Unit 5

- Case study of an IT industry (Product based and Services based)
- Recent technology advancement
- Current affairs related with the IT industry
- Diversity in the Workforce

1. Product-based IT Companies:

- **Example: Microsoft**

- **What They Do:** They create and sell products like software (e.g., Windows, Microsoft Office) and hardware (e.g., Surface laptops, Xbox).

- **How They Make Money:** By selling their products, either as one-time purchases or through subscriptions (like Office 365).

- **Advantages:**
  - **Big Reach:** Products can be sold worldwide to many people.
  - **Steady Income:** Subscription models (like Office 365) bring in regular payments.
- **Challenges:**
  - They have to keep updating and improving their products to stay competitive.

2. Service-based IT Companies:

- **Example: Accenture**

- **What They Do:** They provide services like consulting, IT support, and helping companies improve their technology (e.g., cloud services, custom software development).

- **How They Make Money:** By charging clients for services, often based on the project or ongoing contracts.

- **Advantages**:
  - **Long-Term Relationships:** They work closely with clients and can get repeat business.
  - **Tailored Solutions:** They customize services to meet the client's specific needs.
- **Challenges:**
  - They rely heavily on skilled workers and need to manage costs carefully.

Key Differences:

Product-based IT	Service-based IT
Focuses on creating and selling products (e.g., software, hardware).	Focuses on providing services (e.g., consulting, IT support).
Makes money from product sales or subscriptions.	Makes money from charging clients for services.
Can sell to many customers worldwide.	Works with businesses or organizations, offering tailored services.

Product-based IT Companies:

- **Apple**
  - **What They Do:** Apple makes and sells products like iPhones, MacBooks, iPads, and software like iOS.
  - **How They Make Money:** By selling their devices and software. They also earn from their App Store and subscription services like iCloud and Apple Music.
  - **Example of Products:** iPhone, MacBook, Apple Watch, iPad, and software like iOS.

- **Adobe**
  - **What They Do:** Adobe creates software products used for creative and design purposes (e.g., Photoshop, Illustrator, Premiere Pro).
  - **How They Make Money:** Adobe sells its software (now mostly through subscription services like Adobe Creative Cloud).
  - **Example of Products:** Photoshop, Acrobat Reader, Adobe Premiere Pro.

- **Sony**
  - **What They Do:** Sony develops electronic products like PlayStation consoles and also produces entertainment content (movies, music).
  - **How They Make Money:** Through sales of gaming consoles, media content, and consumer electronics.
  - **Example of Products:** PlayStation gaming consoles, Xperia phones, Sony Bravia TVs.

Service-based IT Companies:

- **Tata Consultancy Services (TCS)**
  - **What They Do:** TCS provides IT services like software development, consulting, cloud services, and IT support to businesses across the world.
  - **How They Make Money:** By offering IT consulting and development services to businesses.
  - **Example of Services:** Custom software development, cloud migration, IT infrastructure management.

- **Infosys**
  - **What They Do:** Infosys helps companies by providing IT consulting, software development, and business process outsourcing services.
  - **How They Make Money:** Charging businesses for technology services like software development, IT infrastructure, and consulting.
  - **Example of Services:** Digital transformation, IT outsourcing, enterprise software solutions.

- **Accenture**
  - **What They Do:** Accenture provides consulting, technology services, and business solutions to help companies improve their performance and implement new technologies.
  - **How They Make Money:** By charging clients for consulting services, custom IT solutions, and technology implementation.
  - **Example of Services:** IT strategy, management consulting, and cloud solutions.

- **Hybrid Examples (Companies that do both products and services):**
- **Microsoft**
  - **What They Do:** Microsoft not only sells products like Windows OS and Surface devices but also offers services like Azure cloud and Microsoft 365 (subscriptions).
  - **How They Make Money:** By selling software (like Windows), hardware (like Surface), and services (like cloud storage and business solutions).
  - **Example of Products:** Windows, Xbox, Surface devices.
  - **Example of Services:** Microsoft Azure (cloud computing), Microsoft 365 (subscription for office tools).

- **Amazon**
  - **What They Do:** Amazon sells products like books, electronics, and other goods (through its marketplace), but also provides services like Amazon Web Services (AWS).
  - **How They Make Money:** From product sales, subscriptions (like Amazon Prime), and cloud services (AWS).
  - **Example of Products:** Electronics, books, Amazon Echo.
  - **Example of Services:** Amazon Web Services (cloud computing), Amazon Prime (subscription service).

- **Recent Technology Advancements**

- **Quantum Computing:**
  - a new type of computing that can solve complex problems much faster than today's computers.
  - **Example:** Amazon introduced a new chip called **Ocelot**, which helps make quantum computers more powerful and efficient.

- **AI and Machine Learning:**

    AI (Artificial Intelligence) is getting better at understanding and doing tasks that usually need human intelligence, like recognizing voices or images.

  – **Example:** AI is now used for things like predicting what you might want to buy online or helping doctors with medical diagnoses.

- **Mixed Reality (AR/VR):**

  - **What is it?** Augmented Reality (AR) and Virtual Reality (VR) are changing how we interact with the world by mixing digital images with the real world or creating entire digital worlds.

  - **Example: Apple's Vision Pro** is a new device that uses AR/VR to give you a more immersive experience.

Current Affairs in the IT Industry

- **Amazon and Quantum Computing:**
  - Amazon is making big moves in the world of quantum computing, competing with companies like Google and Microsoft. This could change how we solve big problems in the future, like curing diseases or managing climate change.

- **Tech Industry Diversity:**
  - The tech industry is still struggling with **diversity**—there are fewer women and people from minority groups in tech jobs.
  - For example, women make up only about **28%** of all tech jobs, and minorities like Black and Hispanic people are still underrepresented in tech, especially in leadership roles.

Diversity in the Workforce

- **Gender Diversity:**
  - There are fewer women in tech jobs compared to men. Women make up about **28%** of tech workers, even though they make up almost half of the overall workforce.
- **Ethnic Diversity:**
  - The tech industry also struggles with ethnic diversity. For example, **White Americans** hold most tech jobs (about **62%**), while **Black** and **Hispanic** Americans are much less represented.
- **Efforts to Improve:**
  - There are ongoing efforts to make the tech industry more inclusive by hiring more women and people of color. But it's still a work in progress, especially in higher-level positions.