2 Introduction to SEO (Search Engine Optimization)

Let us learn

- Definition of SEO
- Types of SEO
- Techniques of SEO
- SEO-Page content
- SEO- Keywords
- SEO-Social Book marking
- SEO-SMO

2.1 Introduction

SEO stands for Search Engine Optimization. SEO is a technique used for: designing and developing a website to rank high in search engine results. It is a subset of search engine marketing. Thus SEO is useful in increasing the number of visitors to a website.

There are many strategies and techniques adopted to optimize the webpage. This chapter introduces few ways at the beginners level.

Do you know?

Search Engine is an online program or software that helps users to search for information on world wide web. Examples of Search Engine include Google, Yahoo and Bing

2.2 Types of SEO - There are two types of optimization

- **On-Page SEO :** It includes Provision of good content, good keywords selection, putting keywords on correct places, giving appropriate title to every page etc.

- **Off-Page SEO :** It includes link building, increasing link popularity by submitting open directories, search engines, link exchange etc.
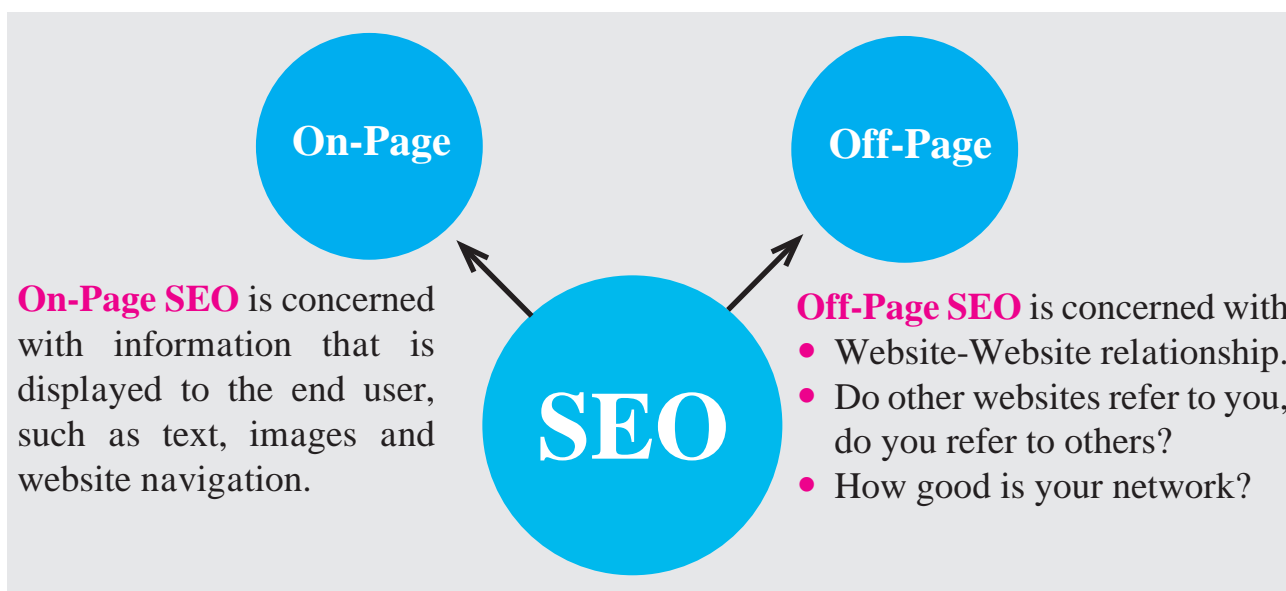
On-Page SEO is concerned with information that is displayed to the end user, such as text, images and website navigation.

SEO

On-Page

Off-Page

Off-Page SEO is concerned with
- Website-Website relationship.
- Do other websites refer to you, do you refer to others?
- How good is your network?

Fig 2.1: Types of SEO

2.3 Techniques of SEO

These are classified into two broad categories:

- **White Hat SEO** : Techniques that search engines recommends as apart of good design.

- **Black Hat SEO :** Techniques that search engines do not approve. The techniques used for optimizing the website are manipulative.

Refer the following strategies and differences in short about Black Hat and White Hat techniques–

WHITE HAT

WHITE HAT STRATEGIES

- Relevant content
- Well-labeled images
- Relevant links and refernces
- Complete sentences with good spelling and grammar
- Standard-compliant HTML
- Unique and relevant page titles

BLACK HAT

BLACK HAT STRATEGIES

- Duplicate content
- Invisible text and stuffed keyword
- Cloking or re-directing the user to another site or page
- Links from sites with non-relveant content

2.4 Optimizing Website

There are various sections of a website which can be optimised for better SEO.

Some of the ways to optimize the webpage for SEO

1. **SEO : Page structure optimization**

    - Html programs should start with <!doctype html>.

    - If it is singular tag eg<img> it should be self enclosed like this- <img />

    - Order of tags should be proper. Most of the time recently opened tag will be closed first.

- **It is recommended to use**

    - **<TITLE> :** Title is the first thing that user notices in search result list while using google for searching. Contents should be up to 60 characters (spaces included)

    - **Meta-description Tag :** While creating a web page, Meta description should be used to boost your On-Page SEO. Meta Description should be between 70 and 160 characters (spaces included)

- **Heading Tags :** The page should include proper heading tags from <h1> to <h6> wherever required.
- **Image Tags with ALT attribute :** The alt attribute gives information about the image, so even if the image does not download, it can make the viewers understand the image related information.

Examples of optimized Webpages

Example 1 :

```
<!doctype html>
<html>
<head><title> Page structure with appropriate order of opening and closing tags</title>
</head>
<body>
<h1> Let us understand SEO</h1>
<p>Webpage optimization helps for higher ranking in search engines.
<b>There are number of ways to opimize the pages.<i>Even the Social media plays an important role!!!</i>
</b>
</p>
</body></html>
```

Note : In the above example check the ordering of <p>,<b>and<i>. The innermost tag ends first, followed by the outermost tag. The other basic tags also follow a proper ordering as per the HTML structure.

Example 2 :

```
<!doctype html>
<html>
<head><title> Meta tag and Image tag </title>
<meta name = "description" content = "statue of liberty">
<meta name = "keywords" content = "alt, optimization of image">
<meta name = "image" content = "statue of liberty">
/head><body>
<h1> Let us understand  Meta and Image for optimization </h1>
<p>
<img  src  ="statue  of  liberty. jpg"alt="Statue of  liberty image"/>
</p>
</body></html>
```

Note : In the above example meta tag is used with important and valid keywords related to that image, like the image source as statue of liberty and from the view of optimisation of <img> tag.

2. SEO Keywords

SEO keywords are the important words and phrases related to the developed website content. A list of keywords. Need to be carefully choosen to optimize the search. Keyword Research and Analysis is an important part of the Search Engine Optimization (SEO) as well as"Search Engine Marketing".

For"Search Engine Marketing", one can pay for certain keywords.

There are various online Keyword Planner tools (such as Google AdWords Keyword Planner) to shortlist keywords. This is more useful to compare the cost of various keywords, if the website designer opts for Paid Search Engine Marketing.

3. SEO Social Bookmarking

Social bookmarking is a powerful tool in promoting a website. It is very useful for Off-Page SEO optimization.

Did you know?

Modern browsers support bookmark features. For example, you can save the bookmark in the browser by clicking the star icon next to the URL in Google Chrome.

Bookmarks are website links that are stored for future references. They are very useful specially when Web pages with long URLs are not easy to remember. Bookmarking service allows you to save, organize and share bookmarks with other users. External links are the important SEO factors to rank a website higher in the search engine. With Social bookmarking, you can quickly create high-quality backlinks.

4. SEO-Social Media Optimization (SMO)

It deals with enhancing the website's ranking, using interactive communities like facebook, twitter, blogs, forums and so on. When these communities have links to the created website it builds familiarity and trust about the website.

5. SEO-Backlinks

Backlinks are links on one website that, when clicked, take the user to another site. Backlinks are especially valuable for SEO because they contribute to the overall strength and value of the content. They also represent a "vote of confidence" from one site to another. In short, backlinks to your website are a signal to search engines that others are interested to know about the contents form your website.

6. Other factors for SEO

- **Speed of the website :** While creating a website, attention is given on the design, content and as many visuals as possible. However, all But this can slow down the website and obstruct usability.

- **Mobile friendly :** Website's mobile friendliness has become a ranking factor for Google. Hence, it is very important to ensure that the created website is mobile friendly 'for maximum' exposure and to improve the websites ranking.

Do you know?

In Google chrome you can check if your site is mobile friendly by right-clicking anywhere on the page and clicking"Inspect. "There is an icon at the left of "Elements "called" Toggle device toolbar "which changes the page to mobile mode when clicked.

- **Creating Robots.txt :** This file tells search engine which pages you want to exclude from indexing. For example, if you do not want a certain page or image being indexed, then you can restrict that page from being indexed.

2.5 SEO Audit

An SEO Audit helps to find out what could be done to improve ranking on search engines, so that consumers could find the website with greater ease. It analyses the websites health.

Eg-Seomator, SEOptimer are few free SEO audit tools available on net.

SEOptimer is a free SEO Audit Tool that will perform a detailed SEO Analysis. It provides clear and actionable recommendations that can be taken to improve your online presence.

The URL are as follows-
https://seomator.com/free-seo-audit-tool
https://www.seoptimer.com/

The following figures display the SEO analysis using SEOptimer website

Get a Free SEO Audit in 3 Minutes

SEO Analysis of this website   Check your website's overall SEO health and get a detailed report identifying any issues we find.

Website *

https://www.geodirect.in/

Submit

Fig 2.2 : Search bar in SEO Audit tool

SEOptimer   Features   Pricing   Blog   More   Login   Premium—FreeTrial

SEO Audit & Reporting Tool

Enter an URL address and get a Free Website Analysis!

geodirect.in   AUDIT

A+

Your page is very good!

You have 16 improvements recommended

Report Generated: 20th April 9:07AM UTC   Refresh Results Now

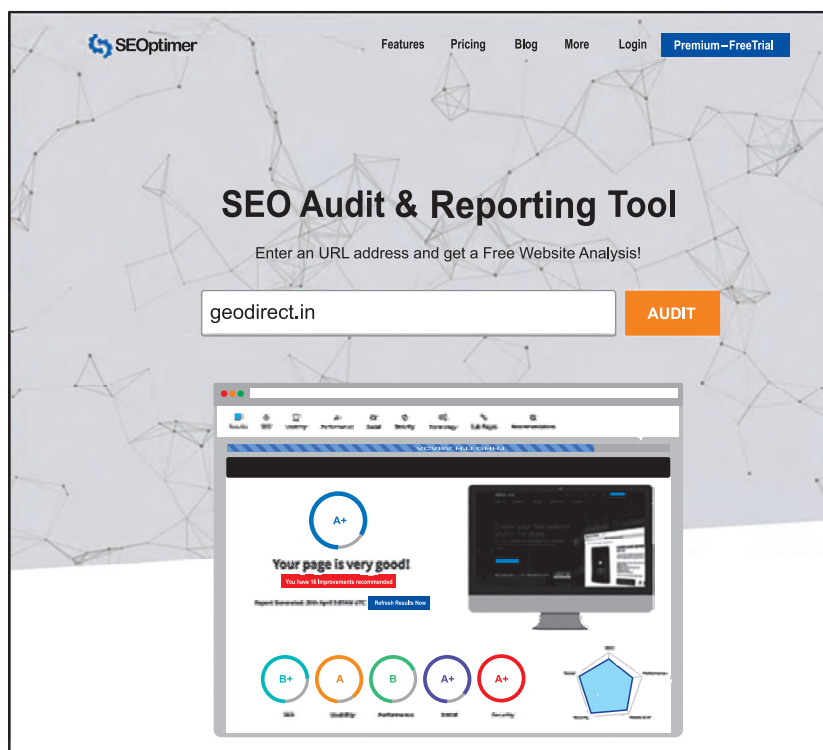B+   A   B   A+   A+

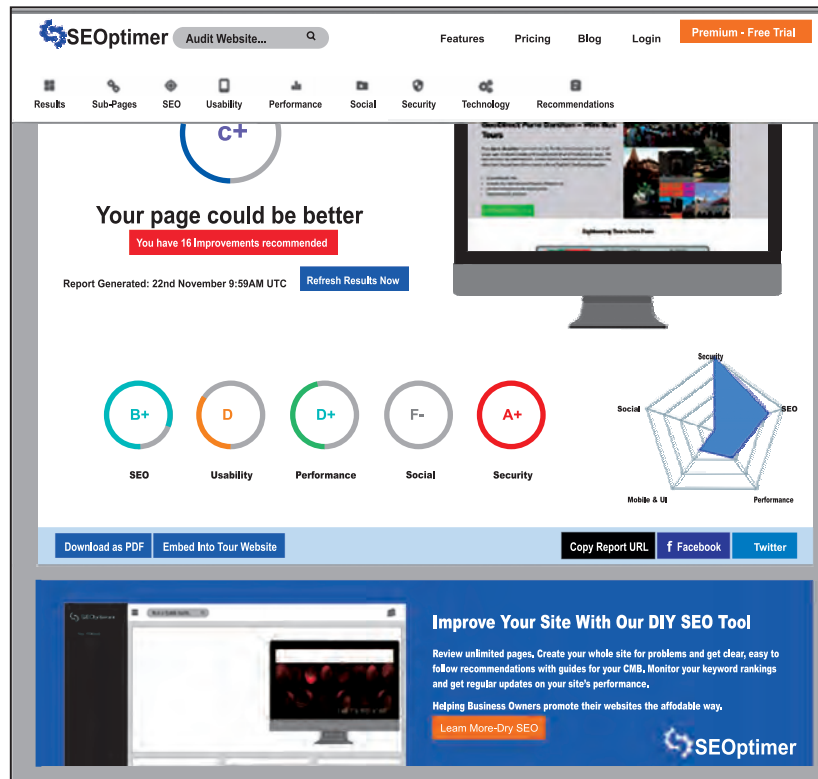**Fig 2.3 : Homepage of SEOptimer**
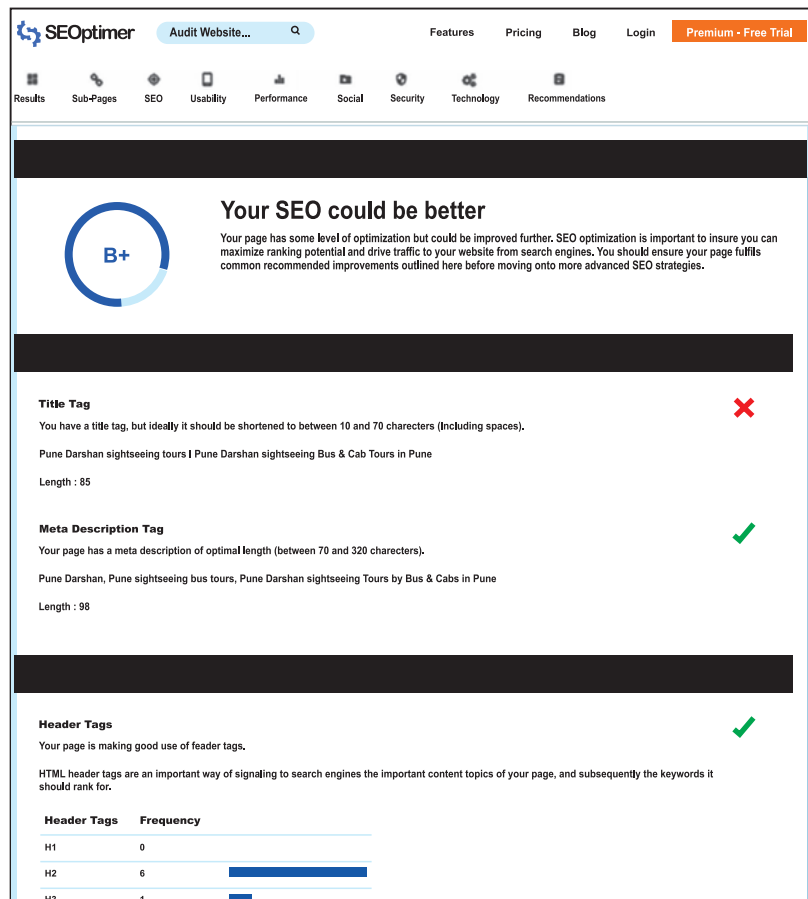
Fig 2.4 : Overall Analysis using SEOptimer

Fig 2.5 : Detailed Analysis of SEOptimer

Audit Results of SEOPtimizer will have following details

- Overall Ranking of the site
- Recommendations for improvements
- Search Engine Optimization
- Usability of the website
- Performance of website
- Social links
  - Connected social accounts
- Security parameters
  - SSL Enabled
  - HTTPS Redirect
  - Email Privacy
- Header content recommendations
  - Title and Meta description
- Body Content
  - Header Tags
  - Body content recommendations
  - Keyword Consistency
  - Amount of content in the pages
- Links
  - Number of backlinks
  - Broken links
  - Friendly links
  - On page links
- Technology list which is used in the website

Did you know?

- *Crawling is a process by which search engines crawler/ spiders/bots scan a website and collect details about each page: titles, images, keywords, other linked pages etc.*
- *Organic search results are the listings on a search engine results page (SERP) that appear because of factors such as relevance to the search term and valid search engine optimization (SEO) efforts rather than because of search engine marketing (SEM) or trickery.*

Summary

- SEO stands for Search Engine optimization .
- Apart from the Content of the website being the king of Optimization there are many other factors to improve the ranking .
- Keywords used in <title>,<meta> and heading levels play key role. Use of proper order of tags and structure, is equally important.
- <img> with alt attribute also contributes to Optimization .
- Social media links and backlinks are also major factors to optimise the webpage.
- Apart from this mobile friendliness, speed also rank the websites higher.
- A SEO Audit tools like SEOptimer and SEOmator are the tools to determine the health of the website.

Exercise

Q.1 Fill in the blank.

1. The full form of SEO is _____ .

2. _____ are links on one website that, when clicked, take the user to another site.

3. One of the optimization factor to improve images is by using _____ attribute.

4. An _____ helps to find out what you can be done to improve ranking on search engines, so that consumers can find the website with greater ease.

5. The _____ files tells search engine which pages you want to exclude from indexing.

Q.2. Match the following.

A	B
1. Image optimization	a) meta tag
2. Links to Twittter, facebook	b) SEO technique
3. description about author	c) alt attribute
4. White hat Strategy	d) Social media optimization

Q.2. Choose corect answers from the following. (2 correct)

1. The page content optimization can be done by using keywords in

    a)<font>   b) <title>

    c) <hr> d> <meta>

    e) <input>

2. Other factors to rank the website higher are

    a) Desktop friendly

    b) Speed of the website

    c) Creating robots. txt

    d) No backlinks

    e) No external links.

Q.3. Answer briefly.

1. Define SEO. State types of SEO.

2. Which are the different SEO techniques?

3. Explain in short White Hat technique.

4. Explain in short Black hat technique.

5. Explain in short SEO Keyword search.

6. Explain any two Page content optimization points.

7. Explain how could you optimize images.