**Aga O. Abarquez BSCS 2A**

**Topics:**

**• What is Information Technology(IT)**

**• Development of Information Communication Technology**

* **Cloud Computing**

**Information Technology** (IT) is the use of computers, networks, and other electronic devices to store, retrieve, and share information. It's a broad field that includes hardware, software, and services.

**What does IT do?**

• IT helps people communicate, learn, and work more efficiently.

• IT builds the digital infrastructure that enables data processing and problem-solving in many industries.

• IT includes building communications networks, safeguarding data, and troubleshooting computer problems.

**What are some examples of IT?**

• Networking hardware, such as servers and routers

• Applications that allow communication over the internet

• Data science, which combines statistics, programming, and domain expertise to analyze data

• Data mining, which uses algorithms to identify patterns and trends in data

**What are some common IT job titles?**

• Chief information officer

• Chief technology officer

• IT director

• System administrator

• Application manager

• Developer or software engineer

**How is IT evolving?**

IT is a dynamic field that's continually evolving as new technologies emerge. Recent innovations include artificial intelligence, cloud computing, and quantum computing.

**Cloud computing** refers to the delivery of computing services, like servers, storage, databases, networking, and software, over the internet, allowing users to access these resources on-demand and pay only for what they use, eliminating the need to manage their own physical infrastructure; essentially, it's like accessing computing power and data storage "in the cloud" instead of on a local computer, with services provided by companies like Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform.

**Key points about cloud computing:**

• On-demand access: Users can access computing resources as needed, without having to purchase and maintain their own hardware.

• Scalability: Easily scale up or down computing power depending on usage requirements.

• Pay-per-use model: Users only pay for the resources they actually utilize.

• Service models: Cloud computing is often categorized into three primary service models:

* **Infrastructure as a Service (IaaS)**: Provides basic computing infrastructure like servers and storage.
* **Platform as a Service (PaaS)**: Offers a development environment for building and deploying applications.
* **Software as a Service (SaaS)**: Delivers fully functional applications directly to users over the internet.

**Examples of cloud computing applications:**

**Email services:** Gmail, Outlook.com

**Office productivity suites:** Google Docs, Microsoft Office Online

**Data storage:**Dropbox, Google Drive

**Streaming services:**Netflix, Spotify

**CRM systems:**Salesforce