

LIVING IN THE IT ERA

Module 1

LEARNING OBJECTIVE

After reading and analyzing the unit, you should be able to:

- To know what a computer is and its components.
- Understand the meaning of information technology.
- Describe the role of information technology in daily life.
- Explain the information technology in media industry

THE WORLD OF COMPUTERS

Computer is everywhere



WHAT IS A COMPUTER

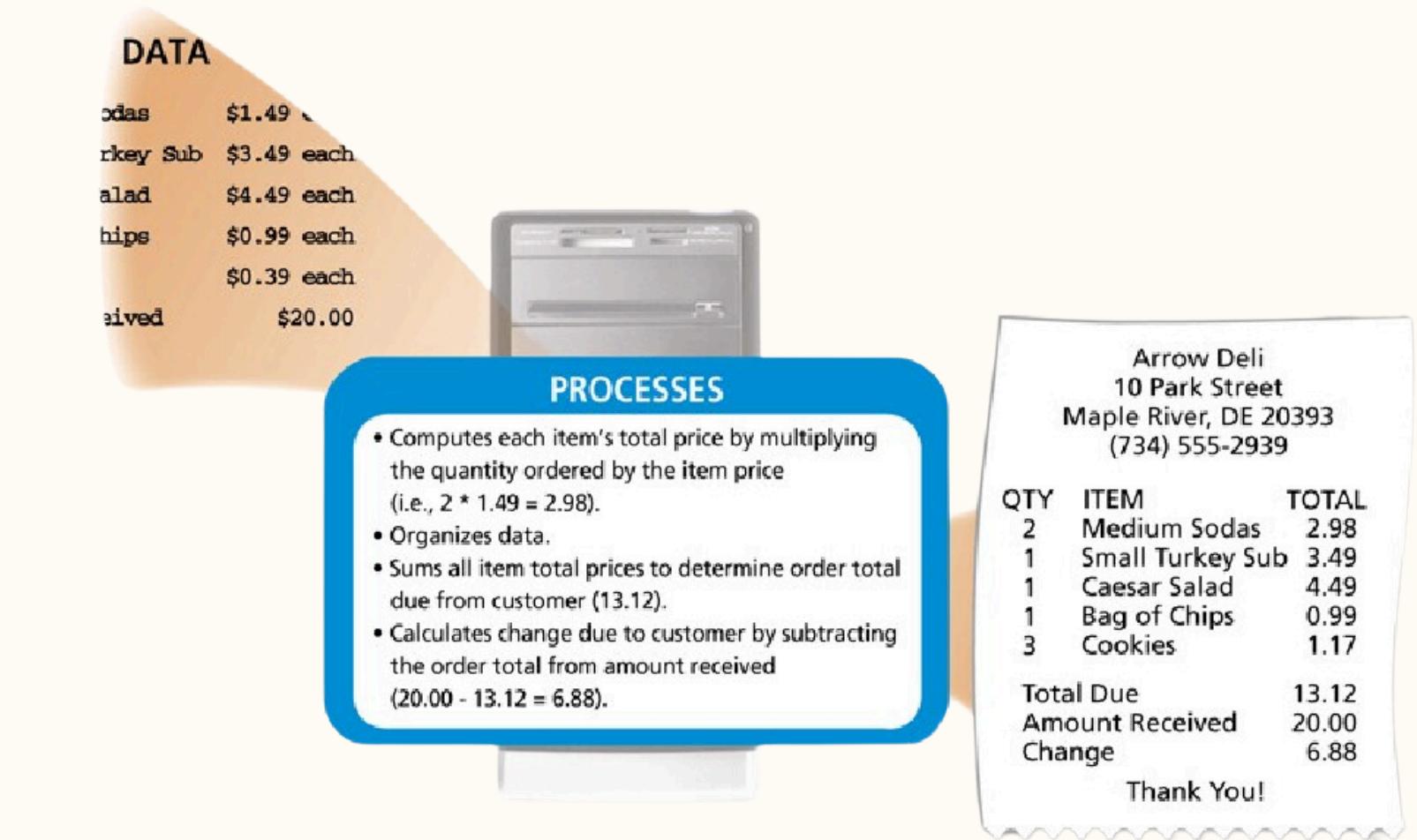
- A computer is an electronic device, operating under the control of instructions stored in its own memory



Information Processing Cycle

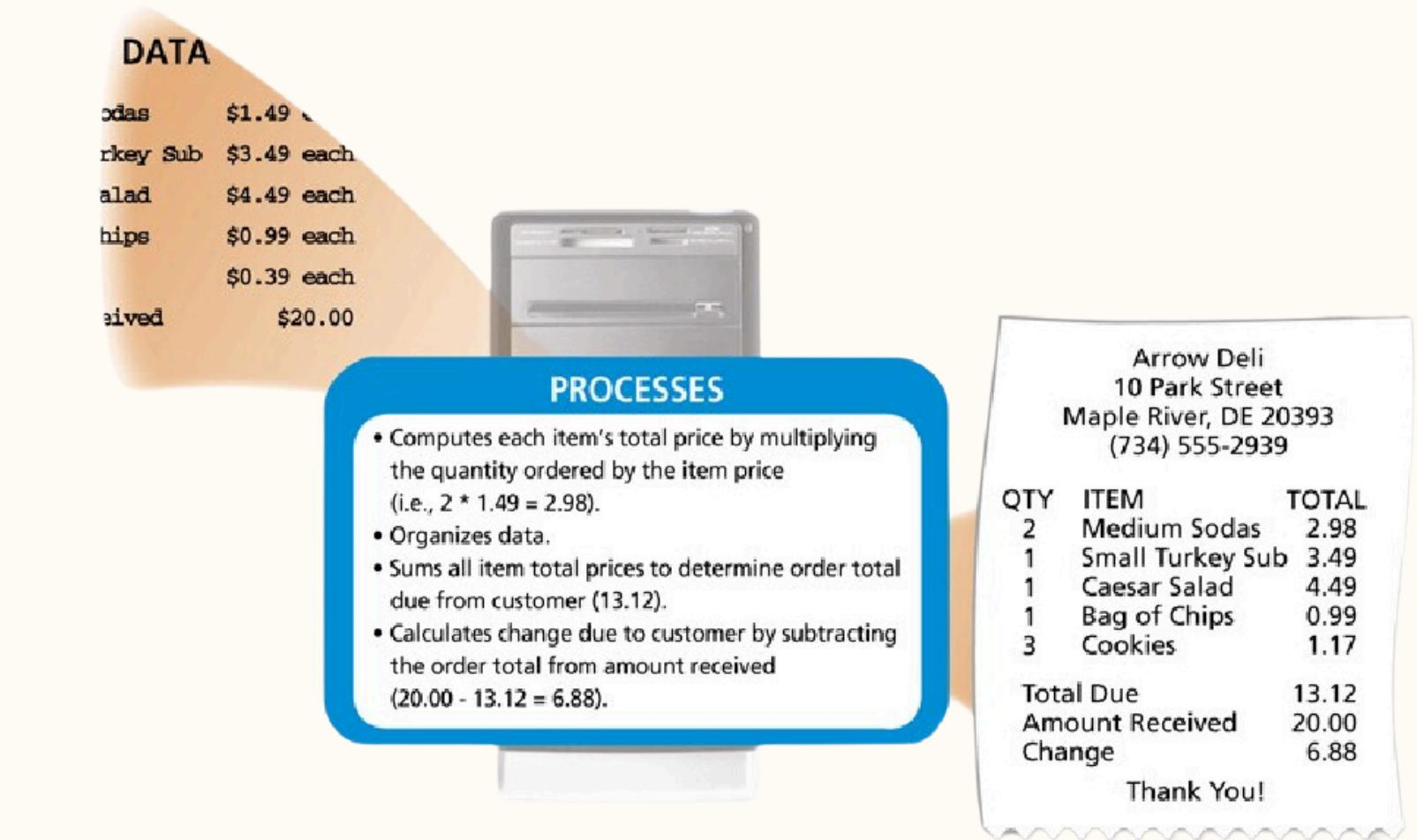
WHAT IS A COMPUTER

- The information processing cycle involves a systematic sequence wherein a user inputs data into a computer system, which then processes this data and generates output. Information processing refers to the transformation or conversion of raw data into a format that is meaningful and comprehensible.
- Information presents data that has been systematically processed, organized, or categorized to enhance its utility for the recipient.
- It may be utilized directly or integrated with additional data or information. The recipient subsequently employs this processed information to make informed decisions and take appropriate actions. For data to be transformed into useful information, it must undergo a processing phase that endows it with specific attributes, thereby rendering it valuable and relevant



WHAT IS A COMPUTER

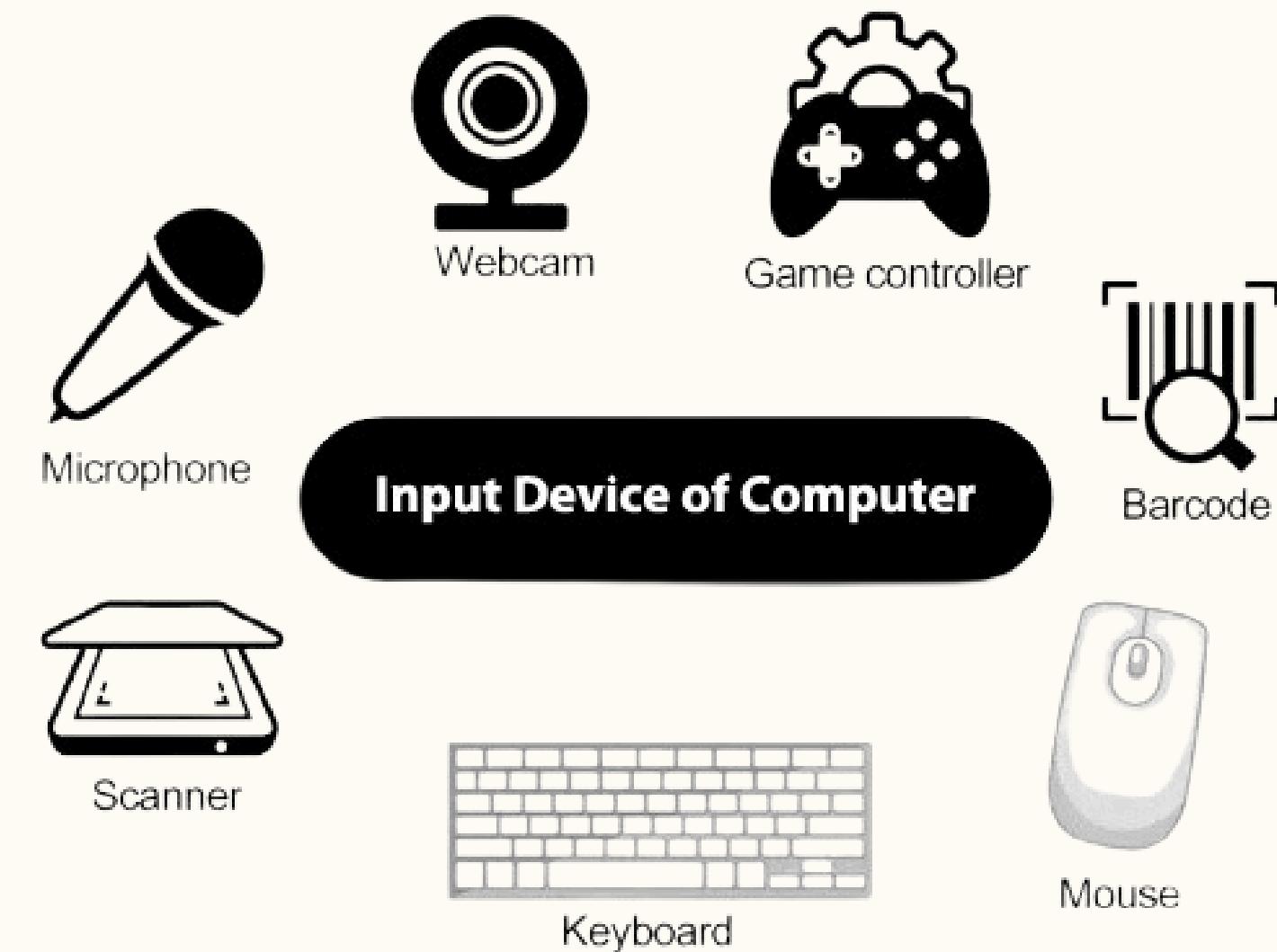
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THE COMPONENTS OF A COMPUTER

A computer contains many electric, electronic, and mechanical components known as **hardware**

Input Device : Allows you to enter data and instructions into a computer.

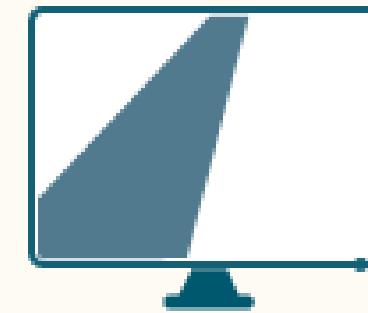


THE COMPONENTS OF A COMPUTER

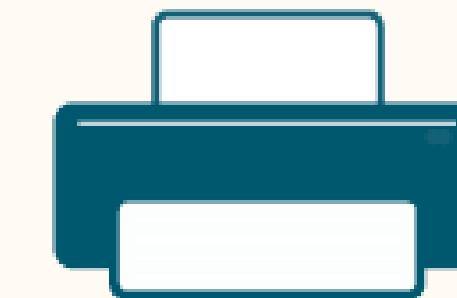
Output Device :

Hardware component
that conveys information
to one or more people.

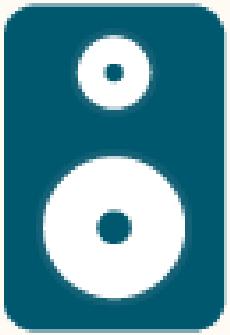
OUTPUT DEVICES



MONITOR



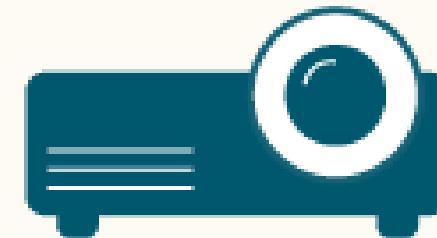
PRINTER



SPEAKER



HEADPHONES



PROJECTOR

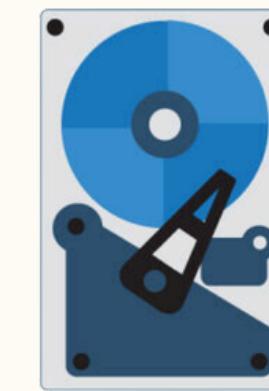
THE COMPONENTS OF A COMPUTER

System Unit : Case that contains the electronic components of the computer that are used to process data.



THE COMPONENTS OF A COMPUTER

Storage Device : Holds data, instructions, and information for future use



Hard disc



DVD



CD-ROM



Pendrive



Floppy Disk

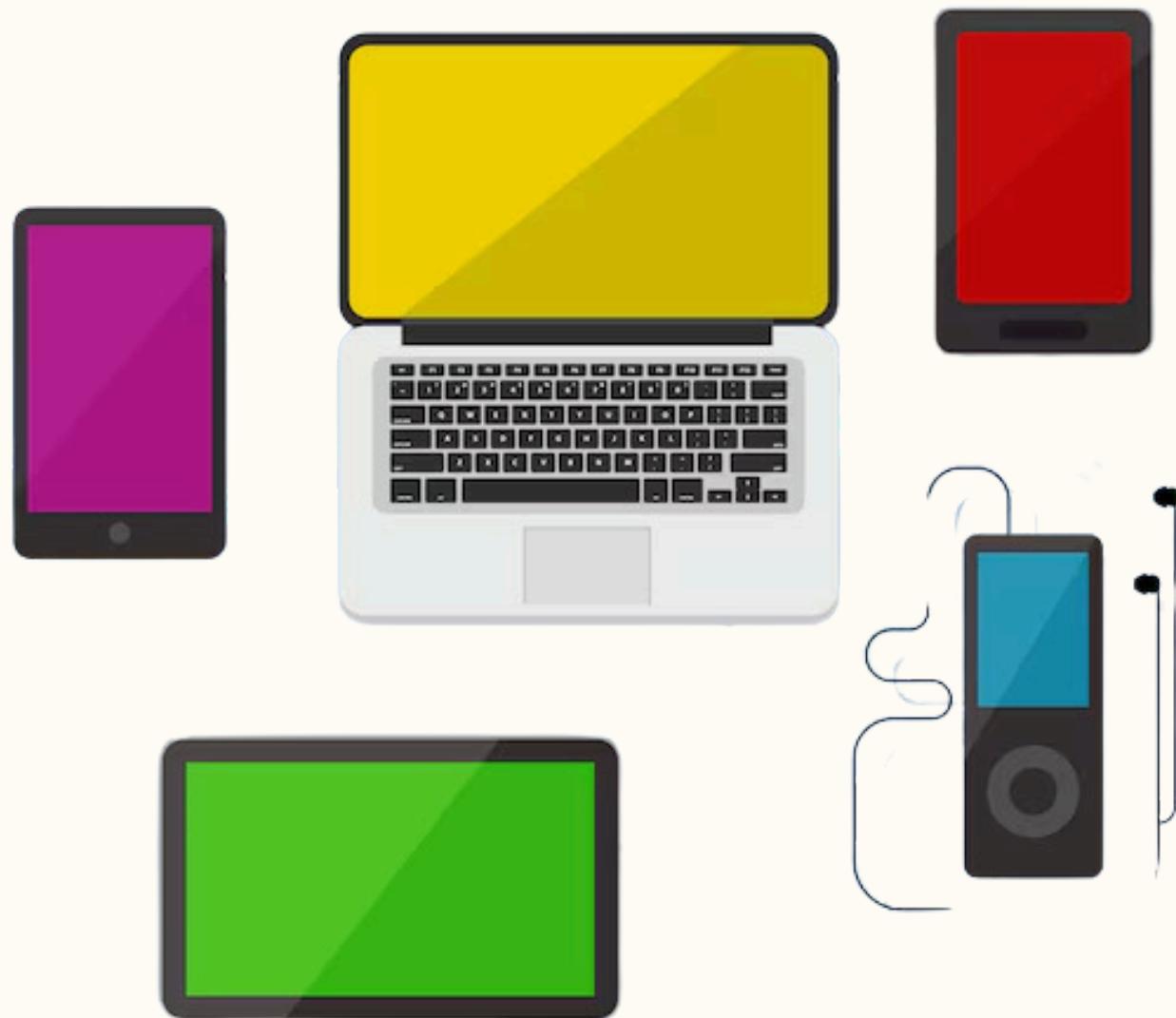


Memory Card

THE COMPONENTS OF A COMPUTER

Communications Device :

Enables a computer to send and receive data, instructions, and information to and from one or more computers or mobile devices



ADVANTAGES AND DISADVANTAGES OF USING COMPUTERS

Advantages of Using Computers

- SPEED
- RELIABILITY
- CONSISTENCY
- STORAGE
- COMMUNICATIONS

Disadvantages of Using Computers

- VIOLATION OF PRIVACY
- PUBLIC SAFETY
- IMPACT ON LABOR FORCE
- HEALTH RISKS
- IMPACT ON ENVIRONMENT

WHAT IS INFORMATION TECHNOLOGY

- Information technology is the technology used to store, **manipulate, distribute or create information**. All these can be summed up easily – It's having knowledge, and knowledge comes from having information.
- Gaining knowledge through information is the role of "information technology" IT in today's informed world.



UNDERSTANDING INFORMATION TECHNOLOGY

- Information technology (IT) is the use of computer systems or devices to access information. Information technology is responsible for such a large portion of our workforce, business operations and personal access to information that it comprises much of our daily activities. Whether you are storing, retrieving, accessing or manipulating information, IT greatly impacts our everyday lives.



UNDERSTANDING INFORMATION TECHNOLOGY

- Information technology drives much of what we do in our personal and professional lives. It is the foundation of our communication, technological advancement, innovation, sustainability and recreation. We use information technology on a personal level to connect and communicate with others, play games, share media, shop and be social.



UNDERSTANDING INFORMATION TECHNOLOGY

- From a career perspective, information technology is largely responsible for much of our business operations and spans nearly every industry. From healthcare to food services, manufacturing to sales, and beyond, we rely on IT to help connect us to others, store and manage information and create more efficient processes.



THE INTERNET AND THE WORLDWIDE WEB

- The **Internet** is a worldwide collection of networks that connects millions of businesses, government agencies, educational institutions, and individuals

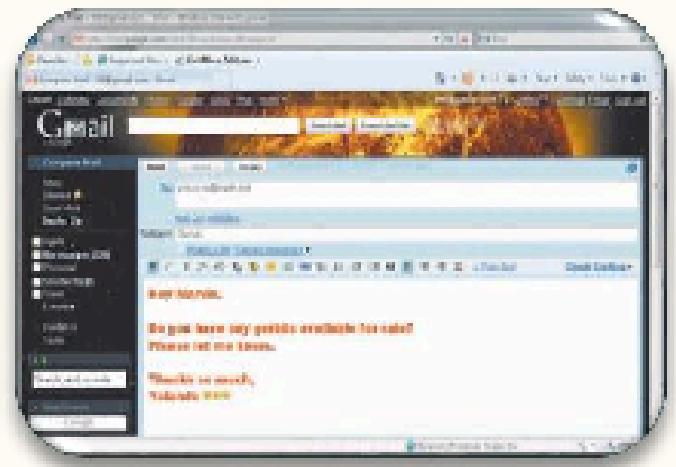


THE INTERNET AND THE WORLDWIDE WEB

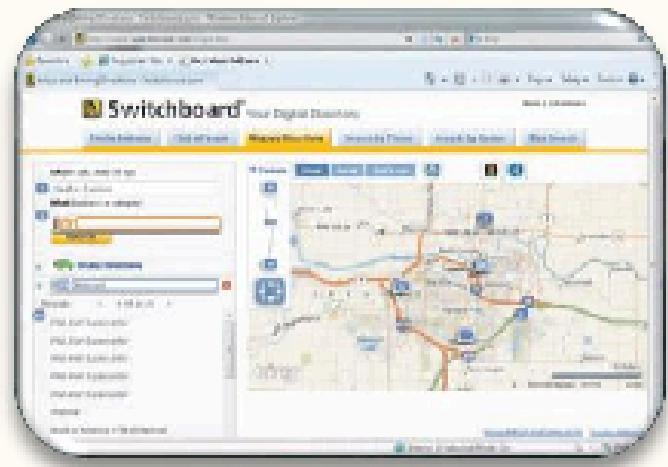
- The **World Wide Web** (www), or web, consists of a worldwide collection of electronic documents (**webpages**).
- A **Website** is a collection of related webpages and associated items.
- A **Web server** is a computer that delivers requested webpages to your computer or mobile device.
- **HTML** (Hypertext Markup Language) is a set of symbols that developers use to specify the headings, paragraphs, images links, and other content elements that a webpage contains



PEOPLE USE THE INTERNET FOR A VARIETY OF REASONS:



Communicate



Research and Access Information



Shop



Bank and Invest



Online Trading



Entertainment



Share Information



Download Videos



Web Application

IMPORTANCE OF INFORMATION TECHNOLOGY

IT has revolutionized the way people communicate with each other. Due to the Internet, social media and smart devices, sharing information globally now takes seconds, and this has changed how companies do business and engage with their customers. A large proportion of companies, including small single-person businesses, now have an online presence. The Internet not only allows businesses to engage audiences via different channels, but it also makes it possible for companies to recruit talent, create partnerships and build their brand reputation with limited budgets.



IMPORTANCE OF INFORMATION TECHNOLOGY

But how important is the advancement of information technology into our lives?

What is the part that this technology can show in present society?

Will it be beneficial to all?



GENERALIZED ADVANTAGES OF INFORMATION TECHNOLOGY

- With improvements in information technology, globalization has increased.
- The world is brought closer, and the
- world's economy is quickly becoming a single interdependent system.
- Information can be shared quickly and easily from all over the globe.
- Barriers of linguistic and geographic boundaries can be torn down as people share ideas and information with each other.



GENERALIZED ADVANTAGES OF INFORMATION TECHNOLOGY

- Communication has become an easier, cheaper, and faster system with the help of information technology.

Example:

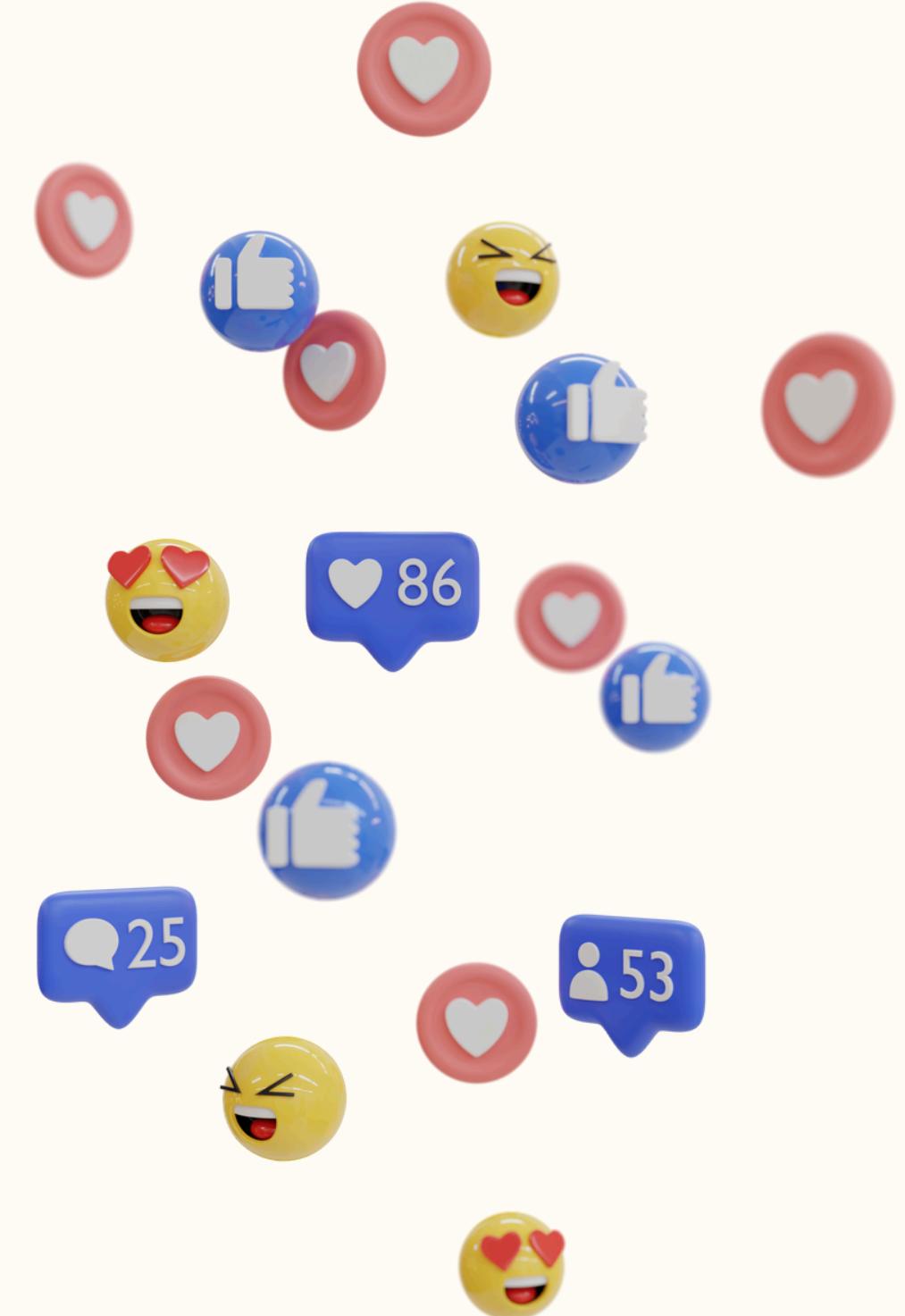
Using the internet, people can speak to each other all over the world using video conferencing.

- Skype is one helpful application that allows users to communicate to other Skype users for free.



GENERALIZED ADVANTAGES OF INFORMATION TECHNOLOGY

- **Social media** is also another area of communication available because of information technology.
- A **social networking web site** encourages members to share their interests, ideas, stories, photos, music, and videos with other registered users. Also called an **online social network**



GENERALIZED ADVANTAGES OF INFORMATION TECHNOLOGY

- Information technology has also created new jobs.
- Programmers, systems analyzers, hardware and software developers, and web designers all owe their jobs to information technology.
- Without such advances, these jobs would not exist.



GENERALIZED DISADVANTAGES OF INFORMATION TECHNOLOGY

- Unfortunately, along with the creation of new and interesting jobs, information technology has also led to a rise in unemployment.
- By streamlining the business process, job redundancies, downsizing, and outsourcing has occurred. Many low and middle level jobs have been turned to other countries, leaving more people unemployed.



THE ROLE OF INFORMATION TECHNOLOGY IN OUR DAILY LIFE

IT is a set of tools that can help provide the right people with the right information at the right time. Though IT is not a solution to everything, for IT to work, people Must learn how to use it.



THE ROLE OF INFORMATION TECHNOLOGY IN BUSINESS SUCCESS.

Innovation is the great way to success in this digital age. The path of innovation in business means doing something **different, smarter or better** that will make a positive difference in terms of value, quality or productivity by using emerging or proved technologies of the world.



THE ROLE OF INFORMATION TECHNOLOGY IN BUSINESS SUCCESS.

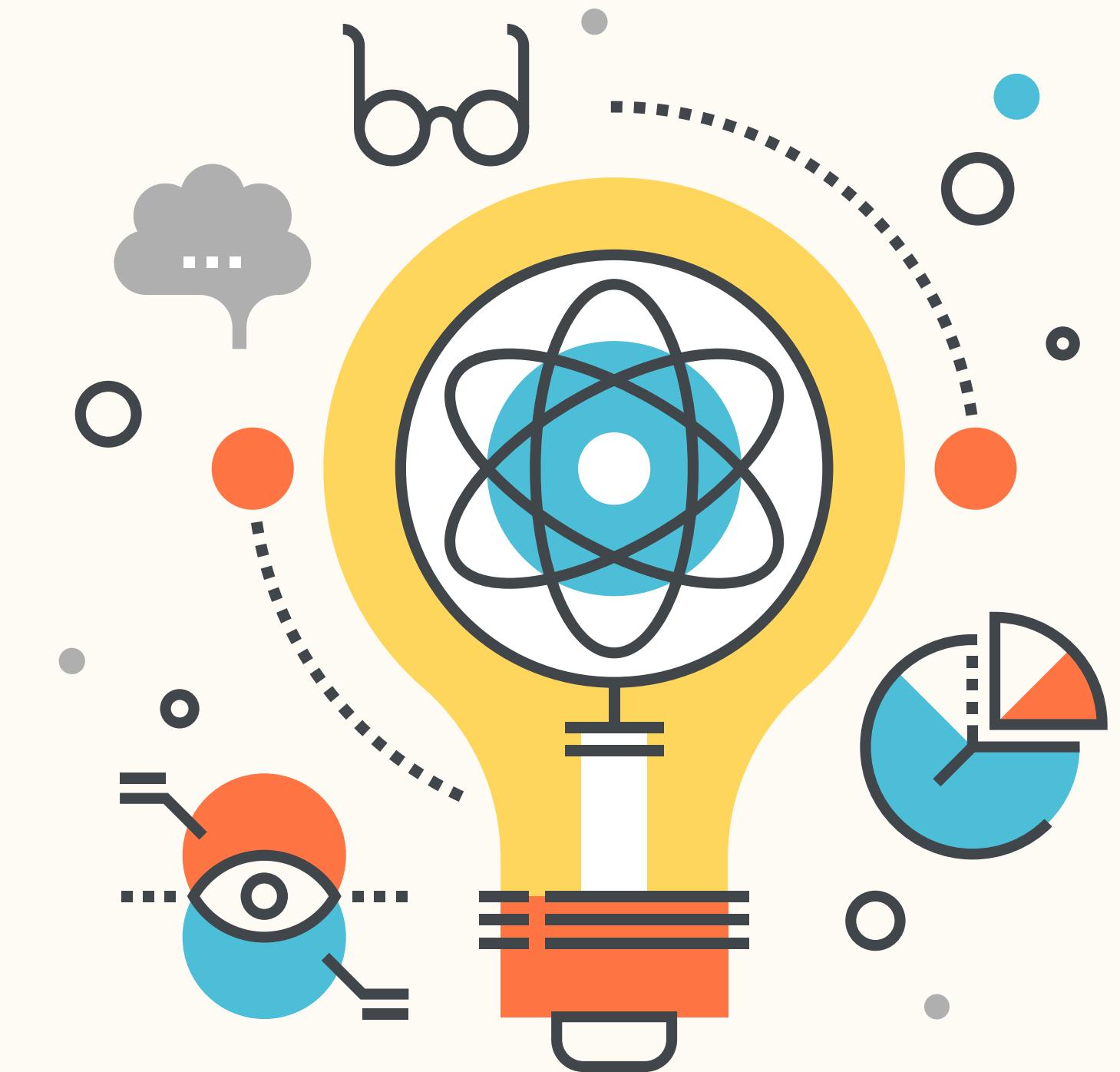
- Currently **online shopping, digital marketing, social networking, digital communication and cloud computing** etc. are the best examples of change which came through the wave of information technology.
- Now **accurate business planning, effective marketing, global sales, systematic management, real time monitoring, instant customer support** and **long term business** growth cannot be achieved at the optimum level without IT.



THE IMPORTANCE OF IT IN BUSINESS

The success of every business depends on certain factors. Some of which are:

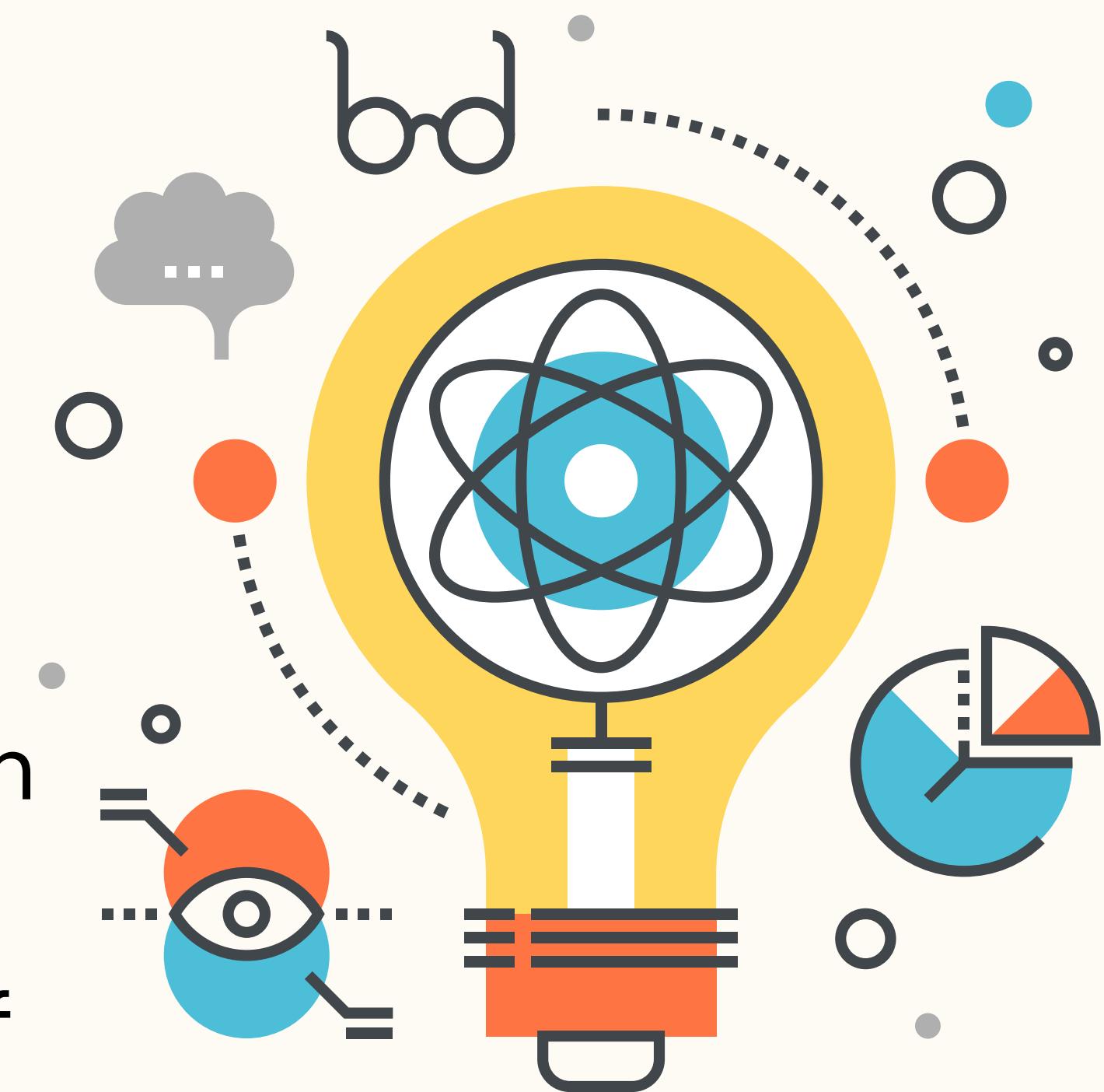
- accurate analysis
- choosing the right technology
- future vision.



THE IMPORTANCE OF IT IN BUSINESS

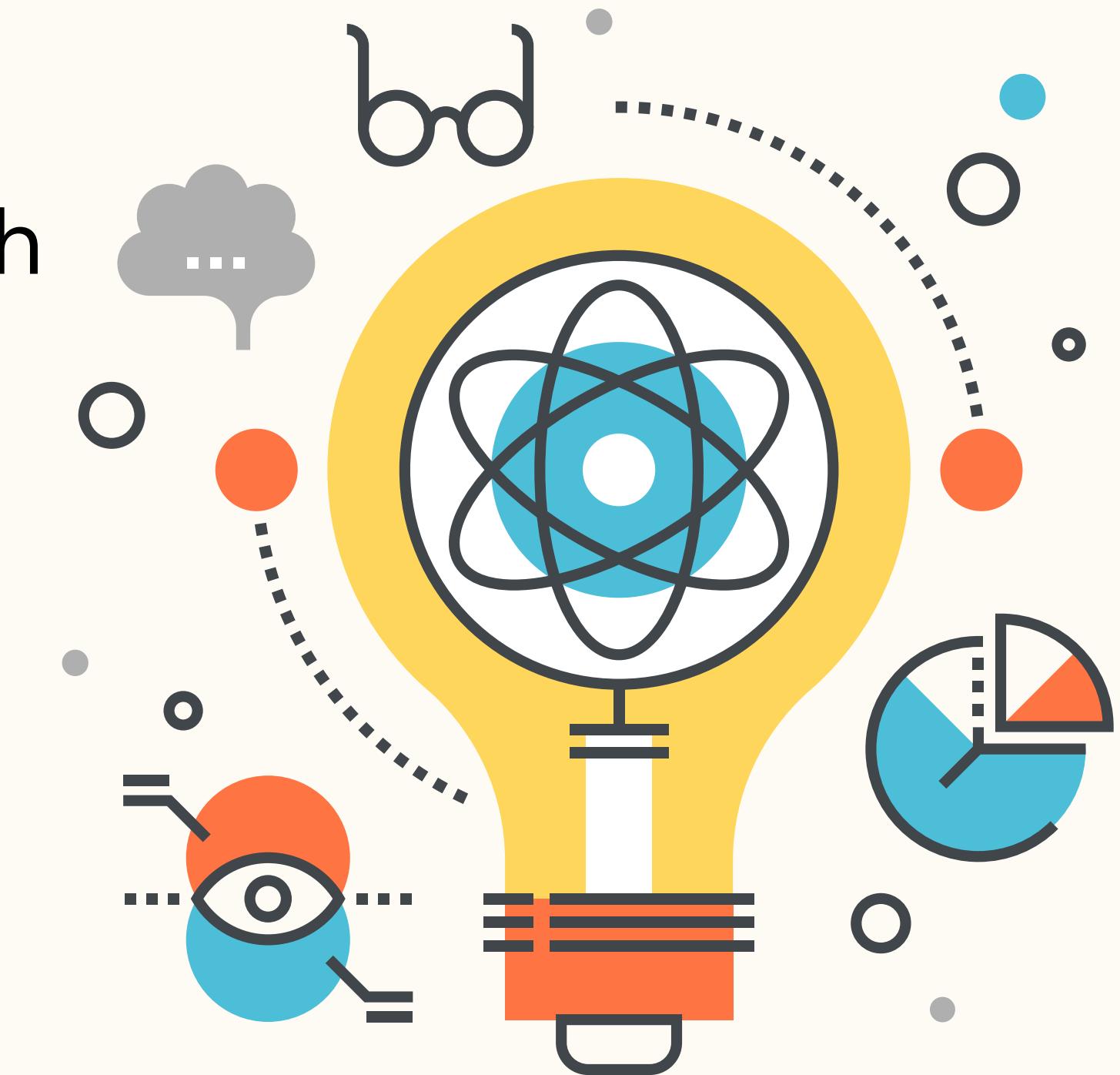
Information technology is the only technology which provides you the opportunity to analyse specific data and plan your business journey accordingly.

It also provides you many tools which can solve complex problems and plan the scalability (future growth) of your business.



THE IMPORTANCE OF IT IN BUSINESS

In the modern age, it is proved that digital marketing is a great tool which let you promote your products or services to the global market while sitting in the comfort of your remote office or home.



DECISION MAKING

- **Speed and accuracy** are at the heart of making right decision for your business.
- Every successful organization has to go through a comprehensive market research process which enables management to make the right decision.
- Market research (online surveys, forums, blogs, and group discussions using World Wide Web and in-person interviews)



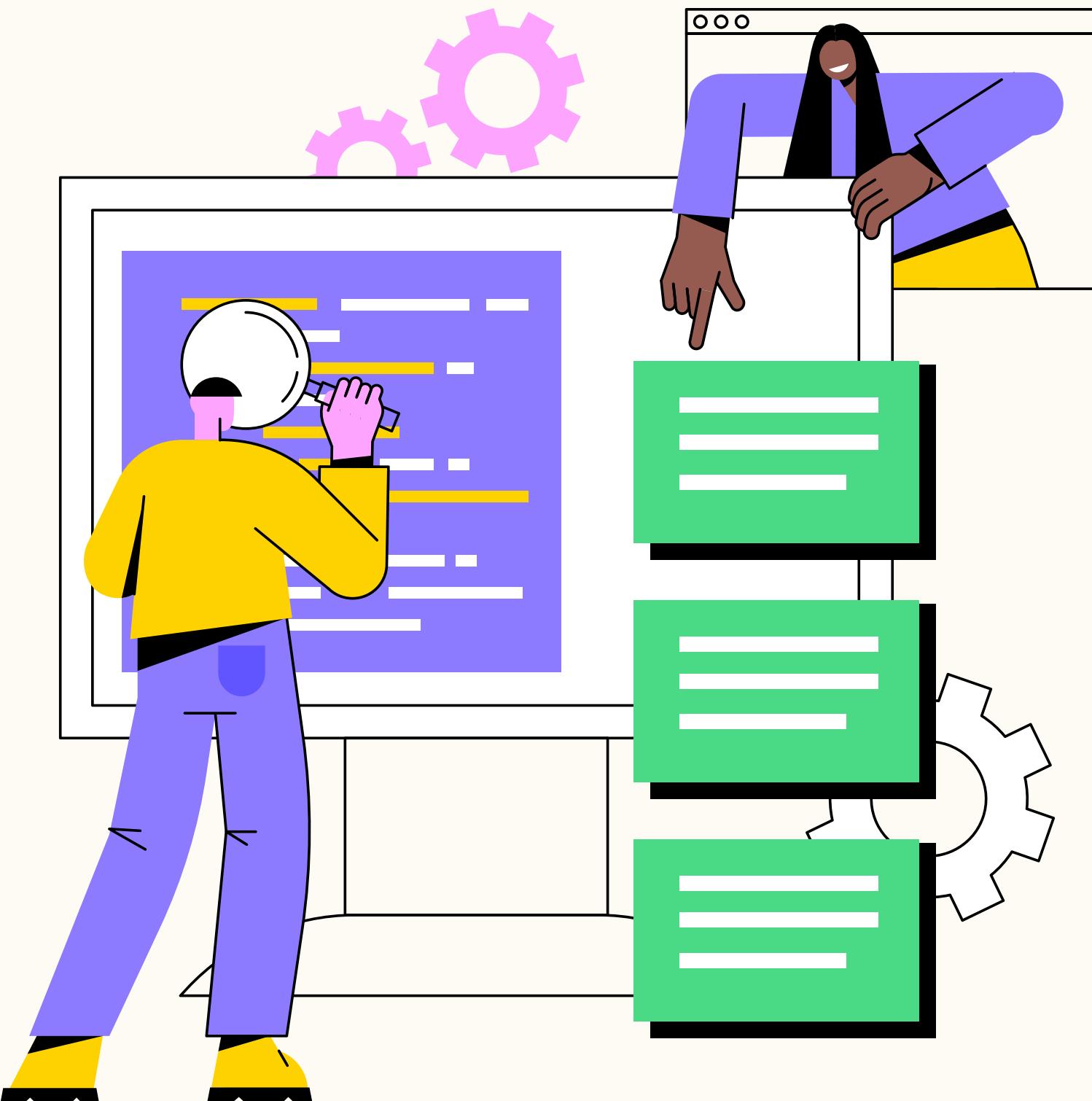
DECISION MAKING

- Currently Big data, Google Analytics and Microsoft CRM Dynamics are also great tools to extract useful information which can impact on decision making.
- These online tools not only provide real time responses from the potential audience but also ensure the accuracy of data by minimizing the risk of human errors.



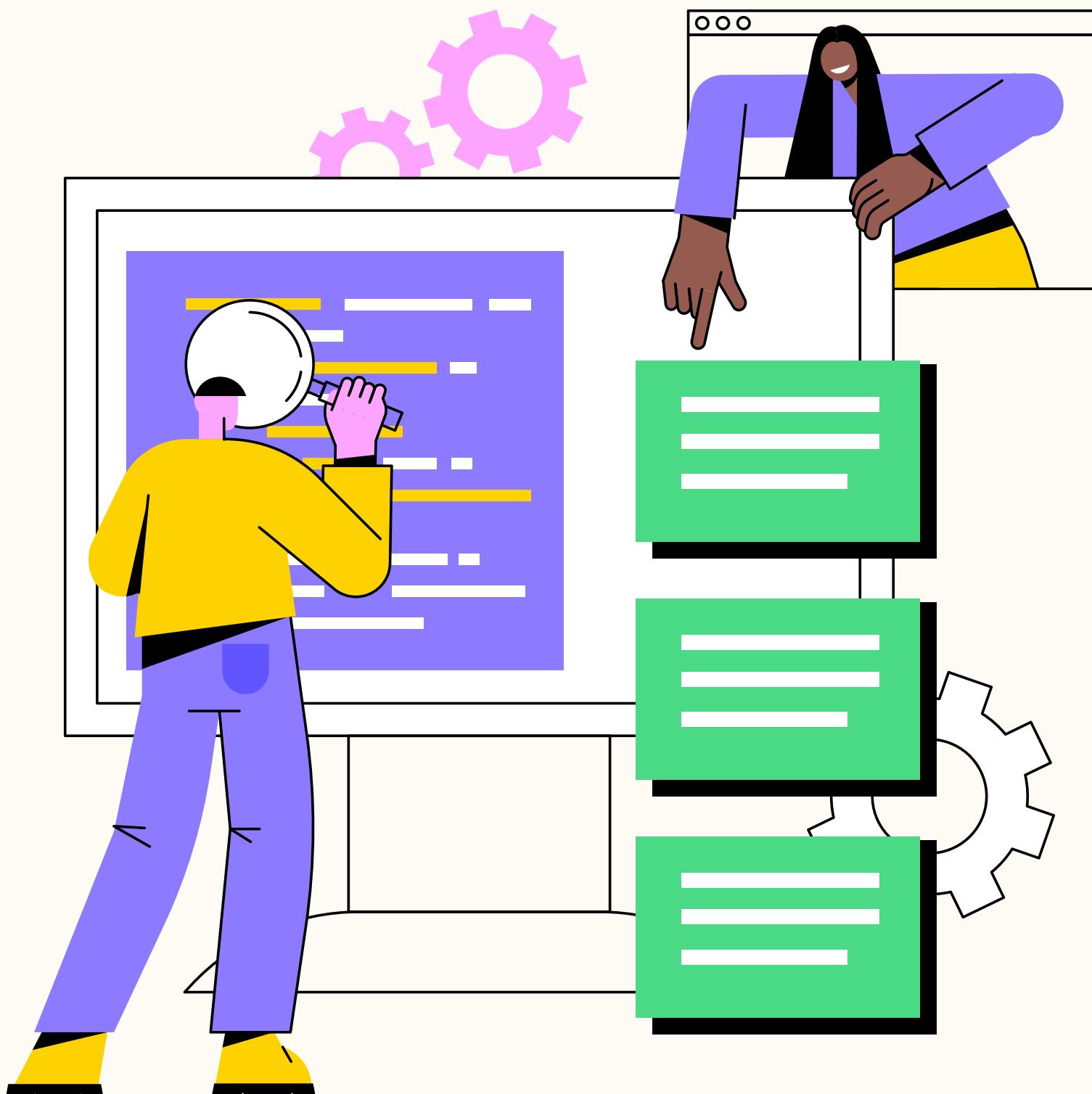
MARKETING AND BUSINESS GROWTH

- The heart of the business success lies in its marketing which enables the management to identify its target audience first and then observe their trends and needs.
- The overall marketing covers **public relation, advertising, promotion and sales** which subsequently impact on business growth.



MARKETING AND BUSINESS GROWTH

- Digital Marketing is a modern phenomenon which let you promote your products or services all over the world.
- It is a broad term which includes many concepts like search engine optimization (SEO), pay per click (PPC), blogging, discussion forum, email shot, SMS, MMS, social media marketing and Smartphone app advertisement etc.



CUSTOMER SUPPORT AND SATISFACTION

- Higher level of customer satisfaction is the key to success which cannot be achieved without a real time customer support process.
- Business success depends on knowing its customer's needs, trends, behaviors and satisfaction level.
- Effective communication is the best tool to understand the customer demands, problems and their solutions.



CUSTOMER SUPPORT AND SATISFACTION

IT provides many channels to communicate with the customer such as:

- email
- webinar
- social media
- member portals
- online newsletters
- text or multimedia messaging through the smart phone



CUSTOMER SUPPORT AND SATISFACTION

Enterprise organizations normally use customer relationship management systems (CRM) to hold valuable data for understanding customer behaviors and future needs.



RESOURCE MANAGEMENT AND GLOBALIZATIONS

Resource management plays a crucial role in business success.

When it comes to medium or large organization, it is very hard for the top management to manage all the resources manually.

These resources may include tangible, financial or human resources etc.



RESOURCE MANAGEMENT AND GLOBALIZATIONS

A decade ago, most of the resource management solutions were desktop based.

Through the use of internet and cloud technology which enables software engineers to introduce cloud based ERP (Enterprise Resource Planning) solutions.

Now, the managers can manage or monitor their organizational resources virtually anywhere in the world by using their personal computer, laptops, tablets or Smartphone.



ROLE OF IT IN MODERN ORGANIZATION

Communication

For many companies, email is the principal means of communication between employees, suppliers and customers.

- live chat systems
- online meeting tools
- video-conferencing systems
- Voice over internet protocol (VOIP)
- telephones and smart-phones



ROLE OF IT IN MODERN ORGANIZATION

Inventory Management

Inventory management systems track the quantity of each item a company maintains, triggering an order of additional stock when the quantities fall below a pre-determined amount.

The POS system ensures that each time an item is sold, one of that item is removed from the inventory count, creating a closed information loop between all departments.



ROLE OF IT IN MODERN ORGANIZATION

Data Management

- Today, most companies store digital versions of documents on servers and storage devices.
- These documents become instantly available to everyone in the company, regardless of their geographical location.
- Companies are able to store and maintain a tremendous amount of historical data economically, and employees benefit from immediate access to the documents they need.



ROLE OF IT IN MODERN ORGANIZATION

Management Information Systems

- Storing data is only a benefit if that data can be used effectively. Progressive companies use that data as part of their strategic planning process as well as the tactical execution of that strategy.



ROLE OF IT IN MODERN ORGANIZATION

Management Information Systems (MIS)
enable companies to:

- to track sales data, expenses and productivity levels
- to track profitability over time
- to maximize return on investment and identify areas of improvement
- to assist managers track sales on a daily basis, allowing them to immediately react to lower-than-expected numbers by boosting employee productivity or reducing the cost of an item.



ROLE OF IT IN MODERN ORGANIZATION

Customer Relationship Management

Companies are using IT to improve the way they design and manage customer relationships.

Customer Relationship Management (CRM) systems capture every interaction a company has with a customer, so that a more enriching experience is possible.

