** to apply consistent fonts/colors/styles across all slides
 - Add **background colors or images**
-

Inserting Pictures

1. Go to **Insert > Picture**.
2. Choose source:
 - From device (computer)
 - Online pictures (Bing, web, OneDrive)
3. Resize, rotate, crop, and style the image using **Picture Tools Format**.

You can also insert **ClipArt, Icons, 3D Models, and Screenshots**.

Working with Different Views

PowerPoint provides multiple views to edit and present slides:

1. **Normal View** – Default; shows slide and notes pane.
2. **Slide Sorter View** – Shows thumbnail overview of all slides for easy rearrangement.
3. **Reading View** – Allows full-screen presentation without switching to Slide Show.
4. **Slide Show View** – Presents the slides in full screen with animations and transitions.
5. **Outline View** – Displays slide content in outline format (titles and text only).

6. **Notes Page View** – Allows editing of speaker notes beneath each slide.

Access from the **View tab** on the ribbon.

Graphics in PowerPoint

- Insert graphics like:
 - **Shapes**
 - **SmartArt**
 - **Charts**
 - **Icons**
 - Modify graphics using **Drawing Tools**:
 - Resize, rotate, color fill, shape styles
 - Group, align, and layer shapes to build custom visuals.
-

Sound Effects and **Animation Effects**

Sound Effects

- Go to **Insert > Audio > Audio on My PC / Record Audio**.
- Sound icons appear on the slide; you can set it to play on click or automatically.
- Use **Playback tools** to trim, loop, or fade audio.

Animation Effects

- Found under the **Animations** tab.
- Animate:
 - Text (e.g., appear, fade, fly-in)

- Pictures, shapes, charts
- **Animation Pane** shows order and timing.
- Set **Trigger, Duration, and Start Options** (On Click, With Previous, After Previous).

Slide Transitions

- Found under **Transitions** tab.
 - Adds movement between slides (e.g., Fade, Wipe, Push, Morph).
 - Set timing and sound effects.
-

Final Steps in Presenting

1. **Preview the entire presentation** in Slide Show mode.
2. Check for typos and design consistency.
3. Print handouts or speaker notes if needed.
4. Connect to a projector or screen share for audience display.
5. Use **Presenter View** for notes and navigation.
6. Save your presentation on cloud storage or USB drive for backup.