

## Unit-2

**SEO:-** SEO stands for Search Engine Optimization. It is a process designed to optimize a website for search engines. It helps websites achieve a higher ranking in search engine results when people search for keywords related to their products and services. So, it is a practice of increasing the quantity and quality of traffic to a website through organic search engine results. See the following image to understand the basic activities involved in the SEO



**Working of SEO:-** Search Engines such as Google have their own algorithm or rules to decide the order of pages to show for a search query. These algorithms determine the rankings of the SERPs based on various ranking factors. However, it gives more emphasis on certain metrics to evaluate the quality of a page and accordingly to decide its ranking.

### Types of SEO:-

**White Hat SEO:-** It refers to the **SEO** techniques which are in accordance with the **SEO guidelines** set by the search engines. It means it uses approved search engine optimization techniques to improve the ranking of a site on **search engine results pages (SERP)**.

Unlike Black Hat SEO, it mainly focuses on the human audience as opposed to a search engine. People who are looking for long-term investment on their websites rely on white hat SEO techniques. Examples of White Hat SEO include quality content, internal linking, link building, site optimization, social media marketing, Google Ads, etc

### Techniques:-

A list of 6 popular white hat SEO techniques are given below:

1. Good content
2. Proper use of title, keywords and metatags

3. Ease of Navigation
4. Site Performance
5. Quality Inbound Links
6. Mobile Friendliness

**Blackhat SEO:** - It refers to the SEO techniques which are not in accordance with the **SEO guidelines** set by the search engines. These techniques exploit the weaknesses in search engines to get higher rankings for websites on the **search engine results pages (SERP)**. It mainly focuses on search engines and not on the human audience. People who are looking for a quick financial return on their website rather than a long term investment use black hat SEO techniques

A list of black hat SEO techniques are given below:

1. Keyword Stuffing
2. Cloaking
3. Hidden Text
4. Doorway Pages
5. Article Spinning
6. Duplicate Content
7. Page Swapping
8. Link Farms
9. URL Hijacking
10. Improper Use of Snippets

**Need of an SEO friendly website:-**

1. Increased Visibility
2. More High Quality Web Traffic
3. Establish Trust & Credibility
4. Your Competitors Are Using It
5. Improve Customer Engagement & Conversion Rates
6. Cost-Effective Digital Marketing
7. Work Toward Long-Term Success

**Search Positioning:-** Search positioning in SEO refers to the rank or position of a website or webpage in the search engine results pages (SERPs) for specific keywords or queries. It's crucial for websites to appear as high as possible in the search results because users are more likely to click on links that appear on the first page

## Benefits of Search Positioning:-

- 1- **Increased Visibility:** Higher search positioning means greater visibility in search engine results, leading to more exposure to potential customers who are actively searching for relevant products or services.
- 2- **More Organic Traffic:** Websites that rank higher in search results tend to attract more organic traffic. Since organic traffic is free, it provides a cost-effective way to reach potential customers.
- 3- **Enhanced Brand Credibility:** Websites appearing at the top of search results are often perceived as more credible and trustworthy by users. Achieving a high search positioning can therefore enhance the credibility and authority of your brand.
- 4- **Higher Conversion Rates:** Targeted traffic from search engines is more likely to convert into leads or sales, as users typically have higher purchase intent when they are actively searching for specific products or services.
- 5- **Competitive Advantage:** Outranking competitors in search results can give your business a competitive edge, especially in crowded markets. It allows you to capture market share and attract customers away from competitors.
- 6- **Long-Term Results:** Unlike paid advertising, which stops generating traffic once the budget is exhausted, SEO efforts can provide long-term benefits. Once you achieve a high search positioning for relevant keywords, you can continue to attract organic traffic over time with ongoing optimization efforts.
- 7- **Cost-Effectiveness:** While SEO requires an investment of time and resources, the return on investment (ROI) can be significant over the long term. Compared to pay advertising, SEO can be more cost-effective since organic traffic is free once you achieve high rankings.
- 8- **Insights into Customer Behaviour:** SEO tools and analytics provide valuable insights into customer behaviour, search trends, and preferences. By analysing this data, businesses can better understand their target audience and tailor their marketing strategies accordingly.
- 9- **Adaptability to Algorithm Changes:** While search engine algorithms may change over time, websites with strong SEO foundations are better equipped to adapt to these changes. By following best practices and staying up-to-date with industry trends, you can maintain and even improve your search positioning over time.
- 10- **Global Reach:** SEO allows businesses to reach a global audience, regardless of their physical location. This is particularly beneficial for e-commerce businesses and companies offering digital products or services.

- **Keyword Density**

Often it is misunderstood that by including more keywords which describe your website can eventually help search engine to bring your website on top. Infact, more keywords sometimes get you penalized for “spamming” or keyword stuffing. So, using keyword wisely from SEO point of view becomes mandatory. So what is the ideal frequency of Keyword? It is believed that for best result, keyword density should be 3-7% for the major and 1-2 % for minor key words.

- **Keywords in Special places, Page titles & Headings**

It is imperative where your keyword exactly appears on your web page. It counts more if you have keywords in the “page title, the headings, the paragraphs” especially in URL. For instance, if your competitor’s web page has same number of keyword as your webpage but if you have

included the keywords in your URL then your webpage have more chances to stand out than your competitor.

Placing the keywords in the “Title of the page” or “Heading tags” is considered the best place to put your keywords. The reason behind is that the search engine looks first for the keywords in your “Title tag” and then in “Heading tag”. The standard title tag keyword is around 70 characters max.

### **Role of keywords in SEO:-**

- 1- **Relevance:** Keywords determine the relevance of your content to search queries. By strategically incorporating relevant keywords into your website's content, meta tags, headings, and URLs, you signal to search engines what your content is about, increasing the likelihood of your pages appearing in relevant search results.
- 2- **Visibility:** Optimizing your website for targeted keywords helps improve its visibility in search engine results pages (SERPs). When users search for specific keywords related to your business or industry, search engines aim to display the most relevant results, and having optimized content can increase the chances of your website ranking higher in search results.
- 3- **Traffic:** Targeting high-volume, relevant keywords can drive organic traffic to your website. When your website ranks well for popular search terms, you attract more visitors who are actively searching for information, products, or services related to those keywords.
- 4- **Competition Analysis:** Keywords can provide insights into your competitors' strategies and audience preferences. By conducting keyword research, you can identify which keywords your competitors are targeting, assess their search volumes and competitiveness, and refine your own SEO strategy accordingly to gain a competitive advantage.
- 5- **User Intent:** Keywords help determine user intent, or the reason behind a user's search query. Understanding user intent is crucial for creating relevant and valuable content that meets the needs and expectations of your target audience. By aligning your content with the intent behind specific keywords (e.g., informational, navigational, transactional), you can attract users at different stages of the buyer's journey and provide them with the most relevant information or solutions.
- 6- **Content Optimization:** Keywords guide the optimization of your website's content. By strategically placing keywords in key areas of your content, such as headings, paragraphs, and image alt tags, you can improve the readability and relevance of your content for both users and search engines. However, it's essential to maintain a natural and user-friendly writing style rather than keyword stuffing, which can negatively impact user experience and SEO performance.
- 7- **Link Building:** Keywords also play a role in anchor text optimization for internal and external links. Using relevant keywords as anchor text when linking to other pages on your website or external websites can help search engines understand the context and relevance of the linked pages, contributing to overall SEO performance.

**Meta-tags:** one of the earliest method to optimize the website high in result was to offer Meta data to the search engines. Meta data is nothing but the data about the data found on that page.

- **Meta description:** - The Meta description tag provides a brief summary or description of the content of a web page. It is displayed beneath the Meta title in search engine results pages (SERPs) and helps users understand what the page is about.
- **MetaKeyword:-**  
The Meta keyword tag is an HTML element that was historically used to specify keywords relevant to the content of a web page. However, its importance has significantly diminished over time, and search engines like Google no longer consider it as a ranking factor.

Both **Meta keyword** and **Meta description** can contribute to your search engine ranking. The Meta description tag is intended to be a brief and concise summary of your page's content. The limitation for meta-description is about 170- 200 characters, writing a unique description for each page of your site. Meta description format would look something like this

`<meta name="description"content= "Brief description of the contents of your page.">`

### **On-Page Optimization:-**

On-page optimization refers to the actions taken directly within a website to improve its search engine visibility and relevance. It involves optimizing various elements of individual web pages to make them more appealing to both search engines and users. Key aspects of on-page optimization include:

- 1- **Keyword Optimization:** Researching and strategically incorporating relevant keywords into page titles, headings, meta tags, content, and URLs to align with search queries and improve relevance.
- 2- **High-Quality Content:** Creating original, valuable, and engaging content that meets the needs of users and provides solutions to their queries. Content should be well-written, informative, and optimized for target keywords.
- 3- **Meta Tags Optimization:** Optimizing meta tags, including meta titles, meta descriptions, and meta keywords (though the latter is less relevant today), to accurately describe the content of each page and improve click-through rates in search results.
- 4- **URL Structure:** Creating SEO-friendly URLs that are descriptive, concise, and include target keywords, making it easier for both users and search engines to understand the page's content.
- 5- **Internal Linking:** Establishing a logical internal linking structure to help search engines navigate and index your site, as well as to distribute link equity (ranking power) throughout the site.
- 6- **Page Speed Optimization:** Improving website loading speed by optimizing images, leveraging browser caching, minimizing CSS and JavaScript files, and utilizing content delivery networks (CDNs) to enhance user experience and search engine rankings.
- 7- **Mobile-Friendliness:** Ensuring that your website is mobile-responsive and provides a seamless user experience across various devices, as mobile-friendliness is a significant ranking factor in search algorithms.

### **Off-Page Optimization:**

Off-page optimization focuses on actions taken outside of your website to improve its authority, relevance, and reputation across the web. It primarily involves building external signals that indicate the popularity, trustworthiness, and credibility of your site. Key aspects of off-page optimization include:

- 1- **Link Building:** Acquiring high-quality inbound links (backlinks) from authoritative and relevant websites to improve your site's authority and credibility in the eyes of

search engines. Natural link building through content promotion, outreach, and relationship-building is essential for off-page SEO.

- 2- **Social Media Engagement:** Engaging with your audience on social media platforms and sharing valuable content to increase brand visibility, attract traffic, and generate social signals (likes, shares, comments), which may indirectly influence search rankings.
- 3- **Online Reputation Management:** Monitoring and managing your brand's online reputation by responding to customer reviews, addressing negative feedback, and maintaining a positive online presence across review sites, forums, and other online platforms.
- 4- **Local SEO:** Optimizing your website for local search by claiming and optimizing your Google My Business listing, obtaining local citations, and earning positive reviews from satisfied customers to improve visibility in local search results.
- 5- **Brand Mentions:** Building brand awareness and earning mentions (citations) of your brand or website on reputable websites, even without a direct link, as they can contribute to your site's authority and trustworthiness.

### **Internal Links:**

Internal links are hyperlinks that point from one page on a website to another page within the same website domain. These links connect different pages and content assets within your website and help users navigate your site efficiently. Internal linking also plays a crucial role in distributing link equity (ranking power) throughout your site and establishing a hierarchy of importance among your pages. Key aspects of internal links include:

- 1- **Navigation:** Internal links form the backbone of website navigation, allowing users to move between different sections, categories, and pages within your site seamlessly.
- 2- **Contextual Links:** Incorporating internal links within the body of your content to provide additional context, guide users to related topics or resources, and encourage exploration and engagement.
- 3- **Anchor Text Optimization:** Using descriptive and relevant anchor text (the clickable text of a hyperlink) for internal links to provide users with clear expectations about the linked content and improve keyword relevance.
- 4- **Hierarchy and Structure:** Organizing internal links strategically to establish a logical hierarchy and structure for your website, making it easier for search engines to crawl and index your content.
- 5- **Link Equity Distribution:** Internal links pass link equity (ranking power) from one page to another within the same domain, helping to spread authority and relevance throughout your site and boost the visibility of important pages.

### **External Links:**

External links, also known as outbound links, are hyperlinks that point from one website to a page on another website domain. These links direct users to external sources of information, references, or related content outside of your website. External links play a vital role in establishing credibility, authority, and trustworthiness for your site, as well as providing additional value to users. Key aspects of external links include:

- 1- **Credibility and Authority:** Linking to reputable and authoritative external sources demonstrates trustworthiness and credibility to both users and search engines, as it indicates that your content is well-researched and backed by reliable sources.
- 2- **Resource and Reference:** Providing external links to relevant and valuable resources, studies, statistics, or expert opinions enhances the depth and breadth of your content, enriching the user experience and providing additional context or insights.

- 3- **Relationship Building:** Building relationships with other website owners, bloggers, influencers, and industry experts through external linking can lead to reciprocal linking opportunities, guest blogging opportunities, and collaborations that benefit both parties.
- 4- **Natural Link Profile:** Maintaining a natural and diverse link profile that includes a mix of internal and external links helps search engines understand the context and relevance of your content and avoids penalties for unnatural linking practices.
- 5- **Nofollow Attribute:** Optionally, you can use the "nofollow" attribute in external links to indicate to search engines that you do not endorse or vouch for the linked website, which can be useful for sponsored content, user-generated content, or untrusted sources.

### **Organic SEO:**

Organic SEO focuses on optimizing a website's visibility in search engine results pages (SERPs) through natural, unpaid methods. It involves optimizing various aspects of a website, creating high-quality content, and earning inbound links from other websites. The primary goal of organic SEO is to improve a website's search engine rankings and attract organic (unpaid) traffic from search engines. Key characteristics of organic SEO include:

- 1- **Content Quality:** Organic SEO emphasizes creating valuable, relevant, and original content that meets the needs of users and provides solutions to their queries. Content should be optimized for target keywords and structured in a user-friendly format.
- 2- **On-Page Optimization:** Organic SEO involves optimizing on-page elements such as meta tags, headings, URLs, and internal linking to improve a website's relevance and visibility in search results.
- 3- **Link Building:** Organic SEO includes acquiring high-quality inbound links (backlinks) from reputable and relevant websites to enhance a website's authority and credibility in the eyes of search engines.
- 4- **User Experience:** Organic SEO focuses on providing a positive user experience by ensuring that a website is mobile-friendly, fast-loading, easy to navigate, and accessible to all users.
- 5- **Long-Term Results:** Organic SEO efforts typically yield long-term results, as improvements in search engine rankings are achieved gradually and sustained over time through ongoing optimization and content creation efforts.

### **Non-Organic SEO:**

Non-organic SEO, also known as paid or artificial SEO, involves using paid methods to improve a website's search engine visibility and attract traffic. It includes tactics such as paid search advertising (e.g., Google Ads), paid inclusion, and other forms of paid promotion. While non-organic SEO can provide immediate results and visibility in search results, it requires ongoing investment and does not have the long-term sustainability of organic SEO. Key characteristics of non-organic SEO include:

- 1- **Paid Advertising:** Non-organic SEO relies on paid advertising methods to appear prominently in search results, such as pay-per-click (PPC) advertising, display ads, and sponsored listings.
- 2- **Immediate Results:** Non-organic SEO can generate immediate visibility and traffic for a website, as ads are displayed prominently in search results and targeted to specific keywords or demographics.
- 3- **Budget Dependency:** Non-organic SEO requires a budget for advertising spend, as businesses pay for clicks or impressions on their ads. The effectiveness of non-organic SEO is directly tied to the budget allocated for paid advertising campaigns.
- 4- **Adaptability to Changes:** Non-organic SEO allows for greater control and flexibility in adjusting ad campaigns, targeting parameters, and messaging to adapt to changes in market conditions or business goals.

- 5- **Short-Term Focus:** Non-organic SEO tends to have a short-term focus, as visibility and traffic are dependent on ongoing advertising spend. Once ad campaigns are paused or discontinued, visibility in search results diminishes.