BACHELOR OF COMPUTER APPLICATIONS

SEMESTER 5

DCA3143

E-COMMERCE

Unit 4

ISP, WWW, and Portals

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1. INTRODUCTION

An enterprise's integrated business processes are needed for providing the required information to support its operations, functions, and processes. The digitalization of the economy has made it imperative for business organizations to have a robust, secure, and clean network infrastructure for providing adequate support to enterprises.

Business enterprises are faced with the challenge of handling a large amount of information and data, through various formats and logistics of e-business. The network infrastructure forms the backbone of the business and provides better productivity and agility to the business organization. It requires the right support along with the right tools for the business organization to function effectively, ensure optimum productivity, and maintain high-performance levels. The combination of the right hardware, software, and interactions between subsystems enables the integration of different systems, thereby adding value to the entire business process.

The conduct of commercial transactions through online business or e-business includes the exchange of products and services between various business entities and individuals and sharing of information via the Internet. This requires the integration of innovative methods and applications with the help of the architecture of the networks, hardware, software, and the Internet. Organizations use different Internet service providers to gain access to the Internet.

This unit explains the purpose of an ISP and its different types. It also explains the concept of the World Wide Web in detail. Later, the unit details the functions of the computer and web server hardware (OnPrem/Cloud).

1.1 Learning Objectives

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

- *Explain the purpose of an ISP and its various types*
- *Define the concept of WWW (World Wide Web)*
- *Discuss the functions of the computer and Web server hardware (OnPrem/Cloud)*

2. PURPOSE OF AN ISP AND ITS VARIOUS TYPES

The Internet Service Provider (ISP) provides services that are used for the exchange of information with individuals or groups. The Internet, through the service providers, offers a mechanism for information dissemination and a wider network for linking global computer networks. This allows people to view websites, send emails and chats, download files and images, post messages on social media and newsgroups, and so much more.

There are several Internet Service Providers (ISPs) offering many different deals by connecting to the Internet through personal or business computers, laptops, and mobile devices. The ISP providers can be commercial, nonprofit, privately owned, or community-owned companies. They offer Internet services to customers by providing access to the Internet, emails, website designing, etc.

The ISP providers offer several kinds of packages for different users depending on many factors like the requirement of free web space, speed of connection, number of email addresses required, and more. The different types of ISP connections are shown in Fig 1:

Fig. 1: Different Types of ISP Connections

These connections are discussed below:

- **Fiber:** It consists of glass-based fiber optic cable that is used to transport data at a very fast speed. It offers the fastest speed for downloading and uploading. It can be used by several users for sharing large files, streaming videos, and playing action-based games online.

- **DSL:** This is the Digital Subscriber Line (DSL) used to establish a connection with the Internet through telephone lines. DSL is a wireline transmission technology used for transmitting data faster than traditional copper telephone lines already installed in homes and businesses. DSL-based broadband provides transmission speeds ranging from several hundred Kbps to millions of bits per second (Mbps). Such connections are offered by telecom companies.
- **Cable:** The companies offering cable TV also offer cable Internet access, which has fewer delays due to low latency. Cable Internet is dependable and much faster. The coaxial cables have 80 times or more transmission capability and are mainly adopted in feed-lines connecting radio transmitters and receivers with their antennas, computer network connections, and distributing cable television signals.
- **Satellite:** Satellite is another form of ISP, which is useful for serving remote or sparsely populated areas. The satellites are used for providing necessary links for telephone and television services through broadband services. The downstream and upstream speeds for satellite broadband depend on many factors, including the provider and service package purchased, the consumer's line of sight to the orbiting satellite, and the weather. The users can receive downloads at a speed of about 500 Kbps and send uploads at a speed of about 80 Kbps. These speeds may be slower than DSL and cable modem, but they are about 10 times faster than the download speed with dial-up Internet access. Service can be disrupted in extreme weather conditions.

It is necessary to understand the ISP requirements before selecting the appropriate ISP provider. This generally depends upon:

- The kind of services needed
- Quality and cost of the services
- Number of users requiring the Internet connection
- Location of the users and the capacity of bandwidth required
- Other terms and conditions for the ISPs

2.1 ISP's Function

Internet service providers (ISPs) give customers access to the Internet along with other services that depend upon the location of their customers. Normally, the general ISPs are involved with providing Internet access and handling the traffic between the users and the Internet. The basic services provided by ISPs are as follows:

- Email
- Web hosting
- Domain registration
- Providing browser and software packages

The ISPs can be divided into three categories:

- **Tier 1 ISPs:** They do not pay for the Internet and have a major global reach with several network lines for the traffic to move independently, making large investments in the infrastructure.
- **Tier 2 ISPs:** They pay for Internet access to tier 1 networks. As service providers, the ISPs connect tier 1 and tier 3 ISPs. To allow the exchange of reach to other networks or greater bandwidth, they get into partnership with another tier 2 ISPs.
- **Tier 3 ISPs:** They connect with the network of another ISP for linking the users to the Internet by paying the higher-tier ISPs. They provide Internet access to the consumer markets and local entrepreneurs.

An ISP has several roles to play apart from providing Internet access to customers, some of these are as follows:

- It acts as a medium for providing connection to Internet services.
- It connects the users to the closest Internet gateway.
- It establishes a modem for dial-up.
- It connects users of the World Wide Web to the information service.
- It allows the provision of voice conversation for the users through the Internet.
- It provides a place for the homepage and personal websites.
- It provides protection to the user's systems from viruses through antivirus systems.

2.2 Domain Name Registration

Domain name refers to the physical address of a website on the Internet that is registered in the name of the business organization. They are also referred to as URLs or web addresses. These URLs are easier to remember and are made for easy accessibility of an IP or Internet Protocol. It is because the URL has a domain name instead of the IP address, hence, it is essential to process the request through a Domain Name Server (DNS).

The Internet Corporation for Assigned Names and Numbers **(ICANN)** is responsible for managing the Domain Name System (DNS). ICANN is a nonprofit organization responsible for creating and implementing policies for domain names. They control and permit companies through the domain name registrars for selling domain names. The domain registrars control the domain names by specifying which domain name extensions are available and they can make the required changes when required. They have a centralized database of where the domain names are referred from.

The main components of a website are as follows:

- **Domain name**: It is the unique name or address that people type in to access the site
- **Web server:** It is the device that hosts the files and the databases that the website is made of and sends them out to people across the Internet when they visit the site from their machine.

The domain names are typed as Rediff.com—where "Rediff" is the name of the website, and ".com" is the domain name extension. If anyone wants to start a business online, they need to have a domain name that needs to get registered for building their website. Each domain name is unique and must be registered. The different types of domain names are as follows:

- **Top-Level Domain (TLD):** These are generic domain extensions that are listed at the highest level in the Domain Name System.
- **Country Code Top Level Domain (ccTLD):** These are country-specific domain names that end with country code extensions, such as ".uk" for the United Kingdom, ".de" for Germany, and ".in" for India.
- **Sponsored Top-Level Domain (sTLD):** This is a category of TLDs that has a sponsor for representing a specific community served by the domain extension.

STUDY NOTE

A remote area in Canada, over 900 miles away, was able to treat many patients using satellite broadband technology. If there was no connectivity, the patients would have waited for months until a specialist traveled to those areas. Due to the broadband technologies, many Specialists can conduct telemedicine consultations between Russia and other countries in Europe and North America, as well as within Russia's vast borders.

SELF-ASSESSMENT QUESTIONS – 1

1. The _____ provides services that are used for the exchange of information with individuals or groups.
2. The _____ connection is the most inexpensive and common way of connecting to the Internet.
   a. Satellite b. Cable c. Dial-up d. Fiber optic broadband
3. The companies that provide cable TV also offer cable Internet access, which has fewer delays due to low latency. (True/False)
4. _____ is another form of ISP, which is useful for serving remote or sparsely populated areas.
5. _____are easier to remember and are made for easy accessibility of an IP or Internet Protocol.

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3. CONCEPT OF WWW (WORLD WIDE WEB)

The World Wide Web is a collection of different websites that provides access to information through the Internet. The World Wide Web was invented by Tim Berners Lee in 1989 while working at CERN, the Swiss-based scientific organization, for research in subnuclear physics. The data from the web is transferred through the Hypertext Transfer Protocol (HTTP) and it can be accessed by the users by using the software application of the web browser, which is a software application of a web server. The web was used for creating websites and it is connected to the Internet. The World Wide Web was used for spreading information over the Internet, which popularized the use of the Internet. The introduction of the Internet and the World Wide Web has revolutionized the way business is conducted through the system of interconnected networks and with other software and hardware components.

The Internet has helped with being the world's biggest computer network, scattered all over the world that has grown over thousands of networks for connecting millions of users across the world. Hence, Internet is a global system of interconnected computer networks that uses a standardized Internet protocol suite (TCP/IP), for the interchange of data, by packet switching. With the emergence of electronic commerce, the Internet has evolved into an infrastructure capable of supporting major commerce-enabled applications. The rapid digitalization of the economy has transformed lives and society on a large scale by delivering several opportunities along with several challenges. The digital transformation of the economy has empowered business enterprises with technological advancements, digitization of operations, and building strategic technologies for business development through e-commerce. It has helped business entities to become more dependent on data analytics, which has helped to facilitate the supporting services for accessing data required for finance, retail distribution, shipping, and transportation. Internet-based e-commerce has brought revolutionary changes and innovations to businesses, management, international trade, information sharing with clients, and coordination of business activities with trading partners based on shared information. The pace of digital transformation has impacted countries globally though it varies in different countries it has led to exponential growth in the aggregation of digital data over the Internet.

World Wide Web (WWW) is also called the W3, and it offers a way to access documents spread over several servers across the Internet. These documents may contain texts, graphics, audio, video, and hyperlinks. The hyperlinks allow the users to navigate between the documents. It uses the Hypertext transport protocol (HTTP), and offers access to hypertext documents, other working programs, and Internet resources. For connecting to the Internet, one needs to use an Internet service that provides a way for data to be transferred from Internet servers to the user's computer. The hardware required for connecting to the Internet includes the following:

- **Computer or a Smartphone:** It is the hardware device for connecting to the Internet.
- **Modem:** It is a hardware device that connects the home or office network to the wider Internet.
- **NIC (Network Interface Card—Wired/Wireless):** It is a hardware component with a circuit board that provides a network connection for the computer.
- **Wi-Fi Router or Hotspot:** It is a wireless communication technology that is used for local area network (LAN).
- **Routers and Switches:** It is a box that consists of all wired and wireless devices for using the Internet connection and also allows them to communicate with one another over the Internet.
- **Cables:** They connect the various devices to the Internet.
- **ISP:** The Internet service provider (ISP) is a company that provides access to the Internet for using their services. One needs to subscribe to them.

3.1 Components of WWW

The World Wide Web makes use of the Internet for globally interconnecting computer networks using the Internet protocol suite of TCP/IP for linking various devices across the globe. The Internet works by using a packet routing network to allow computers to send and receive messages using Internet Protocol addresses and a Transfer Control Protocol. The Internet Protocol and Transfer Control Protocol together are often referred to as TCP/IP. The Internet allows computers to share information by sending messages back and forth across the system and the system that handles this communication is called a packet routing network. The Internet Protocol dictates that each computer has a numerical address. The messages are sent from one computer to another using each one's unique Internet Protocol

(IP) address. The transfer of information between IP addresses is called a message. For transfer, messages are broken up into smaller pieces, called packets. The complete message is separated and sent in pieces, to be reassembled as it is received. These packets are then routed from the sender to the receiver using the IP address. Every computer or device can be said to have a unique, numbered IP address. IP addresses are numbers and not words.

The various networks across the globe consist of public, private academic, government, and business networks that are linked with various wireless, electronic, and optical networking technologies.

Let us understand the components that are needed to access the Internet through the World Wide Web using Internet software. These include the following:

- **Operating System:** The operating system is the interface between the computer and the user. For connecting to the Internet, we need an operating system like Microsoft Windows, Apple macOS, Linux, Android, Apple's iOS, and more. The operating system helps to perform many tasks like handling input and output, file management, memory management, process management, and controlling other devices like disk drives, printers, and more.
- **Internet Browser:** This is the software required for locating and retrieving the contents from the World Wide Web and displaying them on the user's screen. It helps to convert HTML pages into simple language. Examples of Internet browsers are Internet Explorer and Netscape. Browser software allows the user to navigate and search the WWW. The process of navigating the Internet means moving from one web page or site to another. Browser software has several navigation tools to help the user move through the WWW. The browser software helps the user to:
  - read text
  - display graphics
  - display videos
  - listen to sound/music
  - interact with games
  - use e-commerce
  - set up secure links
  - enable applications

- download files
- stream live video and radio

- **Database Server:** This is a server that is used for running the network database application, storage of data, and maintaining the database files like Microsoft SQL Server or Oracle.
- **Web App Server:** This is required for delivering web content like HTML pages, images, files, videos, and more.
- **Firewall:** This is the security tool required to safeguard the system while sharing information on a big network globally. The security hazards could be in form of viruses, information theft, hacking, and more. Hence, the firewall tool is the protection tool that is recommended to remain safe. Security with a firewall helps to make the computer secure since it restricts harmful information and programs affecting the systems.
- **TCP/IP Protocol:** These are a set of standard protocols that are needed for communicating on the Internet. It enables application programs and computing devices to exchange messages over a network.
- **Search Engine:** It is used for searching any information and the most popular search engines are Google, Yahoo, and more.

STUDY NOTE

Web-based software is the software you use over the Internet with a web browser, and it is much safer. The user does not have to install anything, download any software, or worry about upgrades. If you are using an online bank or web-based email programs like Gmail, Hotmail, or Yahoo Mail, then you are already using web-based software.

3.2 Portals and their Difference from Websites

Web portals and websites are different from each other but there is a correlation between them consisting of a web-based interface. Web portal refers to the management of knowledge systems and data required for the delivery of facilities to different organizations and enterprises for sharing, interchanging, reusing, and creating data. Portals of a company are private domains present on the Internet. They require a unique web address (URL) and an ID with a password for getting to the web portal. The data and content in the portals are

specific to the users and it is protected and secured. The total interface can be public or private providing the user access to several roles. The portals can be classified as horizontal portals and vertical portals. The horizontal portals are like public website that delivers all kinds of services for the users. The vertical portals are user-centric and provide information as required by the user or organization.

The websites of a company are a group of web pages located on the Internet and can be accessed via a web address. They help in facilitating the online transaction of businesses and services. The users need to log into the websites of the company and the content can be seen globally, which helps to facilitate the expansion of business globally, where customers all over the world can access websites for business transactions. The website can be specific to the business, industry, or product.

The development of websites involves various applications and tools necessary for making the website look attractive and user-friendly for online clients. Intelligent websites require latest technologies for developing human machine interfaces (HMIs) with high-speed communication links to connect the business entities with the global markets. The process requires network infrastructure in form of hardware and software for creating and running the website, with the visual design of the site, user interface and the type of audience, and more.

The difference between a web portal and a website are as follows:

- Web portals are private and user-centric with a two-way communication process. On the other hand, websites are owned by a company.
- The website is present on the Internet and comprises several web pages that can be accessed through its URL. On the other hand, a web portal consists of a point of access where the information or content is available for specific users.
- The web portals require to be updated regularly with sources of information and they are gateways to the knowledge domain. On the other hand, the websites do not need to be updated regularly with information unless required, and they are not a knowledge domain.

Activity 1

Find methods of how the e-commerce search engine can be optimized for a better flow of customers and prepare a report on it.

SELF-ASSESSMENT QUESTIONS – 2

6. The World Wide Web was invented by _____in 1989.
7. _____ is a server that is used for running the network database application, storage of data, and maintaining the database files like Microsoft SQL Server or Oracle.
8. Internet Explorer and Netscape are examples of operating system. (True/False)
9. The development of websites involves various applications and tools necessary for making the website look attractive and user-friendly for online clients. (True/False)
10. _____ is the security tool required to safeguard the system while sharing information on a big network globally.

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4. FUNCTIONS OF THE COMPUTER AND WEB SERVER HARDWARE (ONPREM/CLOUD)

Web services are used for the exchange of information between applications on the web. The web services enable the applications to easily interact with each other. Web services are offered using the concept of utility computing and it respond to the client's request through its software and hardware using Hypertext Transfer Protocol (HTTP) and other protocols needed via the World Wide Web. The web server is responsible for displaying the website content by processing, storing, and displaying the web pages to the clients or the users.

The information is passed by the web server when the user runs a specific program with the supplied input data. The data is processed and passed back to the web browser with a confirmation message. This process of communication involving passing data back and forth between the server and the application is called the Common Gateway Interface (CGI). This can be better understood with the following steps during web browsing when the user clicks a hyperlink for a particular web page or URL:

1. User browser contacts the HTTP web server and demands the URL, which is the - filename.
2. Web server will parse the URL with the filename and after finding the file it sends it back to the browser. If there is a problem, it sends an error message indicating that the user has requested the wrong file.
3. Web browser takes the response from the web server and displays either the received file or the error message.

The HTTP server can be set so that whenever a file in a certain directory is requested that file is not sent back but is executed as a program and the output of the program is sent back for the browser to display. This process is referred to as the Common Gateway Interface and the programs are called CGI scripts. The CGI programs can be in form of PERL Script, Shell Script, C or C++ programs, or more computer languages.

Most companies (big and small) prefer to store their business information either in on-premises or in the cloud. In fact, location is the main differentiating factor between on-premise and cloud software. The on-premise software is installed in the company's

infrastructure, which is hosted locally. However, the cloud software is available and managed by the service provider's servers, like Microsoft. They can be accessed with the help of an interface or a web browser. The service provider maintains and procures the software and hardware, along with other infrastructure required for supporting the data centers. The account and services can be accessed and managed with the help of the Internet from the computer, mobile applications, and the web browser. The important differences between on-premise and cloud are as follows:

- In the computing scenario, the public cloud involves the resources being hosted by the service provider and the business enterprise can access the resources for its use at any time. In an on-premise situation, the resources are located in-house within the infrastructure of the company, and it is the responsibility of the company to maintain the system and all its associated processes.
- The companies that make use of the on-premise software are responsible for the costs involved in developing infrastructure, space, and server hardware. On the other hand, companies using cloud computing are required to pay for the use of resources.
- Within an on-premise environment, the company has full control and can retain its entire data in a good or bad situation. In a cloud computing scenario, the key to information, data, and encryption is kept with the third-party provider. Hence, at times of downtime or any other unexpected situation, the company is unable to access its data or information.
- In the on-premise environment, the companies, like banks, governments, etc., can manage their confidential or sensitive information through a certain level of privacy and security. On the other hand, security is the main concern in the cloud computing environment for many industries.
- Companies working in on-premise environments should remain compliant with the regulatory mandates. On the contrary, in cloud computing environment, business enterprises must ensure that their third-party provider is compliant with all the regulatory mandates required by the industry.

4.1 Server Software (Individual Installation vs SaaS)

Server software is used by the Internet for sharing and transferring data and information over a large network securely following a set of protocols. The server software is a user-friendly interface that runs on the web server to carry a large range of information resources and services linked to the applications of the cloud environment.

Software-as-a-Service (SaaS) is a cloud-based software whose services are used through paid subscriptions. The users can access the software through the Internet through the SaaS provider's servers. The service provider is responsible for storing the data of the company and manage, install, upgrade, and maintain the software. The SaaS application can be accessed by users according to their needs and by paying a monthly fee for its access. The users do not need to buy, install, or purchase a license for the software. The advantages of using SaaS over the on-premise software are as follows:

- It does not require a dedicated IT team.
- It is user-friendly and can be accessed from any Internet-enabled device.
- It does not require maintenance or installation.
- It does not require end-to-end support for its work.
- It has better and faster scalability than the on-premise software.
- No infrastructure is required for running the software.
- The implementation period is small.
- The service provider is responsible for the management and maintenance of the software.

Some examples of SaaS are Google, Facebook, Twitter, etc., which can be accessed from any kind of Internet-based device.

4.2 Different Types of E-commerce Software Used Widely

E-commerce refers to electronic business since it is carried out using electronic means. The purchase and sale of products and services are done over the Internet. E-commerce business covers a large area globally for conducting business and interacting with customers and other entities.

E-commerce companies require the right kind of software that could help them conduct transactions with customers. There are several types of e-commerce software available for simplifying the customer experience and selling products and services online. The software helps in streamlining the various businesses and makes it easier for the customers to navigate through the website from the front end. The different forms of e-commerce software used widely are:

Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS)

These options are more suited to small companies or the ones that are in the beginner's phase. These software allow a company to retain higher control over its e-commerce website and build custom storefront solutions.

On-Premise Software

The on-premise software is hosted locally by the retailers and managed by its IT team. They can take care of any problems that come up and work on manual updates along with adding new features.

Shopify

Shopify is one of the most popular software used and accepted on e-commerce platforms due to its usability and complete form of tool bundling. It is a user-friendly software and is used by many sites like Facebook, Pinterest, Twitter, Amazon, and more.

BigCommerce

BigCommerce is another type of e-commerce software used during the online interface that helps with online transactions of buying and selling. It helps organizations with the growth of their business through its customizable processes, website builders, etc.

SELF-ASSESSMENT QUESTIONS – 3

11. _____ is the main differentiating factor between on-premise and cloud software.
12. The companies using cloud computing are required to pay for the use of resources. (True/False)
13. Software-as-a-Service (SaaS) is a cloud-based software whose services are used through _____.
14. The on-premise software is hosted locally by the _____.
15. _____ helps organizations with the growth of their business through its customizable processes, website builders, etc.

5. CONCEPT MAP

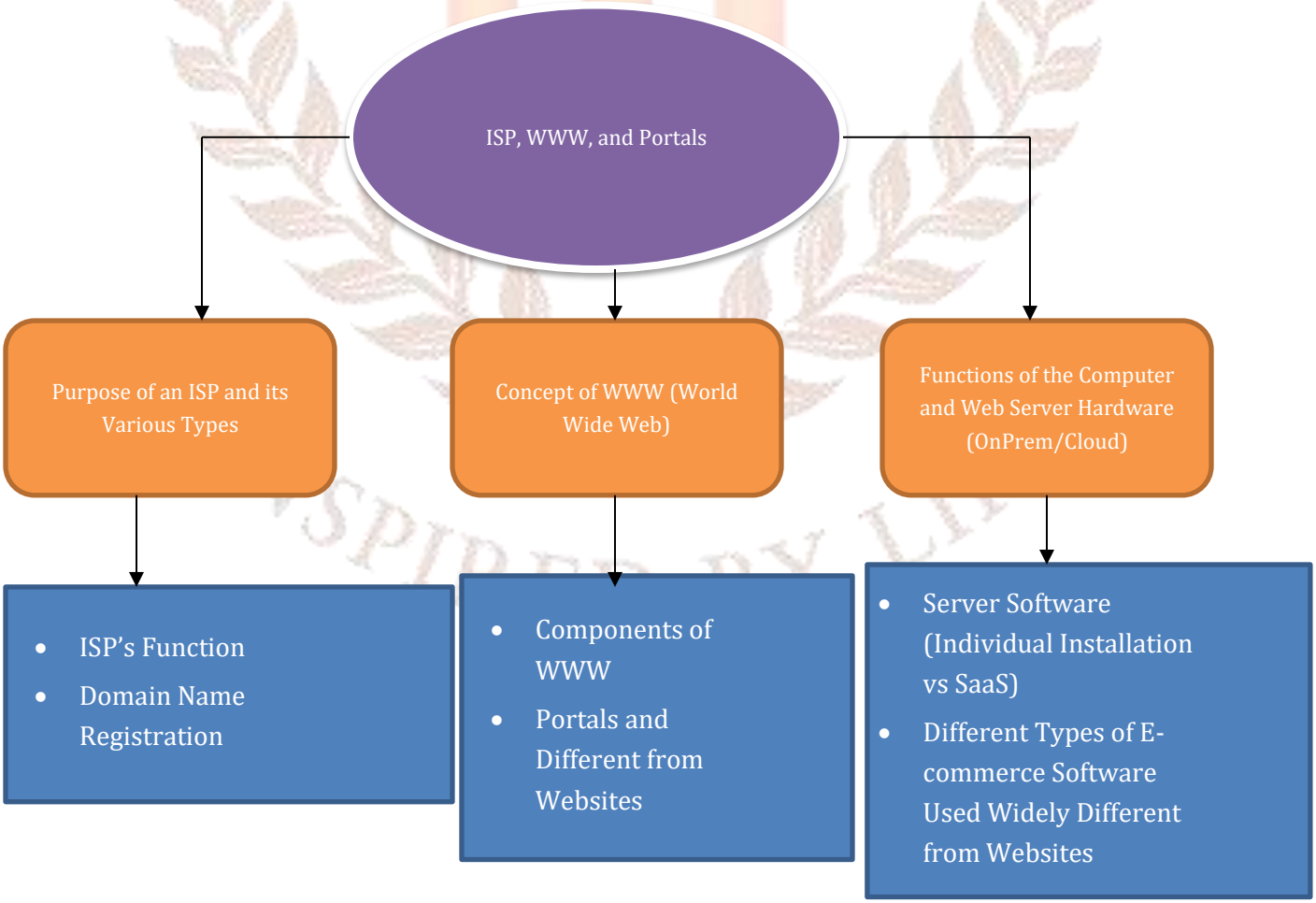

Fig 2: Concept Map

6. SUMMARY

- The Internet service provider (ISP) provides services that are used for the exchange of information with individuals or groups.
- There are several ISPs connections available, including fiber, DSL, cable, and satellite.
- Domain name refers to the physical address of a website on the Internet, that is registered in the name of the business organization.
- The World Wide Web is a collection of different websites that helps to access information through the medium of the Internet.
- The World Wide Web makes use of the Internet for globally interconnecting computer networks using the Internet protocol suite of TCP/IP for linking various devices across the globe.
- Web portal refers to the management of knowledge systems and data required for the delivery of facilities to different organizations and enterprises for sharing, interchanging, reusing, and creating data.
- Web portals are private and user-centric with a two-way communication process. On the other hand, websites are owned by a company.
- The web server is responsible for displaying the website content by processing, storing, and displaying the web pages to the clients or the users.
- Server software is used by the Internet for sharing and transferring data and information over a large network by securely following a set of protocols.
- Software-as-a-Service (SaaS) is a cloud-based software whose services are used through paid subscriptions.
- There are several types of e-commerce software available for simplifying the customer experience and selling products and services online.

7. GLOSSARY

- **Internet:** A large network of networking infrastructure that connects millions of computers globally creating a network where the computers can communicate with other computers via Internet.
- **Server Software:** A software used by the Internet for sharing and transferring data and information over a large network securely following a set of protocols.
- **Web Portal:** The management of knowledge systems and data that is required for the delivery of facilities to different organizations and enterprises.

8. TERMINAL QUESTIONS

Short Answer Questions

1. What is the purpose of ISP?
2. Explain the DSL connection in ISP.
3. Define WWW.
4. What is SaaS software?

Long Answer Questions

1. Explain the importance of domain name registration.
2. Describe the components of WWW.
3. Explain the role of server software.

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9. CASE STUDY: E-COMMERCE WEBSITE DEVELOPMENT

A small time eyewear retailer wanted to design its e-commerce website. The retailer wanted to develop its brand and image along with multiple templates and page layouts. For this, the retailer required a new e-commerce website developed on a user-friendly platform, so that the audience could easily find all of their products with ease. The retailer also liked to synchronize his/her inventory with a third-party distributor to allow offsite storage of products along with cost-effective shipping options.

In its endeavor, the retailer was helped by ABS web solutions company. The company understood the requirements of the retailer and used WooCommerce capabilities to create a fully functional online storefront to sell sunglasses and other accessories. Additionally, the company developed the website using a user-friendly platform, i.e. WordPress. The platform allowed the retailer to update the website content with ease. ABC also designed and developed multiple webpage templates to maintain the consistency of a variety of content along with the latest web development and design best practices.

To optimize the ongoing ad expenses, ABC installed and created Google Analytics conversions and goals. This allowed the retailer to visualise the impact of Google, Facebook and Instagram advertising and scale their budget accordingly. Apart from this, retargeting was established to send messages to clients who had left items in their carts. ABC also built a Facebook and Instagram Marketing campaign to target customers from various other e-commerce websites.

The steps taken by ABC helped the eyewear retailer immensely. Soon, the retailer achieved the following outcomes:

- A 100% mobile and responsive e-commerce website was created.
- Retargeting and conversions led to a 150% increase in online sales by 4th month.
- Internal staff was also trained to make updates and upload the latest products with the WooCommerce theme.

Questions:

1. Discuss the requirements of the eyewear company?

(Hint: The eyewear company wanted to build a new e-commerce website to sell their unique and stylish sunglasses online.)

2. How did ABC help its client achieve their aim?

(Hint: ABC implemented WooCommerce capabilities to develop a fully functional online storefront to sell sunglasses and other accessories.)

10. ANSWERS

Answers to Self-Assessment Questions

1. Internet service provider
2. Dial-up
3. True
4. Satellite
5. URLs
6. Tim Berners Lee
7. Database server
8. False
9. True
10. Firewall
11. Location
12. True
13. Paid subscriptions
14. Retailers
15. BigCommerce

Short Answer Questions

Answer 1. The Internet service provider (ISP) provides services that are used for the exchange of information with individuals or groups.

For details, refer to section 2.

Answer 2. The DSL is the digital subscriber line that is used for establishing a connection with the Internet through telephone lines.
For details, refer to section 2.

Answer 3. The World Wide Web is a collection of different websites that helps to access information through the medium of the Internet.
For details, refer to section 3.

Answer 4. Software-as-a-Service (SaaS) is cloud-based software, and its services are used through paid subscriptions and are also called software on demand.
For details, refer to section 4.

Long Answer Questions

Answer 1. Domain name refers to the physical address of a website on the Internet that is registered in the name of the business organization.
For details, refer to section 2.

Answer 2. The components that are needed to access the Internet through the World Wide Web using Internet software include operating system, Internet Browser, Database server, etc.
For details, refer to section 3.

Answer 3. Server software is used by the Internet for sharing and transferring data and information over a large network securely following a set of protocols.
For details, refer to section 4.

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