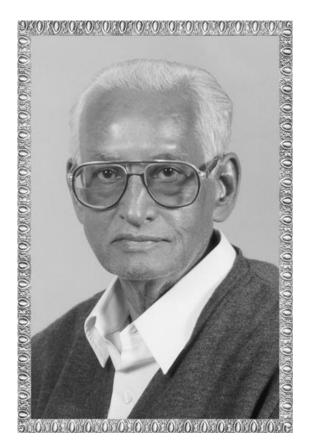
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Raiya Road,
Rajkot – 360001.
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Nr. Amrapali Under bridge,
Raiya Road,
Raiya Road,
Rajkot – 360001.
Ph No. 0281- 2471645



# Lt. Shree Chimanbhai Shukla

# B.Sc. I.T. SEM 4 - SEO

Shree H.N.Shukla College Campus, Street No. 2, Vaishali Nagar, Nr. Amrapali under bridge, Raiya Road, Rajkot. Ph. (0281)2440478, 2472590 Shree H.N.Shukla College Campus, Street No. 3, Vaishali Nagar, Nr. Amrapali under bridge, Raiya Road, Rajkot. Ph. (0281)2471645

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# <u>UNIT 1</u>:-

# SEARCH: REFLECTING CONSCIOUSNESS AND CONNECTING COMMERCE & SEARCH ENGINE BASICS

**Definition of SEO** The Mission of Search Engines The Market Share of Search Engines The Human Goals of Searching Determining Searcher Intent: A Challenge for Both Marketers and Search Engines How People Search How Search Engines Drive Commerce on the Web Eve Tracking: How Users Scan Results Pages Click Tracking: How Users Click on Results, Natural versus Paid Conclusion. Understanding Search Engine Results Algorithm-Based Ranking Systems: Crawling, Indexing, and Ranking Determining Searcher Intent and Delivering Relevant, Fresh Content **Analyzing Ranking Factors** Using Advanced Search Techniques **Vertical Search Engines Country-Specific Search Engines** Conclusion.

Conclusion

# UNIT -1

# Ch-1 – the search Engines: Reflecting Consciousness & Connecting Commerce:-

# 1. What is SEO? Explain mission or requirements of search engines.

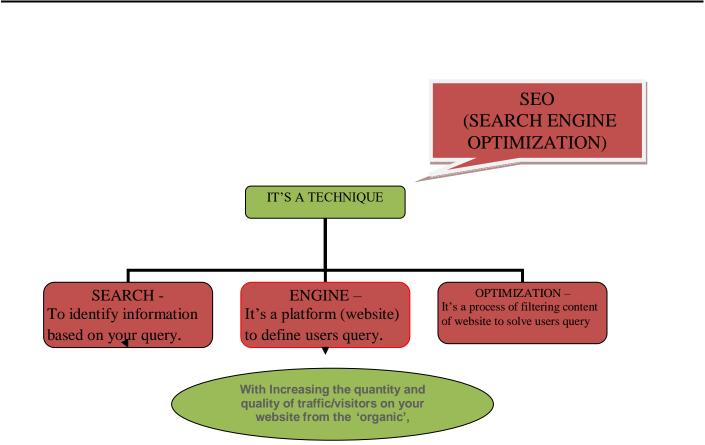
# **Definition of SEO:**

Search engine optimization (SEO) refers to techniques that help users to identify proper information with optimization of your website and get rank higher in organic (or "natural") search results.

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- > The Mission/Requirements of Search Engines:
- Since web searchers are free to use any of the many available search engines on the Web to find what they are seeking, the burden is on the search engines to develop a relevant, fast, and fresh search experience.
- As a result, search engines invest a tremendous amount of time, energy, and capital in improving their relevance.
- Search engines generate revenue primarily through paid advertising.
- The great majority of this revenue comes from a pay-per-click (or cost-per-click) model, in which the advertisers pay only for users who click on their ads.
- Each major search engine employs a team of people who focus solely on finding and eliminating spam from their search results.

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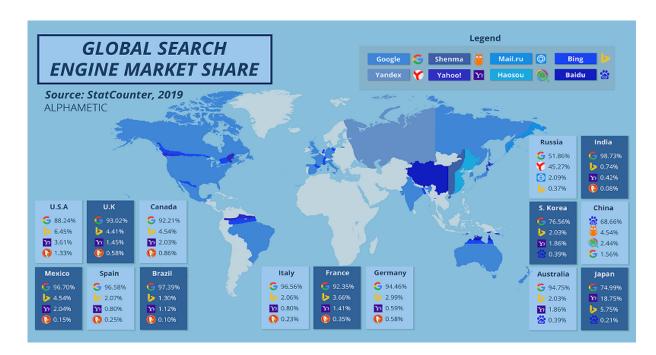
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- To making of your website more visible to people who are looking for your product or service via search engines.
- > The main Goal of Search Engine is to "satisfies the searcher".

# \*1 WORD QUESTION ANSWERS:-

SR. NO	QUESTIONS	ANSWERS
1	The burden is on the search engines are	To develop a relevant, fast, and fresh search experience.
2	How Search engines generate revenue?	Through paid advertising
3	PPC/CPC full form	Pay Per Click /Cost per click
4	Search engines sites are invest in	Time, energy and capital
5	The main goal of search engine is	To satisfy the searcher.

# 2. Explain about Market Share of Search Engines.



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# SEARCH ENGINE MARKET SHARE WORLDWIDE APRIL 2023



#### WEB BROWSER MARKET SHARE IN INDIA APRIL 2023

- As you can see, a lot can change in International SEO in 2 years. It's easy to get overly-focused on Google when there are other search engines that capture market share around the world.
- In this, we'll share the percentage of market penetration of individual search engines across the top 15 GDP countries.

# Methodology:

- A list of the 15 nations with the largest nominal GDPs in the world (as of 2020) was compiled. <u>Stat Counter</u> was then utilized to calculate the percentage of search engine market penetration within those nations.
- The resulting percentages were rounded to the nearest tenth and the top 5-6 search engines were reported.
- According to the web analytics service, Stat Counter, its tracking code is installed on more than 2 million sites globally.
- "These sites cover various activities and geographic locations. Every month, we record billions of page views to these sites. For each page view, we analyze the

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browser/operating system/screen resolution used and we establish if the page view is from a mobile device.

- For our search engine stats, we analyze every page view referred by a search engine...No artificial weightings are used.
- We remove bot activity and make a small adjustment to our browser stats for retendering in Google Chrome. Aside from those adjustments, we publish the data as we record it." – <u>Stat Counter FAQ</u>.
- We chose not to utilize ComScore for this exercise, which uses a different tracking methodology, relying more on user panels. ComScore data shows higher market shares for Bing/Yahoo! in the US.



# Summary of different countries:

- Within the United States Google continues to lead the pack, with a <u>16% increase</u> since 2010. Bing and Yahoo make up the majority of the resulting percentages with a combined approximate 12% of market share. Although, compared to the other nations on this list, Google has a higher penetration in 9 other countries. In China, Google makes up a measly 1.5% of market share with search engine <u>Baidu</u> taking the lion's share at 70%. In fact, Google places 4<sup>th</sup> after Shenma, Haosou and Sogou. Yahoo! Continues to demonstrate a strong presence in Japan.
- If Eastern Europe is a strong market for your brand, make sure to pay attention to <u>Yandex</u>, which is the search engine market leader in Russia, although Google has a 45% search market share as the 2<sup>nd</sup> highest. Nonetheless, with over 92% market share, Google dominates the search engine landscape in most of the top GDP nations in the world, including India, Germany, Mexico, Spain, Brazil, Italy and Australia.
- When you're thinking globally, Google is a great start. But, depending on your market, you might find that you need to pivot your SEO efforts into a different search

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engine altogether, <u>such as Bing</u>, Baidu, or Yandex, to capture the largest amount of traffic. Use the data below as a reference when determining your next global SEO strategy.

	1. United States		
Google: 88.24%			
Bing: 6.45%			
Yahoo!: 3.61%			
DuckDuckGo: 1.33%			
MSN: 0.06%			
Other: 0.13%			
	2. China		
Baidu: 68.66%			
Shenma: 4.54%			
Haosou: 2.44%			
Sogou: 21.10%			
Google: 1.56%			
Other: 1.55%			
	3. Japan		
Google: 74.99%	÷		
Yahoo!: 18.76%			
Bing: 5.75%			
Baidu: 0.21%			
DuckDuckGo: 0.14%			
Yandex: 0.04%			
	4. Germany		
Google: 94.46%			
Bing: 2.99%			
Ecosia: 0.66%			
Yahoo!: 0.59%			
DuckDuckGo: 0.58%			
T-Online: 0.25%			
	5. United Kingdom		
Google: 93.02%			_
Bing: 4.41%			
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Yahoo!: 1.45%		
DuckDuckGo: 0.58%		
Ecosia: 0.35% Yandex: 0.03%		
1 and cx. 0.0570		
6	. France	
Google: 92.35%		
Bing: 3.66%		
Yahoo!: 1.41%		
Ecosia: 1.15% DuckDuckGo: 0.35%		
Qwant: 0.84%		
	7. India	
Google: 98.75%		
Bing: 0.74%		
Yahoo!: 0.42% DuckDuckGo: 0.08%		
Yandex: 0.01%		
	8. Italy	
Google: 98.73%		
Bing: 0.74%		
Yahoo!: 0.42%		
DuckDuckGo: 0.08%		
Yandex Ru: 0.01% Ecosia: 0.01%		
9	. Brazil	
Google: 97.39%		
Bing: 1.3%		
Yahoo!: 1.12%		
DuckDuckGo: 0.10% Ecosia: 0.04%		
Yandex: 0.02%		

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	10. Ca	nada
Google: 92.21% Bing: 4.54% Yahoo!: 2.03% DuckDuckGo: 0.8 Ecosia: 0.13% MSN: 0.08%	86%	
	11. South	Korea
Google: 76.56% Never: 17.51% Bing: 2.03% Yahoo!: 1.86% Other: 1.13% Baidu: 0.39%		
	12. Ru	issia
Google: 51.68% Yandex: 45.27% Mail.ru: 2.09% Bing: 0.37% Yahoo!: 0.24% DuckDuckGo: 0.2	22%	
	13. S <sub>I</sub>	pain
Google: 96.58% Bing: 2.07% Yahoo!: 0.80% DuckDuckGo: 0.2 Ecosia: 0.22% Yandex: 0.03%	25%	

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#### 14. Australia

Google: 94.75% Bing: 3.45% Yahoo!: 0.78% Baidu: 0.06% DuckDuckGo: 0.63% Ecosia: 0.21%

15. Mexico

Google: 96.70% Bing: 2.04% Yahoo!: 0.88% DuckDuckGo: 0.15% MSN: 0.05% Ecosia: 0.14%

#### \*1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Dominant Search engine is in the world.	Google
2	Market share is based on	GDP
3	In China, Popular search engine is	Baidu
4	In India which search engine is popular	Google
5	In Russia, Popular search engine is	Yandex

#### 3. Explain about Human Goals of Searching in detail.

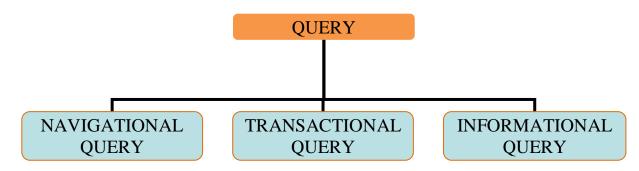
> The basic goal of a human searcher is to obtain information relevant to a query.

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- However, searcher inquiries can take many different forms.
- $\triangleright$  One of the most important elements to building an online marketing strategy for a website around SEO and search rankings is developing a thorough understanding of the psychology of your target audience.
- Most search processes comprise the following steps:
- Experience the need for an answer, solution, or piece of information.

TYPES OF QUERY



For example,

- 1) The user may be looking for a website (navigational query).
- 2) To buy something (transactional query).
- 3) To learn something (informational query).
- Formulate that need in a string of words and phrases (the query). Most people formulate their queries in one to three words. Table 1-1 gives a more detailed look at the percentages of searches per query length.
- Execute the query, check the results, see whether you got what you wanted, and if not, and try a refined query.

# \*1 WORD QUESTION ANSWERS:-

SR.	QUESTIONS	ANSWERS	
NO			

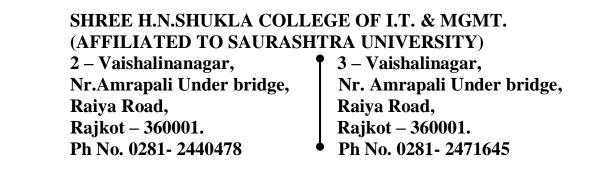
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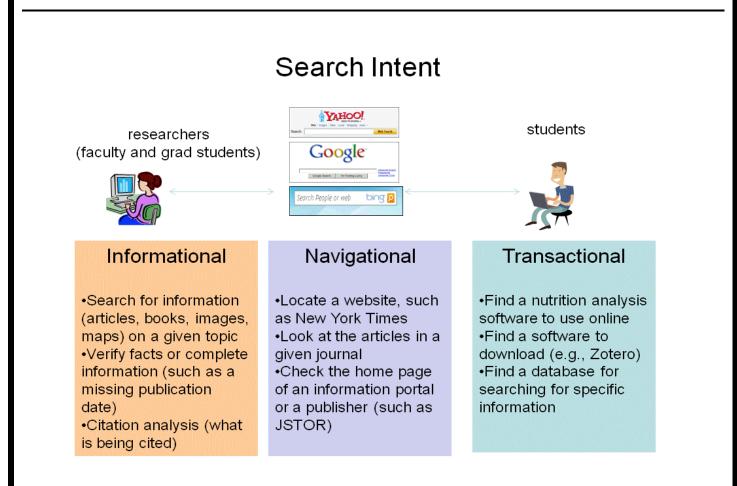
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1	The basic goal of human searcher is	To obtain information relevant to a query.
2	Search engine companies must know abt.	Target audience.
3	Total numbers of query is	3
4	If you want to purchase online watch then	Transactional query
	you must type	

# 4. Explain about Determining Searcher Intent: A Challenge for both Marketers and Search Engines:-

- Good marketers are empathetic. Smart SEO practitioners and the search engines have a common goal of providing searchers with results that are relevant to their queries.
- Therefore, a crucial element to building an online marketing strategy around SEO and search rankings understands your audience.
- Once you grasp how your target market searches for your service, product, or resource, you can more effectively reach and keep those users.
- Search engine marketers need to be aware that search engines are tools—resources driven by intent.





- Above figure summarizes our findings from the interviews.
- Navigational searches involve searching for information by a given data point (such as the name of an author or a publication)
- Informational searches (such as locating a publisher's home page) are more broadly focused.
- Transactional searches support accomplishing tasks such as connecting to a database for statistical analysis.
  - > Different types of queries, their categories, characteristics, and processes.
  - **Navigational Queries:** Navigational searches are performed with the intent of surfing directly to a specific website. In some cases, the user may not know the exact URL.

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#### • Informational Queries

Informational searches involve a huge range of queries—for example, local weather, maps and directions, details on the latest Hollywood awards ceremony, or just checking how long that trip to Mars really takes.

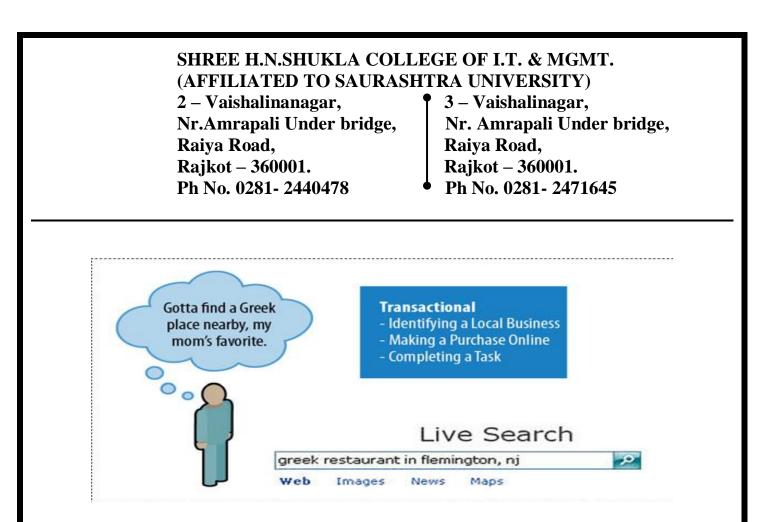
Informational searches are primarily non-transaction-oriented



#### • Transactional Queries

Transactional searches don't necessarily involve a credit card or wire transfer. Signing up for a free trial account at CooksIllustrated.com, creating a Gmail account, paying a parking ticket or finding the best local Mexican restaurant for dinner tonight are all transactional queries.

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- Intent Note: more than 80% of searches are informational in nature, and only about 10% of searches are navigational or transactional.
- The researchers went further and developed an algorithm to automatically classify searches by query type. When they tested the algorithm, they found that it was able to correctly classify queries 74% of the time.

# > Adaptive Search:-

Defination: Adaptive Search Engine Optimization (SEO) refers to practices that enhance your website's visibility in "organic" web searches.



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- The search engines also look at sequences of search queries to determine.
- This was confirmed in Eric Enge's interview with Jack Menzel, Product Management Director for Google Search.
- Keeping track of users' previous search queries and taking them into account when determining which results to return for a new query—known as adaptive search.
- Adaptive search is intended to help the search engines get a better sense of a user's intent.

SRNO	QUESTIONS	ANSWERS
1	Good Search engine marketers are	Empathetic
2	Mostly which type of query accessed by users/searchers	Informational
3	To check local weather which query applied by the searcher	Informational
4	To creating Gmail account which query applied by the user	Transactional
5	Adaptive search enhances	Website Visibility in free search.

### \*1 WORD QUESTION ANSWERS:-

#### 5. Explain How People Search in search engines.

- Search engines invest significant resources into understanding how people use search, enabling them to produce better (i.e., faster, fresher, and more relevant) search engine results.
- For website publishers, the information regarding how people use search can be used to help improve the usability of a site as well as search engine compatibility.

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- Data from comScore provides some great insight into what people actually search for when they perform a search. Table shows a breakdown of many of the major categories that people's Internet searches fall into, based on comScore data for October 2019.
- Table : Searches by market segment

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Parent category name	Percent of total searches
Directories/Resources	16.60%
Retail	11.86%
Entertainment	11.54%
Services	6.63%
Education	4.59%
Conversational Media	4.04%
Government	3.87%
Health	3.38%
Games	3.26%
News/Information	3.06%
Hobbies/Lifestyle	3.05%
Business/Finance	2.94%
Travel	2.21%
Community	1.94%
Regional/Local	1.87%
Sports	1.78%
Technology	1.73%
Automotive	1.67%
Real Estate	1.43%
Career Services and Development	1.12%
Telecommunications	0.78%
Auctions	0.57%
Portals	0.56%
ISP	0.38%
Gambling	0.27%
Business to Business	0.25%

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• This shows that people search across a very wide number of categories. Search engines are used to find information in nearly every portion of our lives. In addition, user interactions with search engines can be a multistep process.

# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Search engines investing significant resources for	To understand how the people search
2	Search engines provide which types of results	Faster, fresher, and more relevant results
3	Which site is useful to find best SEO related analytical data	Comscore

# 6. How Search Engines Drive Commerce on the Web?

- People make use of search engines for a wide variety of purposes, with some of the most popular being to research, locate, and buy products.
- Ecommerce sales reported by the US Census Bureau were a healthy \$47.5 billion
- It is important to note that search and offline behavior have a heavy degree of interaction, with search playing a growing role in driving offline sales.
- A Google study from 2011 showed that each \$1 of online ad spend drives anywhere from \$4 to \$15 in offline sales
- According to a March 2010 report from Forrester Research, over \$155 billion worth of consumer goods were purchased online in the US in 2009. While that seems like a big number, the influence on offline sales was far greater.
- Local search and mobile search are an increasingly important component of SEO.
- The concept of SEO is straightforward optimizing your website to deliver better information to search engines to ensure your content is indexed correctly and displayed among the top search results.

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- But, with rules changing so often, putting it into practice can be challenging. Although you might consider SEO a daunting task, rest assured that its importance outweighs the efforts needed to implement relevant strategies.
- To start you off on your endeavors, we bring you some fascinating SEO statistics. We tried to keep things simple and ensure that by the end of it, you have a solid understanding of the most critical aspects of search engine optimization and how to make the most out of it.

4 General Stats & Facts;-

- 1. SEO Industry is poised to reach \$80 billion.
- 2. If done right, SEO can drive a 14.6% conversion rate.
- 3. 93% of online experiences begin with a search engine.
- 4. 75% of users don't even scroll past the first page of the SERPs.
- 5. 50% of search queries consist of at least 4 words.
- 6. 21% of users access more than one of the search results.
- 7. Search engines drive 10 times more traffic to shopping sites than social media.

↓ Google Search Engine Stats:-

- 8. Google holds 74.75% of the search engine market share.
- 9. Over 5.5 billion searches are performed on Google every day.
- 10.On average, Google receives over 63,000 search queries every second.
- 11. Sites that make the first page on Google have an average of 1,890 meta words.
- 12. You're 53% more likely to show up on the first page of Google if you have a video on your homepage.
- 13. Fascinating Google page statistics: 44% of website referral traffic goes through Google.
- 14.Up to 20% of Google queries are searched for the first time.
- 15.Organic Google results with 3-4 words in the title drive higher CTR.
- 16. Search queries of the "\_\_\_\_ to avoid" format have increased by 150%.

4 Mobile SEO Stats:-

17.In 2020, there will be 221 million mobile phone search users in the US.

18.60% of Google searches are done via mobile devices.

19. Mobile-optimized sites are more trusted by 51% of consumers.

20.27% of the global online population is using voice search on mobile.

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- 21.By 2021, mobile is predicted to dominate online sales, driving 54% in sales.
- 22.69% of Smartphone users are more likely to buy from companies whose sites answer their questions easily.
- 23. The ideal load time on mobile devices is 5 seconds or less.
- 24.57% of consumers said they wouldn't recommend a business with a poorly designed mobile website.

Local SEO Statistics:-

- 25.1 in 3 Smartphone searches is made before the store visit.
- 26.Based on local SEO statistics 2018, 82% of Smartphone shoppers conduct "near me" searches.
- 27.50% of "near me" Google searches performed via mobile result in a store visit.
- 28. Most important mobile website features are a "list of products".
- 29.88% of consumers will interact with a local business within 24 hours of searching for it on a mobile device.
  - SEO Statistics & Content Marketing:-
- 30.Content marketing gets three times more leads than paid search advertising.
- 31.Content creation is the most effective SEO tactic in 2019.
- 32.72% of marketers consider relevancy the most critical factor for improving SEO.

# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

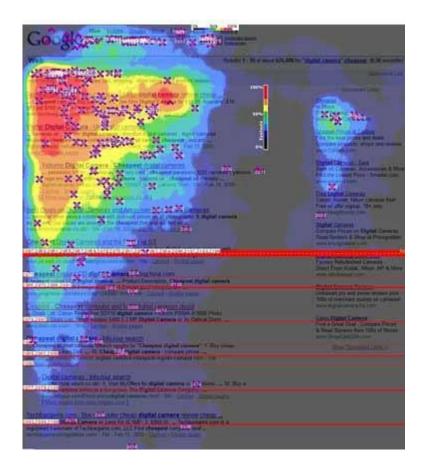
SR. NO	QUESTIONS	ANSWERS
1	Peoples make use of search engines for	Research, Buy products and location searching.
2	Use of mobile search increase or decrease.	Continuously Increase

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# 7. What is Eye Tracking? How Users Scan Results Pages?

Research firms Enquiro, Eyetools, and Didit conducted heat-map testing with search engine users (http://www.enquiro.com/research/eyetrackingreport.asp) that produced fascinating results about what users see and focus on when engaged in search activity. Figure depicts a heat map showing a test performed on Google. The graphic indicates that users spent the most amount of time focusing their eyes in the top-left area where shading is the darkest.



Published in November 2006, this particular study perfectly illustrates how little attention is paid to results lower on the page versus those higher up, and how users' eyes are drawn to bold keywords, titles, and descriptions in the natural ("organic") results versus the paid search listings, which receive comparatively little attention.

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- This research study also showed that different physical positioning of on-screen search results resulted in different user eye-tracking patterns.
- When viewing a standard Google results page, users tended to create an "F-shaped" pattern with their eye movements, focusing first and longest on the upper-left corner of the screen, then moving down vertically through the first two or three results, across the page to the first paid page result, down another few vertical results, and then across again to the second paid result.
- The other search engines followed suit within a few months, and the industry now refers to this general concept as Blended Search.
- Blended Search, however, creates more of a chunking effect, where the chunks are around the various rich media objects, such as images or video. Understandably, users focus on the image first. Then they look at the text beside it to see whether it corresponds to the image or video Figure shows what the eye-tracking pattern on a Blended Search page looks like.



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- Users' eyes then tend to move in shorter paths to the side, with the image rather than the upper-left-corner text as their anchor. Note, however, that this is the case only when the image is placed above the fold, so that the user can see it without having to scroll down on the page. Images below the fold do not influence initial search behavior until the searcher scrolls down.
- This study is a vivid reminder of how important search engine results pages (SERPs) really are. And as the eye-tracking research demonstrates, "rich" or "personalized" search, as it evolves, will alter users' search patterns even more: there will be more items on the page for them to focus on, and more ways for them to remember and access the search listings. Search marketers need to be prepared for this as well.

SR. NO	QUESTIONS	ANSWERS
1	Eye tracking process creates which alphabet shape pattern	F shaped pattern
2	For Videos and Images eye tracking which search is useful.	Blended search
3	Eye Tracking is useful for	To find users mindset and its interested area in serp page
4	Eye tracking use which testing method	Heat map testing method

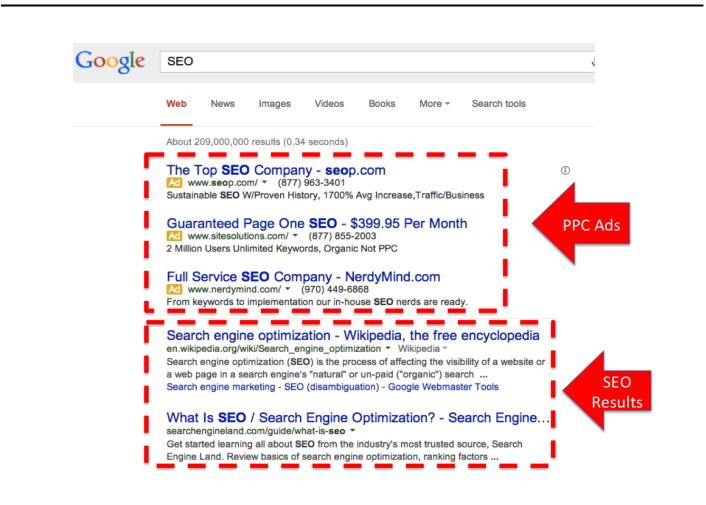
# ✤ 1 WORD QUESTION ANSWERS:-

# 8. Explain Click Tracking and How Users Click on Results, Natural versus Paid.

- Click tracking is an analytics feature that measures and reports where people click or tap on websites, apps, and emails.
- SEO is part of the broader topic of Search Engine Marketing (SEM), a term used to describe all marketing strategies for search. SEM entails both organic and paid search.

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- With paid search, you can pay to list your website on a search engine so that your website shows up when someone types in a specific keyword or phrase.
- Organic and paid listings both appear on the search engine, but they are displayed in different locations on the page.
- So, why is it important for your business" website to be listed on search engines? On Google alone, there are over 694,000 searches conducted every second. Every second that your website is not indexed on Google, you are potentially missing out on hundreds, if not thousands of opportunities for someone to visit your website, read your content, and potentially buy your product or service.
- In addition, the first 10 results received 89.71% of all click-through traffic; the next 10 results (normally listed on the second page of results) received 4.37%, the third page

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2.42%, and the fifth page 1.07%. All other pages of results received less than 1% of total search traffic clicks.

• When it comes to search, deciding whether to dedicate resources to organic search efforts (SEO) or paid search efforts (PPC) is not easy. The right answer depends on a variety of factors including audience behavior, available budget, and your organization's marketing goals.

To help, we've put together some key things to consider when implementing the right SEO/PPC balance for your organization. But first, let's review the major difference between paid and organic search.

PAID SEARCH	FREE SEARCH	
Businesses pay Google and marketers	Businesses pay SEO professionals to	
to be at the top of search results	be at the top of search results.	
Quite costly search	Free search	
Display on the top of the SERP.	Display after Paid search options	

# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Eye tracking process creates which alphabet shape pattern	F shaped pattern
2	For Videos and Images eye tracking which search is useful.	Blended search
3	Eye Tracking is useful for	To find users mindset and its interested area in serp page
4	Eye tracking use which testing method	Heat map testing method

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#### Conclusion

Search has penetrated the very fabric of global society. The way people work, play, shop, research, and interact has changed forever. Organizations of all kinds (businesses and charities), as well as individuals, need to have a presence on the Web-and they need the search engines to bring them traffic.

As our society moves ever closer to a professional consumer ("prosumer") economy, the ways in which people create, publish, distribute, and ultimately find information and resources on the Internet will continue to be of great importance. This book will investigate further just how search, and therefore search engine optimization, is at the center of the Web and is still your key to success in the new web economy.

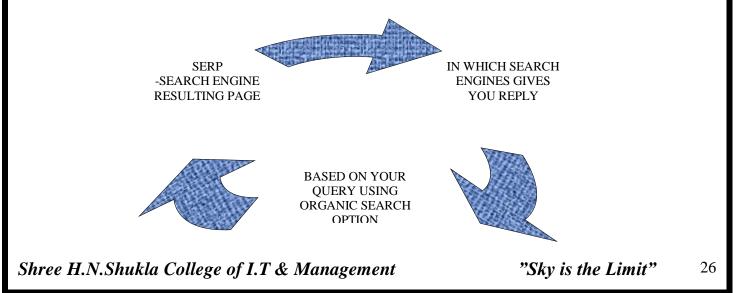
#### **Ch** – 2 Search Engine Basics

#### **1.** What is SERP? Explain about Understanding of Search Engine Results: - (3M)

In the search marketing field, the pages that engines return to fulfill a query are referred to as search engine results pages (SERPs). Each engine returns results in a slightly different format and will include vertical search results (specific content targeted to a query based on certain triggers in the query, which we'll illustrate shortly).

What is SERP? -1 M

SERP is a search engine resulting page in which engines returns results of your query.



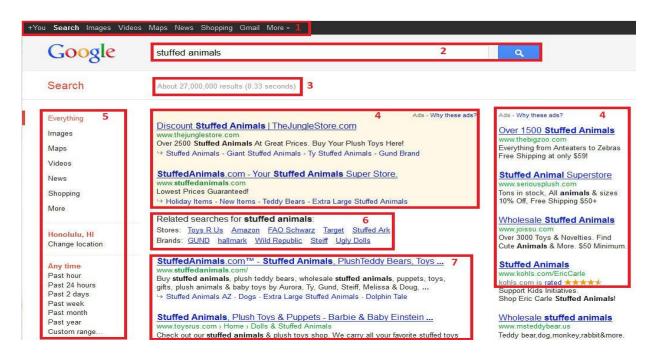
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# **4** Understanding the Layout of Search Results Pages:-

Each unique section represents a snippet of information provided by the engines. Here are the definitions of what each piece is meant to provide:

**4** The various sections outlined in the Google search results are as follows:

- 1. Horizontal navigation (see top left)
- 2. Search query box
- 3. Results information
- 4. PPC advertising
- 5. Vertical navigation
- 6. Query refinement suggestions
- 7. Natural/organic/algorithmic results.



# Horizontal navigation:

The search engines also offer other types of navigation elements. For example, in Figure 2-1 you can see that Google offers the option to limit the date range of the content returned in the search results.

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#### Search query box:

All of the engines show the query you've performed and allow you to edit that query or enter a new query from the search results page.

Next to the search query box, the engines also offer links to the advanced search page, the features of which we'll discuss later in the book.

#### **Results information:**

This section provides a small amount of Meta information about the results that you're viewing, including an estimate of the number of pages relevant to that particular query

#### PPC (a.k.a. paid search) advertising:

Companies purchase text ads from either Google Edwards or Microsoft adCenter. The results are ordered by a variety of factors, including relevance.

#### Vertical navigation:

Each engine offers the option to search different verticals, such as images, news, video, or maps. Following these links will result in a query with a more limited index.

#### Natural/organic/algorithmic results:

These results are pulled from the search engines' primary indexes of the Web and ranked in order of relevance and popularity according to their complex algorithms.

#### Query refinement suggestions:

Query refinements are offered by Google, Bing, and Yahoo!. The goal of these links is to let users search with a more specific and possibly more relevant query that will satisfy their intent.

In March 2009, Google enhanced the refinements by implementing Orion Technology, based on technology Google acquired in 2006. The goal of this enhancement is to provide a wider array of refinement choices.

#### Shopping search results:

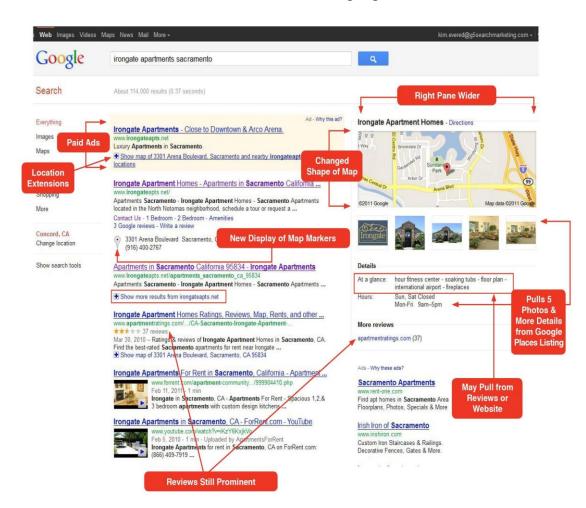
All three search engines do this as well. Shopping results incorporate offers from merchants into the results so that searchers that are looking to buy something can do so quite easily.

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Current layout of SERP page:-

A sample search results page (Google), where, e.g., top links (A), Google search button (B), advanced search (C), search field (D), preferences (E), page title (I), text below the title (J), URL of result (K), and size (L) are shown in following figure:



# How Vertical Results Fit into the SERPs:

- $\checkmark$  These "standard" results, however, are certainly not all that the engines have to offer. For many types of queries, search engines show vertical results, or instant answers, and include more than just links to other sites to help answer a user's questions.
- $\checkmark$  These types of results present many additional challenges and opportunities for the SEO practitioner.

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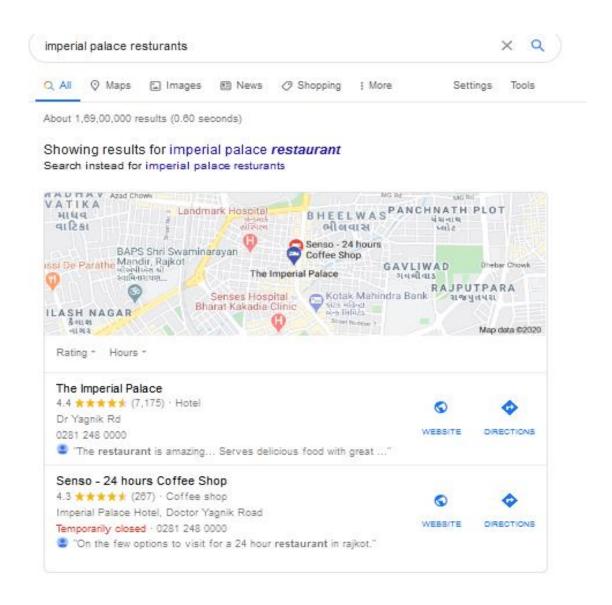
# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR.NO	QUESTIONS	ANSWERS
1	SERP FULL FORM.	SEARCH ENGINE RESULTING PAGE
2	WHAT IS SERP?	SERP is a search engine resulting page in which engines returns results of your query.
3	SEARCH QUERY IS WRITTEN IN WHICH BOX?	SEARCH QUERY BOX
4	Use of Query refinement suggestions	The goal of these links is to let users search with a more specific and possibly more relevant query that will satisfy their intent.
5	Ppc advertising is also known as	Paid Advertising.
6	Options provided by the Horizontal and Vertical navigations are	Images, news, video, or maps.

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#### EXAMPLE 1:

Figure below shows an example of these types of results. The query in Figure brings back a business listing showing an address and the option to get directions to that address. This result attempts to provide the user with the answer he is seeking directly in the search results.



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### EXAMPLE 2:

Figure shows another example. The Google search in Figure for weather plus a city name returns a direct answer. Once again, the user may not even need to click on a website if all she wanted to know was the temperature.

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	🖪 Books	🗉 News	⊘ Maps	🧷 Shopping	g ≇ More	:	Settings	Tools
bout 1,	25,00,000 r	esults (0.50 s	seconds)					
	kot, Gu y, 1:00 pm y 3		·		Precipitation Humidity: 18 Wind: 24 km	3%		
					Temperature	Precipitation	Wind	
39	38	33	29	27	26	26	34	38
2	pm 5	pm 8 p	m 11 pm	n 2 am	5 am	8 am	11 am	
F	ri s	at Su	in Mon	Tue	Wed	Thu	Fri	
39°	24° 39°	24° 41°	24° <b>41°</b> 25	° 42° 25	5° <b>42°</b> 26°	43° 26°	42° 26°	

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# **EXAMPLE 3:**

Figure is an example of a search for a well-known singer. A Google search for kirtidan Gadhvi returns image results of some of his most memorable works

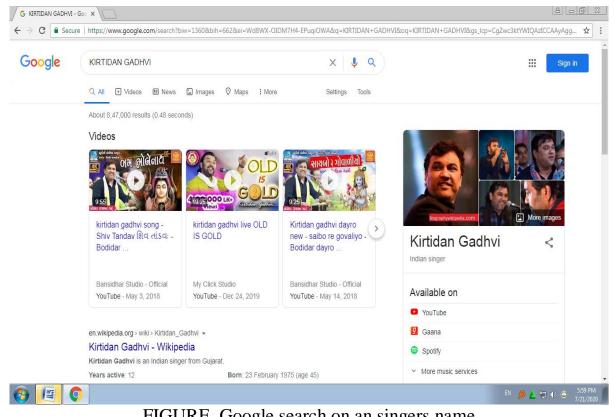


FIGURE. Google search on an singers name

As you can see, the vast variety of vertical integration into search results means that for many popular queries, returning the standard set of 10 links to external pages is no longer the rule.

Engines are competing by attempting to provide more relevant results and more targeted responses to queries that they feel are best answered by vertical results, rather than web results.

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### 2. Define and explain Algorithm-Based Ranking Systems: Crawling, Indexing, and Ranking. - 3M/5M

# 4 Crawling:-

- $\checkmark$  Defination: Crawling is the process of fetching all the web pages linked to a web site.
- ✓ This task is performed by software, called a **crawler** or a **spider** (or Googlebot, as is The case with Google).
- $\checkmark$  To offer the best possible results, search engines must attempt to discover all the
- $\checkmark$  Public pages on the World Wide Web and then present the ones that best match up
- $\checkmark$  With the users search query.
- $\checkmark$  The first step in this process is crawling the Web.

# 4 Indexing –

- $\checkmark$  Definition: Indexing is the process of creating index for all the fetched (captured) WebPages and Keeping them into a giant database from where it can Later be retrieved.
- $\checkmark$  Essentially, the process of indexing is identifying the words and expressions that best Describe the page and assigning the page to particular keywords.

Crawling and Indexing Processing Steps:

✓ Search engine starts Processing based on request: -

When a search request comes, the search engine processes it. I.e. it compares the Search string in the search request with the indexed pages in the database.

✓ Search engine Calculating Relevancy based on search string: – Since it is likely that more than one pages contains the search string, so the search Engine starts calculating the relevancy of each of the pages in its index to the search String.

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- ✓ Search engine Retrieving Results from different web options: –
- The last step in search engines' activities is retrieving the best matched results. Basically, it is nothing more than simply displaying them in the browser.
- Search engines such as Google and Yahoo! often update their relevancy algorithm Dozens of times per month. When you see changes in your rankings it is due to an Algorithmic shift or something else outside of your control.
- Although the basic principle of operation of all search engines is the same, the minor Differences between their relevancy algorithms lead to major changes in results Relevancy.
- The search engine will then load those other pages and analyze that content as Well. This process repeats over and over again until the crawling process is Complete. This Process is an enormously complex one as the Web is a large and Complex place.
- Search engines do not attempt to crawl the entire Web every day. In fact, they May become aware of pages that they choose not to crawl because they are not Likely to be Important enough to return in a search result.
- Once the engines have retrieved a page during a crawl, their next job is to parse The Code from them and store selected pieces of the pages in massive arrays of Hard drives.
- The first step in this process is to build a dictionary of terms. This is a massive Database that catalogs all the significant terms on each page crawled by a search Engine.
- One key concept in building a search engine is deciding where to begin a crawl Of the Web.
- Although you could theoretically start from many different places on the Web, You would ideally begin your crawl with a trusted seed set of websites.

Aware of pages that they choose not to crawl because they are not likely to be Important enough to return in a search result.

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# **4** Ranking:-

- ✓ Definition : Rank is the position that your website physically falls in on the SERP When a specific Search query is entered.
- $\checkmark$  If you are the first website in the organic section of the SERP (don't be confused by The paid ads at the very top), then your rank is 1. If your website is in the second Position, your rank is 2, and so on.
- $\checkmark$  As discussed previously in How Search Engines Work, your rank is an indicator of how relevant and authoritative your website is in the eyes of the search engine, as it relates to the search query entered.

C	loogle	carpet installation	Ŷ	×	
	<u> </u>	About 62,400,000 results (0.15 seconds)			1
Q	Everything	Carpet Installation - 110% Low Price Guarantee.   Luna.com I Q			
0	Images	www.luna.com Plus Free Installation and Pad Upgrade.			
	Videos	70% Off Carpet Sale - Quality, Name-Brand Carpet   empiretoday.com ன 🔍			
	News	www.empiretoday.com			
	Shopping	Summer Blowout Sale. Ends 8/21			
9	Places	Carpet Installation - Upfront Pricing, Quality Service, 🖅 🔍			
	More	Free Estimates - Call 781-312-7137			
	Cambridge, MA	Empire Today - Carpet, Hardwood, Laminate & Ceramic Flooring • ? www.empiretoday.com/ - Cached			
	Change location	We specialize in carpets, laminate and hardwood flooring, area rugs, window Empire Today offers next day installation on carpet, hardwood, laminate,	#1		
	Any time	Carpet - Hardwood Flooring - Laminate Flooring - Special Online Offers	<del>1</del> <del>1</del>	•	
	Past hour				
	Past 24 hours	Carpet Installation • Q www.lowes.com/cd Carpet+Installation 134470449 - Cached	#2		
	Past week Past month	This FREE offer only includes labor for installation of STAINMASTER® carpet and	πz	-	
	Past 3 months	STAINMASTER® carpet pad purchased from Lowe's. Offer not valid on			
	Past year	Carpet Flooring-Affordable Carpet Installation 🖅 🔍			
	Custom range	www.homedepot.com//ContentView?Carpet_Installation Cached	#3		
	All results	Professional carpet installation by The Home Depot the brand you trust. Get carpet flooring installed in your home by experienced experts.			

# ✤ 1 WORD QUESTION ANSWERS:-

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1	GIVE THE NAME OF ALGORITHMIC RANKING BASED SYSTEMS	<ol> <li>Crawling</li> <li>Indexing</li> <li>Ranking</li> </ol>
SRNO	QUESTIONS	ANSWERS

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Rajkot – 360001.	Rajkot – 360001.	
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2	What is crawling?	Crawling is the process of fetching all the web pages linked to a web site.
3	What is Indexing?	Indexing is the process of creating index for all the fetched (captured), Webpages and Keeping them into a giant database from where it can later be retrieved.
4	What is ranking?	Rank is the position that your website physically falls in on the SERP When a specific Search query is entered.
5	Name Of Google crawler/spider	Google bot.
6	What is the major difference between Google and other engines?	Relevancy algorithms.
7	Ranking is only applicable in	Organic/Natural Search

## 3. What is Relevance? 1M

#### **Definition:**

**Relevance** is the degree to which the content of the documents returned in a Search matches the intention and terms of the user's query.

 $\checkmark$  The relevance of a document increases if the page contains terms relevant to the phrase queried by the user, or if links to the page come from relevant pages and use relevant anchor text.

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#### 4. What is Importance? 1M

#### **Definition:**

**Importance** refers to the relative importance, measured via citation (The act of One work referencing another, as often occurs in academic and Business documents), of a given document that matches the user's query.

✓ The importance of a given document increases with every other document that references it. In today's online environment, citations can come in the form of links to the document or references to it on social media sites. Determining how to weight these signals is known as citation analysis.

✤ <u>1 WORD QUESTION ANSWERS:-</u>

SRNO	QUESTIONS	ANSWERS
1.	Relevance and importance required for.	IR(Information Retrieval)
2.	What is relevance?	Relevance is the degree to which the content of the documents returned in a Search matches the intention and terms of the user's query.
3.	What is Importance?	Importance refers to the relative importance.
4.	What is Citation?	The act of One work referencing another, as often occurs in academic and Business documents

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- 5. Explain how search engines evaluating Content on a Web Page. 3M/5M
- ✓ Search engine crawlers and indexing programs are basically software programs. These Programs are extraordinarily powerful.
- $\checkmark$  They crawl hundreds of billions of web pages, analyze the content of all these pages, and analyze the way all these pages link to each other.
- $\checkmark$  Then they organize this data into a series of databases that enable them to respond to a user search query with a highly tuned set of results in a few tenths of a second.
- $\checkmark$  This is an amazing accomplishment, but it has its limitations. Software is very mechanical; and it can understand only portions of most web pages.
- $\checkmark$  The search engine crawler analyzes the raw HTML form of a web page.
- $\checkmark$  If you want to see what this looks like, you can do so by using your browser to view the page source. Shows how to do that in Google chrome (Right click on page – select view page source option), in Firefox (Tools Web Developer Page Source), and shows how to do it in Internet Explorer (Page View Source).



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## ✤ <u>1 WORD QUESTION ANSWERS:</u>-

SR. NO	QUESTIONS	ANSWERS
1	Search engine crawlers and indexing programs are basically	Software Programs.
2	Crawlers analyzes	HTML coding.
3	In Google Chrome which option is there to check html codes	View Page Source Option
4	In Internet Explorer which option is there to check html codes	Page View Source.

## 6. Explain about URL Structure in detail. 3M/5M

- ✓ The actual structure of your website URL can have an impact on the search engines "ability to index and understand your websites content".
- ✓ Opting for a more organized URL structure will have the greatest impact. Some website creation software will insert arbitrary numbers and code in the URL.
- ✓ Although this may be optimal for the software, it serves no other purpose. If you can edit the URL to include the title of your webpage, you should do so.
- ✓ In fact, some website creation software, like Hub Spot, will automatically create URLs based on your webpage content in order to eliminate this issue.

## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

S N	SR. NO	QUESTIONS	ANSWERS
1		URL FULL FORM.	Uniform Resource Locator.

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 2
 URL is useful ...
 Ability to index and understand your websites content.

 3
 To create auto URL which Software is useful ....
 Hub spot.

#### 7. Explain Alt tags in detail. 3M/5M

- ✓ There are two types of alt tags.
- 1. Title Tags
- 2. Meta Tags
  - Meta description tag
  - Meta keywords tag.

#### 📥 <u>TITLE TAG:</u>

- ✓ Besides an actual text headline on your page, every webpage you create has a title tag.
- ✓ This is the text snippet (small information) that appears in the upper left corner or on the tabs of your web browser.
- ✓ Also, the title tag is the blue link that the search engines show when they list your webpage on the SERP.
- ✓ Title tags max. Out at 75 characters, so choose your words wisely.

#### 📥 <u>META TAG:</u>

- ✓ Meta tags are snippets of code you can include within your webpage's HTML.
- ✓ The Meta tags are usually located near the title tag code in the head of your HTML. There are two Meta tags – Meta description and Meta keywords.

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✤ Meta description:-

- $\checkmark$  The Meta description is a text snippet that describes what your specific webpage is about.
- $\checkmark$  Meta descriptions are usually the first place a search engine will look to find text to put under your blue link when they list your website on the SERP.
- $\checkmark$  If you do not have a Meta description, the search engines will usually select a random piece of content from the page they are linking to.
- $\checkmark$  The Meta description is limited to 150 characters.



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✤ Meta Keywords:-

- $\checkmark$  Most search engines claim that they do not even use Meta keywords when indexing content.
- $\checkmark$  Some small or niche search engines may still use it though.
- $\checkmark$  As a best practice, it is recommended to put 5-7 keywords in the Meta keywords, but don't spend too much time thinking about it.
- ✤ 1 WORD QUESTION ANSWERS:-

SR. NO	QUESTIONS	ANSWERS
1	How many types of Alt tags in HTML.	2 types
2	Give the name of Alt Tags.	<ol> <li>Title Tags</li> <li>Meta Tags</li> </ol>
3	Maximum characters in title tag.	75 characters
4	Give the names of meta tags	1.Meta Description Tag 2. Meta Keywords Tag
5	Minimum Meta characters are	150 characters
6	How many popular keywords are available in Meta keywords coding	5 to 7 keywords

#### 8. Write a short note on Headline tag. 2M

When the search engine bots scan your WebPages, they look for clues to determine exactly what your webpage is about.

Keywords that are treated differently than most others on the page show the search engines that they are more important than other keywords on the page. This is why the use of headline tags within your page is so important.

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Rajkot – 360001.
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<div id="tagline">
</hi>

#### 9. Write a note on Internal Linking. 2M

- ✓ Up until this point we have only referenced inbound links, or those links coming to you website from other websites.
- ✓ When creating content for your website on your blog or on specific webpage, you may want to reference other pages on your website.

6 Ways to Become an Industry Thought Leader

1. Maintain an Active Business Blog Launching a blog hat covers important topics relating to the industry in which you're selling is perhaps the best way to establish and uphold your image as a thought leader. A well-written blog will make prospects and current customers confident that the products and services they buy from you are created using industry expertise. Not only will maintaining an active business blog reward you with a more credible industry presence, but when done right, it will also afford you additional business benefits such as improved lead generation and a boost in search engine optimization.

2. Contribute Guest Blog Posts: Once you start gaining traction as a credible business blogger using

## 10. What search engines cannot see? 1M/2M/3M

Images, flash files, audio files and video files are not seen by the search engines at The time of evaluation.

#### **4** Image:

- ✓ A search engine cannot tell whether an image is a picture of any person, a boat, a house, or a tornado.
- $\checkmark$  In addition, search engines will not recognize any text rendered in the image.

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 $\checkmark$  The search engines are experimenting with technologies to use optical character recognition (OCR) to extract text from images, but this technology is not yet in general use within search.

## **Flash files:**

- $\checkmark$  In addition, conventional SEO wisdom has always held that the search engines cannot read Flash files, but this is a little overstated.
- $\checkmark$  Search Further, the search engines cannot see the pictorial aspects of anything contained in Flash. This means that when text is converted into a vector-based outline in Flash, the textual information that search engines can read is lost.

#### 📥 Audio and video files:

- ✓ Audio and video files are also not easy for search engines to read. As with images, the data is not easy to parse (observe).
- ✓ 1 WORD OUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Total headline tags in html is	H1 to H6
2	Internal linking also known as	Inbound Links
3	Which file search engines can't see?	Image,Flash,Audio and
		Video files

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# 11. How to Determining Searcher Intent and Delivering Relevant, Fresh Content in SERP. 3M/5M

- ✓ Modern commercial search engines rely on the science of information retrieval (IR).
- ✓ This science has existed since the middle of the twentieth century, when retrieval systems powered computers in libraries, research facilities, and government labs. Early in the development of search systems.
- ✓ IR scientists realized that two critical components comprised the majority of Search functionality:
- ✓ Relevance
- ✓ Importance
  - (Which we defined earlier in this chapter).
- ✓ To measure these factors, search engines perform document analysis (including semantic analysis of concepts across documents) and link (or citation) analysis.
- ✤ DOCUMENT ANALYSIS:-
- ✓ In document analysis, search engines look at whether they find the search terms in important Areas of the document.
- ✓ Important areas like the title, the metadata, the heading tags, and the body of the text.
- ✓ They also attempt to automatically measure the quality of the document based on document Analysis, as well as many other factors.
- ✓ Reliance (dependency) on document analysis alone is not enough for today's search engines, so they also look at semantic connectivity.
- ✤ SEMANTIC CONNECTIVITY:
- ✓ Semantic connectivity refers to words or phrases that are commonly associated with one another.

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- ✓ For example, if you see the word aloha you associate it with Hawaii, not Florida.
- ✓ Search engines actively build their own thesauruses and dictionaries to help them determine how certain terms and topics are related.
- $\checkmark$  By simply scanning their massive databases of content on the Web, they can use Fuzzy Set Theory and certain equation to connect terms and start to understand web pages/sites more like a human does.
- ✓ The professional SEO practitioner does not necessarily need to use semantic connectivity measurement tools to optimize websites, but for those advanced practitioners who seek every advantage.
- > Semantic connectivity measurements can help in each of the following sectors:
- ✓ Measuring which keyword phrases to target
- ✓ Measuring which keyword phrases to include on a page about a certain topic
- ✓ Measuring the relationships of text on other high-ranking sites/pages
- ✓ Finding pages that provide "relevant" themed links
- ✓ Although the source for this material is highly technical, SEO specialists need only to know the principles to obtain valuable information.
- $\checkmark$  It is important to keep in mind that although the world of IR incorporates hundreds of technical and often difficult-to-comprehend terms, these can be broken down and understood even by an SEO novice.
- > The following are some common types of searches in the IR field:
- Proximity searches:-
- $\checkmark$  A proximity search uses the order of the search phrase to find related documents.
- ✓ For example, when you search for "sweet Indian Gulabjamun" you are specifying only a precise proximity match.

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- $\checkmark$  If the quotes are removed, the proximity of the search terms still matter to the search engine, but it will now show documents whose contents don't exactly match the order of the search phrase, such as Sweet Gulabjamun-Indian.
- Fuzzy logic:-
- $\checkmark$  Fuzzy logic technically refers to logic that is not categorically true or false.
- $\checkmark$  Example 1: A common example is whether a day is sunny (e.g., if there is 50% cloud cover, is it still a sunny day?).
- $\checkmark$  Example 2: Colleges open or not.
- $\checkmark$  One way engines use fuzzy logic is to detect and process misspellings.
- **H**Boolean searches:-
- ✓ Boolean searches use Boolean terms such as AND, OR, and NOT.
- $\checkmark$  This type of logic is used to expand or restrict which documents are returned in a search.
- ✓ Example 1: India and China Relation.
- ✓ Example 2: Hotel or Restaurant.
- **H** Term weighting:-
- ✓ Term weighting refers to the importance of a particular search term to the query.
- $\checkmark$  The idea is to weight particular terms more heavily than others to produce superior search results.
- ✓ For example, the word "The" in a query will receive very little weight in selecting the results because it appears in nearly all English-language documents.
- $\checkmark$  There is nothing unique about it, and it does not help in document selection.

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**4** Machine logic:-

- ✓ Although fuzzy logic process is complicated, but the foundations are simple. Search engines need to rely on machine logic (true/false, yes/no, etc.).
- ✓ Machine logic has some advantages over humans, but machine logic is not as good at solving certain types of problems as people. Things that are intuitive to humans can be quite hard for a computer to understand.

#### $\checkmark$ For example,

Both oranges and bananas are fruits, but oranges and bananas are not both round. To a human this is intuitive.

- $\checkmark$  For a machine to understand this concept and pick up on others like it, semantic connectivity can be the key.
- $\checkmark$  The massive human knowledge on the Web can be captured in the systems Index and analyzed to artificially create the relationships humans have made.
- $\checkmark$  Thus, a machine can determine that an orange is round and a banana is not.
- $\checkmark$  By scanning thousands of occurrences of the words banana and orange in its index and noting that round and banana do not have great concurrence, while orange and round do.
- This is how the use of fuzzy logic comes into play. The use of Fuzzy Set Theory helps the computer to understand how terms are related simply by measuring how often and in what context they are used together.

## ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	IR FULL FORM.	Information Retrieval
2	What is Fuzzy Logic?	Fuzzy logic technically refers to logic that is not categorically true or false.

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3	Give the Boolean terms	And, Or, Not
4	What is Term Weighting	Term weighting refers to the importance of a particular search term to the query.

## 12. Explain Analyzing Ranking Factors in detail. 3M/5M

- ✓ SEOmoz periodically conducts surveys of leading search engine optimizers to determine what they think about the most important ranking factors. (*http://www.seomoz.org/article/search-ranking-factors*).
- ✤ Here is a high-level summary of the top nine results:
- Page Level Link Metrics
- Domain Level Link Authority Features
- Page Level Keyword Usage
- Domain Level Keyword Usage
- Page Level Social Metrics
- Domain Level Brand Metrics
- Page Level Keyword Agnostic Feature
- Page Level Traffic/Query Data
- Domain Level Keyword Agnostic Features

Here is a brief look at each of these:

Page Level Link Metrics:--

This refers to the links as related to the specific page, such as the number of links, the Relevance of the links, and the trust and authority of the links received by the page.

Domain Level Link Authority Features:--

Domain level link authority is based on a cumulative link analysis of all the links to the Domain. Factors considered include the number of different domains linking to the site, The trust/authority of those domains, the rate at which new inbound links are added, the Relevance of the linking domains, and more.

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Page Level Keyword Usage:--

This describes use of the keyword term/phrase in particular parts of the HTML code on The page (title element, <h1>s, alt attributes, etc.).

4 Domain Level Keyword Usage:--

This refers to how keywords are used in the root or sub domain name, and how impactful That might be on search engine rankings.

Page Level Social Metrics:--

Social metrics considered include mentions, links, shares, Likes, and other social media Site-based metrics. At the time of the survey, the considered sites were Face book and Twitter. Since then Google has launched Google+, and Search, plus Your World, which Would also be included in this definition.

Domain Level Brand Metrics:--

This factor includes search volume on the website's brand name, mentions, whether it has a presence in social media, and other brand-related metrics.

Page Level Keyword Agnostic Features:--

Factors included here are on-page elements such as Number of internal links on the page, number of other followed links in page.

Page Level Traffic/Query Data:--

Elements of this factor include the click-through rate (CTR) to the page in the search Results, the bounce rate of visitors to the page is also included.

Domain Level Keyword Agnostic Features:--

Major elements of this factor in the survey included the number of hyphens in the domain Name, numeric characters in the domain name and domain name length.

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## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR.	QUESTIONS	ANSWERS
NO		
1	Give the name of Site for Optimization	SEOMOZ.
	Survey	
2	How many factors are there in analyzing	
	ranking factors?	9
3	CTR full form.	Click through rate

## 13. Explain Negative Ranking Factors in detail. 2M/3M

The SEOmoz survey also identified a number of negative ranking factors. Some of the most significant ones included:

## > Malware being hosted on the site:

The search engines will act rapidly to penalize sites that contain viruses or Trojans.

## > Cloaking:

Search engines want publishers to show the same content to the search engine as is shown To users.

## Pages on the site that sell links:

Google has a strong policy against paid links, and sites that sell them may be penalized.

## > Content that advertises paid links on the site:

As an extension of the prior negative ranking factor, promoting the sale of paid links maybe a negative ranking factor.

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## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Negative ranking factors identified by which site	seomoz
2	Total negative ranking factors are	4
3	SEARCH QUERY IS WRITTEN IN WHICH BOX?	SEARCH QUERY BOX
4	Malware means	It's a negative content that is available in the form of Virus or Trojans to destroy your data.

#### 14. Explain different other Ranking Factors in detail. 5M.

The ranking factors we've discussed so far are really just the basics. Search engines potentially factor in many more signals. Some of these include:

#### **4** Rate of acquisition of links:--

If over time your site has acquired an average of 5 links per day, and then the links Suddenly start to come in at a rate of 10 per day that could be seen as a positive ranking Signal. On the other hand, if the rate of new links drops to two per day, that could be a Signal that your site has become less relevant.

However, it gets more complicated than that. If your site suddenly starts to get 300 new Links per day, you have either abruptly become a lot more relevant or started to acquire Links in a spammed (unwanted) way.

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#### 📥 User data:-

#### 1- Geolocation factor:-

There are a few ways of personalization can take place. For one, a search engine can perform a geolocation lookup to figure out a user's approximate location and then show results tailored to that location.

This is very helpful.

For example, if you are looking for a local restaurant. (Near me Concept).

#### 2- Language Preference:-

Another way of search engine is to get some data voluntarily from the users.

For example, a simple example would be a language preference. If the user indicates he prefers Portuguese, the search engine can tailor the results to that preference.

## 3 – Search History:-

Search engines can also look at the search history for a given user.

Basically, the search engine maintains a log of all the searches you have performed when you are logged in.

Based on this, it can see that you have been checking out "luxury cars" recently, and can Use that knowledge to tweak the results you see after you search on "jaguar". This is Sometimes referred to as adaptive search.

How users avoid personalization:-

To avoid personalization,

1. Before searching users need to log out of their Google accounts and select "disable customizations based on search history" in the Google interface under Web search History.

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This will allow the user to see Google results that are not personalized based On search history. However, the results will still be personalized to the user's location.

2. You also need to have Google instant turned off/Sync. Turned Off in your preferences.

## 3. 1 WORD QUESTION ANSWERS:-

SR. NO	QUESTIONS	ANSWERS
1	Other ranking factors are	User data and rate of
		acquisition links
2	Geographical concept is also known as	"Near to me" concept.
3	Is it possible to avoid customization?	Yes.

## 15.Explain Google sandbox in detail.2M

- $\checkmark$  As we have discussed throughout this chapter, the search engines use a number of Methods to fight spam.
- $\checkmark$  One technique that many people believe Google uses has become known as the Google "Sandbox." The sandbox is thought to be a filter where Google limits the rate of growth of the Page Rank (or rankings) of new domains.
- ✓ This approach could be useful in filtering out spam domains because they often don't Stay around very long, so the spammer works hard to get them ranking and producing Traffic as quickly as they can.
- The sandbox can potentially create a scenario where the website is caught by improved algorithms or manual review prior to becoming highly productive. At a minimum, it would increase the cost of the spammer's efforts.

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#### 16. Explain Advanced Search Techniques. 3M

One of the basic tools of the trade for an SEO practitioner is the search engines Themselves.

They provide a rich array of commands that can be used to perform advanced research, Diagnosis and competitive analysis. Some of the more basic operators are:

#### ✤ -Keyword:-

- $\checkmark$  Excludes the keyword from the search results.
- $\checkmark$  For example, loans -student shows results for all types of loans except student loans.

#### ✤ <u>+keyword:-</u>

 $\checkmark$  Allows for forcing the inclusion of a keyword. This is particularly useful for including Stop words (keywords that are normally stripped from a search query because they usually do not add value, such as the word *the*) in a query, or if your keyword is getting converted into multiple keywords through automatic stemming.

#### $\checkmark$ For example,

- 1. If you mean to search for the TV show "The Office", you would want the word "The" to be part of the query.
- 2. As another example, if you are looking for Patrick Powers, who were from Ireland, you would search for Patrick powers + Ireland to avoid irrelevant **Result For Patrick Powers**.

## keyword1 OR keyword2:-

- ✓ Shows results for *at least one* of the keyword.
- ✓ For example, Google **OR** Yahoo!.

These are the basics, but for those who want more information, what follows is an Outline of The more advanced search operators available from the search engines.

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## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SRNO	QUESTIONS	ANSWERS
1	What is Google Sandbox?	The sandbox is thought to be a filter where Google limits the rate of growth of the Page Rank (or rankings) of new domains.
2	Give the 3 names of advance search operators.	-keyword +keyword Keyword1 OR keyword2
4	Example of -keyword is	loans -student
5	Example of +keyword is	Circuit house +Rajkot

#### 17. Explain Vertical Search Engines.3M/5M

- ✓ Vertical search is the term people sometimes use for specialty or niche search engines that focus on a limited data set.
- Examples of vertical search solutions provided by the major search engines are image, video, news, maps, books and blog searches.
- ✓ These may be standard offerings from these vendors, but they are distinct from the engines general web search functions.
- ✓ Vertical search results can provide significant opportunities for the SEO practitioner.
- ✓ High Placement in these vertical search results can equate to high placement in the web search Results, often above the traditional 10 blue links presented by the search engines.

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**4** Vertical Search from the Major Search Engines:-

The big three search engines offer a wide variety of vertical search products. Here is a partial list:

#### Google:-

Google Maps, Google Images, Google Product Search, Google Blog Search, Google Video, Google News, Google Custom Search Engine, Google Book Search, Google US Gov't Search, etc.

## Yahoo:-

Yahoo! News, Yahoo! Local, Yahoo! Images, Yahoo! Video, Yahoo! Shopping, Yahoo! Audio Search, etc.

## <u>Bing:-</u>

Bing Image, Bing Video, Bing News, Bing Maps, Bing Health, Bing Products, etc.

## Advantages of Vertical search engines:-

- Have smaller index, and, thus, normally operate faster
- Offer fewer results to choose from
- Return more accurate results (well, in most cases)
- To find exactly what you need, you don't have to keep on perfecting your query.

## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR.	QUESTIONS	ANSWERS
NO		
1	Give the names of 3 major vertical search engines	Google, Yahoo, Bing.

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2	Most popular search engine is	Google.
3	Search engines provide which types of search options	Image, Video, News, Maps, Books, Blogs etc
4	Map search is also known as	Local Search

## ADDITIONAL INFORMATON ABOUT SEARCH ENGINE BASICS:-

## 1. Image search:-

- $\checkmark$  All three of the big search engines offer image search capability.
- ✓ Basically, image search engines Limit the data that they crawl, search, and return in results to images.
- ✓ This means files that are in GIF, TIF, JPG, JPEG and other similar formats.
- ✓ A surprisingly large number of searches are performed on image search engines.
- ✓ According to comScore, more than 1 billion image searches were performed on Google Image Search.
- ✓ It is likely that at least that many image-related search queries occurred within Google web search during that same time frame; however, since an image is a binary file, search engine crawlers cannot readily interpret it.
- ✓ Historically, to determine an image's content, search engines have had to rely on text surrounding the image, the alt attribute within the img tag, and the image filename.

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- ✓ However, Google now offers a search by image feature you can drag an image file into the Google Image Search box and it will attempt to identify the subject matter of the image and show relevant results.

## Example OF Image Search:-



## 2. Video search:-

 $\checkmark$  As with image search, video search engines focus on searching specific types of files on the Web—in this case, video files is in different formats.

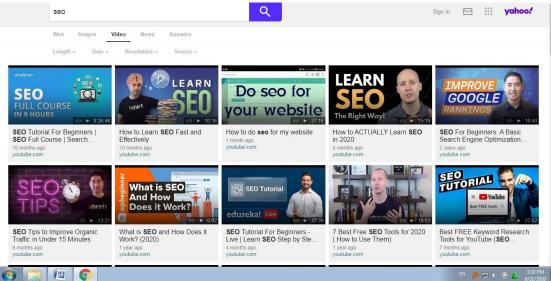
✓ Video file formats such as MPEG, AVI, and others.

- $\checkmark$  A very large number of searches are also performed in video search engines.
- ✓ As with image search, many video searches are also performed directly within Google web search.

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- There is significant traffic to be gained by optimizing for video search engines and participating in them. Once again, these are binary files and the search engine cannot easily tell what is inside them.
- ✓ However, each search engine is investing in technology to analyze images and videos to extract as much information as possible.
- $\checkmark$  For example, the search engines are experimenting with OCR technology to look for text within images, and other advanced technologies are being used to analyze video content.
- $\checkmark$  Flesh-tone analysis is also in use to detect pornography or recognize facial features. The application of these technologies is in its infancy, and is likely to evolve rapidly over time.
- ✓ YouTube (http://www.youtube.com) is the dominant video search engine, with over 5 billion searches performed every day.
- ✓ Example Of Video Search:-



Facts about you tube:

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#### Total Number of Monthly Active YouTube Users:

2 billion (<u>source</u>) Last updated: 9/4/19

#### Total Number of Daily Active YouTube Users:

30 million (source) Last updated: 9/4/19

#### Number of Videos Shared to Date:

#### 5+ billion

Last updated: 6/24/18

#### Number of Users Creating Content Shared to Date:

50 million

Last updated: 6/24/18

#### **Average Viewing Session**

40 minutes, up 50% year-over-year

Last updated: 6/24/18

#### Number of Videos Watched Per Day

5 billion (source) Last updated: 9/4/19

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## Number of mobile YouTube views per day:

1 billion + (<u>source</u>) Last updated: 9/4/19

## Number of Videos uploaded per minute:

500 hours (source)

Last updated: 9/4/19

## **YouTube Demographics**

- 62% of YouTube users are **Males**.
- <u>78%</u> of US **men adults** use YouTube.
- <u>68%</u> of US women adults use YouTube.
- More than <u>15% of YouTube's site traffic comes from the U.S.</u>
- <u>80% of YouTube users</u> come from outside the US.
- <u>62%</u> of **businesses** use YouTube.
- **9% of small businesses** are on YouTube.
- <u>35+ and 55+ age groups</u> are the fastest growing YouTube demographics.
- 51% of YouTube users say they visit the site daily.
- <u>70%</u> of YouTube watch time comes from **mobile devices**.
- YouTube services are available in more than <u>100 countries in 80 languages</u>..
- <u>95%</u> of global internet population watches YouTube.
- There **50 million creators** on YouTube.
- YouTube has <u>265 million</u> active users in India.

♦ YouTube's revenue came to <u>\$15.1 billion</u> for the full year 2019, up 36% from 2018.

## 3. <u>News search:-</u>

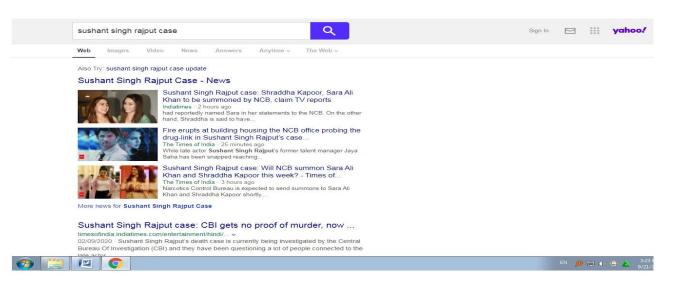
✓ News search is also unique. News search results operate on a different time schedule, as they must be very, very timely.

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- ✓ News search engines must be able to retrieve information in real time and provide nearly instantaneous responses.
- $\checkmark$  Modern consumers tend to want their news information now.
- ✓ As with the other major verticals, there is a lot of search volume here as well. To have a chance of receiving this volume, you will need to become a news source. This means generating timely, topical news stories on a regular basis. There are other requirements as well.

#### Example of News Search:-



## 4. Local Search:-

- $\checkmark$  Next major vertical search option is local search (also known as Map search).
- ✓ Local Search results are now heavily integrated into the traditional web search results, so a presence in local search can have a large impact on organizations.
- ✓ Local search engines search through databases of locally oriented Information, such as the names, phone numbers, and locations of local Businesses around the world, or just provide a service, such as offering Directions from one location to another.

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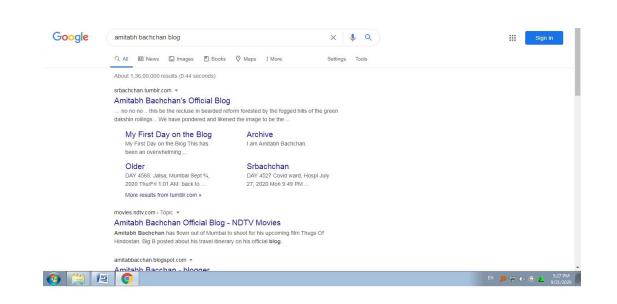
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- $\checkmark$  The integration of local search results into regular web search results has Dramatically increased the potential traffic that can be obtained through Local search.

Example of Local Search:-

Google	petrol pump near me	X 🏮 Q	Sign in
	🔍 All 🛇 Maps 🗉 News 🕐 Books 🧷 Shopping 🗄 More	Settings Tools	
	About 23,80,00,000 results (0.50 seconds)		
		ice ગાંધી મ્યૂઝિઅમ ટ હેંડ શિક્સ RAGHUVEER	
	Hours *		
	A Eagle Petrol Pump Petrol Pump Subhash Road Open - Closes 12AM	WEBSITE DIRECTIONS	
	A Eagle Petrol Pump Petrol Pump Subhash Road		

- 5. Blog search:-
- ✓ Google has implemented a search engine focused just on blog search called Google Blog Search (misnamed because it is an RSS feed engine and not a blog engine).
- ✓ This search engine will respond to queries, but only search blogs (more accurately, feeds) to determine the results.

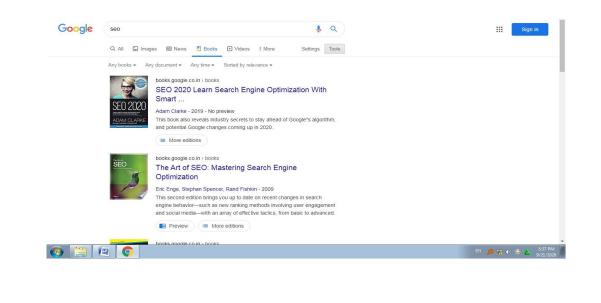
#### Example of Blog Search:-



#### 6. Book search:-

✓ The major search engines also offer a number of specialized offerings. One highly vertical search engine is Google Book Search, which specifically searches only content found within books.

Example of Book Search:-

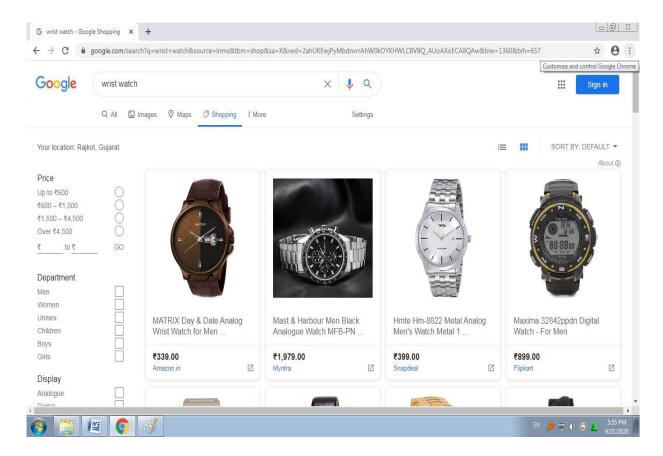


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7. Shopping search:-

Search engines also have some unique vertical search properties. One of the more interesting ones is its vertical shopping search solution.



#### **1 WORD QUESTION ANSWERS:-**ॐ

SR. NO	QUESTIONS	ANSWERS
1	Which types of images supported by Image Search?	GIF, TIF, JPG, JPEG

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2	Full form OF GIF is	Graphics Interchange Format
3	Full form OF TIF is	Tagged Image File
4	TIF also known as	TIFF
5	Shopping search option is not available in	Yahoo and Bing
6.	Full form of RSS is	Really Simple Syndication

## Additional Search Options: -

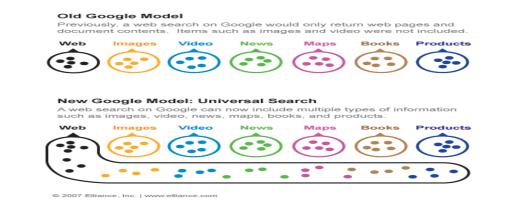
1. Universal Search/Blended Search:-

Google made a big splash in 2007 when it announced Universal Search.

Universal search is search that allows Google to show images, local businesses, and Rich snippets, and more right on the SERP. In the past, Google only showed links From other websites when a user typed in a query. Now, Google uses universal Search. This refers to Google's ability to take results from a few different verticals And combine them into a single SERP.

This was the notion of integrating images, videos, and results from other vertical Search properties directly into the main web search results.

The other search engines quickly followed suit and began offering vertical search Integration before the end of 2007.



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People now refer to this general concept as blended Search (since Universal Search is specifically associated with Google).

A wide range of vertical data sets have been integrated into Google's Universal Search, as well as into the Blended Search results of the other search engines.

#### Use Blended Searches for the Best Search Results:-

Search engines have historically indexed Web pages based upon text content. Now Search engines are displaying other types of content integrated (blended) automatically Onto the search results page. The intent of this blending is to satisfy the searcher and to Engage them by making the results more relevant, essentially making the user happier With the search results.

A blended search gives you results that the engine thinks would be useful to you, by Including results from their search verticals, specialized engines that search only one Type of content, like images, videos, news, local results, or blog posts.

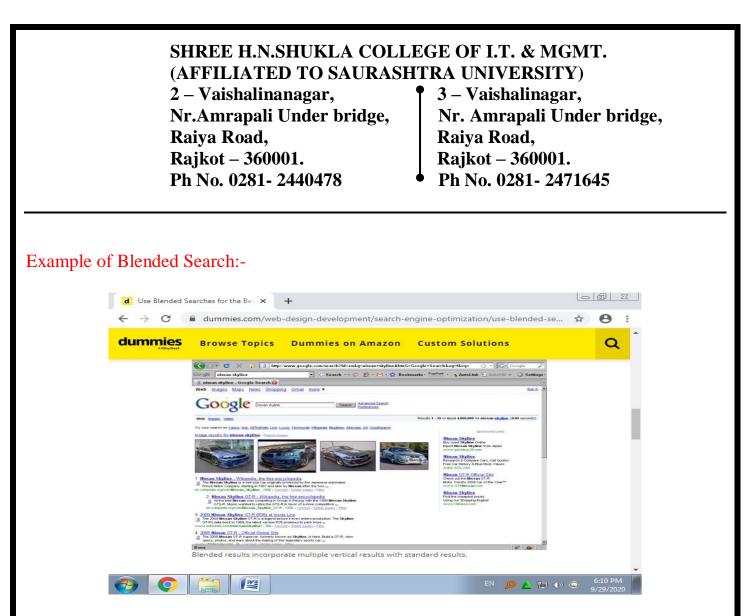
A blended search is the search engine's way of trying to give you the most relevant Results possible by giving you results drawn from multiple sources. The images at the Top of the figure are brought in from Google Image Search as a result of Blended search. It requires no effort on the part of the user to receive blended search Results.

Any query that the search engine algorithms consider being a candidate for a blended Result will have such results. Try this yourself with a query for a popular musician or Movie and see what happens. Searching for a person or event that was recently in the News is another good way to see blended search in action.

The results for the blended search include news items, images, and local results and Many other types of engagement objects. These might be results that aren't exactly What you are looking for, but Google thinks they might be useful, so they include Them. Notice how the inclusion of an image seems to break up the page. This is Important because it changes the eye-tracking patterns in the Golden Triangle.

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2. Meta search:-

✓ Meta search engines are search engines that aggregate results from multiple search Engines and present them to the user. The two best-known ones are MetaCrawler.com and Dogpile.com. However, their cumulative search volume is Quite small and these do not factor into SEO strategies.

- ✓ More specialized vertical search engines:
  - Vertical search can also come from third parties. Here are some examples:
  - Comparison shopping engines, such as Price Grabber, Shopzilla, and NexTag
  - Travel search engines, such as Expedia, Travelocity, Kayak, and Uptake
  - Real estate search engines, such as Trulia and Zillow
  - People search engines, such as Spock and Wink
  - Job search engines, such as Indeed, CareerBuilder, and Simply Hired
  - Music search engines, such as iTunes Music Store
  - B2B search engines, such as Business.com, Knowledge Storm, Kelly search, and Thomas Net.

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## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Blended search is also known as	Universal Search
2	Universal search first announced by	Google in 2007
3	Give the names of Meta search engines	Metacrawler.com and Dogpile.com
4	The name of first Indian meta search engine is	Humhaiindia.com
5	Give the names of Meta search engines for real estate	Trulia and Zillow

## 18. Explain Country-Specific Search Engines in detail. 3M/5M

- ✓ At this stage, search is truly global in its reach. Google is the dominant search engine In many countries, but not all of them.
- ✓ How you optimize your website depends heavily on the target market for that site, And the search engines that (are) the most Important in that market.
- ✤ Answer of this question plz see Q.2 in Chapter 1.
- Conclusion: Understanding how search engines work is an important component Of SEO. The search engines are constantly tuning their algorithms. For That reason, the successful SEO professional is constantly studying Search engine behavior and learning how they work.

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#### <u>UNIT 2</u>:-

## DETERMINING YOUR SEO OBJECTIVES AND DEFINING YOUR SITE'S AUDIENCE & FIRST STAGES OF SEO

Strategic Goals SEO Practitioners Can Fulfill **Every SEO Plan Is Custom** Understanding Search Engine Traffic and Visitor Intent Developing an SEO Plan Prior to Site Development Understanding Your Audience and Finding Your Niche **SEO** for Raw Traffic **SEO** for Ecommerce Sales SEO for Mindshare/Branding SEO for Lead Generation and Direct Marketing **SEO** for Reputation Management SEO for Ideological Influence Conclusion The Major Elements of Planning Identifying the Site Development Process and Players Defining Your Site's Information Architecture Auditing an Existing Site to Identify SEO Problems Identifying Current Server Statistics Software and Gaining Access **Determining Top Competitors Assessing Historical Progress Benchmarking Current Indexing Status** Leveraging Business Assets for SEO Combining Business Assets and Historical Data to Conduct SEO/Website SWOT Analysis Conclusion

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### <u>UNIT 2</u>

### <u>CH-3 Determining Your SEO Objectives and</u> <u>Defining Your Site's Audience</u>

### INTRODUCTION OF SEO PLANNING:-

- ✓ SEO, once a highly specialized task relegated to the back rooms of a website Development team is now a mainstream marketing activity. This dramatic rise can be Attributed to three emerging trends:
- ✓ Search engines drive dramatic quantities of focused,
  - 1. Comprising people intent on accomplishing their search
  - 2. Traffic
  - 3. Purchasing goals.
- ✓ Businesses can earn significant revenues by leveraging the quality and relevance of This traffic for direct sales, customer acquisition, and branding/awareness campaigns.
- ✓ Visibility in search engines creates an implied endorsement effect, where searchers Associate quality, relevance, and trustworthiness with sites that rank highly for their Queries.
- ✓ Dramatic growth in the interaction between offline and online marketing necessitates Investment by organizations of all kinds in a successful search strategy.
- Consumers are increasingly turning to the Web before making purchases in verticals Such as real estate, autos, furniture, and technology.
- ✓ Organizations cannot afford to ignore their customers' needs as expressed through Searches conducted on the major search engines.
- ✓ As with any other marketing function, it is important to set specific goals and Objectives—if a goal is not measurable, it is not useful.
- ✓ Setting up such objectives is the only way you can determine whether you are getting Your money's worth from your SEO effort.

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✓ Although SEO can be viewed as a project, the best investment, in our opinion, is to Treat it as more of a process—one that is iterative, ongoing, and requires steady Commitment from the stakeholders of an organization.

# Q.1 Explain Strategic Goals of SEO Practitioners.3M/5M

List of Strategic Goals of SEO Practitioners:-

- **1. Visibility (Branding)**
- 2. Website Traffic
- 3. High ROI (ROI = RETURN ON INVESTMENT)
- 4. Understanding Search Engine Traffic and Visitor Intent

# 1. Visibility (Branding) :

- ✓ Most consumers assume that top placement in the search engines is like a stamp of approval on a business.
- Surely a company could not rank highly in the search results if it were not one of the best in its field, right?
- ✓ However, the fact is that many consumers, and even business searchers, interpret high Search rankings as an implicit endorsement.
- ✓ Therefore, for critical brand terms, the SEO practitioner should work toward Improving the search engine rankings for the website he is working on.
- ✓ However, if you sell solar panels, you will want to rank well for the search term solar panels. When users see you ranking highly on that search term, they will assume your site is best for purchasing solar panels.

# 2. <u>Website Traffic:</u>

- ✓ Long gone are the days of a "build it and they will come" paradigm on the Web.
- ✓ Today's environment is highly competitive, and you need great SEO to ensure Targeted, high-quality traffic to your site.

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- $\checkmark$  The SEO practitioner fills the different, more critical role of bringing new prospects to your website from an audience of people who would not otherwise have been interested in or perhaps aware of, the business at all.
- Experienced SEO practitioners know that users search for products, services, and Information using an extraordinarily wide variety of search queries and query types.
- $\checkmark$  An SEO professional performs keyword research to determine which search queries People actually use. For example, when searching for a set of golf clubs, some users May type in left handed golf clubs as a search query.
- $\checkmark$  Knowing that, the SEO process works on a site architecture strategy and a link-Building strategy to help the site's pages achieve Competitive search engine Rankings for these types of terms.

# **3.** High ROI (ROI = RETURN ON INVESTMENT):-

- $\checkmark$  Improving visibility and driving traffic are nice, but the most important Objective is to achieve the goals of your organization.
- $\checkmark$  For most organizations, that means generating sales, leads, or advertising Revenue. For others, it may mean the promotion of a particular message.
- ✓ An important component of SEO is to deliver not just traffic, but relevant traffic That has the possibility of converting visitors into the customers. The great thing About SEO is that it can result in dramatically improved Website ROL
- ✓ Whether you are selling products and services, advertising and looking for Branding value, or trying to promote a specific viewpoint to the world, a well-Designed SEO strategy can result in a very high return on investment when Contrasted with other methods of marketing.
- ✓ For many organizations, SEO brings a higher ROI when compared to TV, print, And radio campaigns. Traditional media is not in danger of being replaced by SEO, but SEO can provide some high-margin returns that complement and Enhance the use of offline media.

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- ✓ The ever-changing, dynamic nature of the search marketing industry requires Constant diligence (EFFORTS).
- ✓ SEO professionals must maintain a research process for analyzing how the Search landscape is changing, because search engines strive to continuously Evolve to improve their services and monetization.
- $\checkmark$  It Provides advertisers with the continuous opportunity, either Independently or through outside consulting, to achieve top rankings for Competitive target searches for their businesses.
- Organizations should take many factors into account when pursuing an SEO Strategy, including:
  - What the organization is trying to promote
  - Target market
  - Brand
  - Website structure
  - Current site content
  - Ease with which the content and site structure can be modified
  - Any immediately available content
  - Available resources for developing new content
  - Competitive landscape
  - And so on...

### 4. Understanding Search Engine Traffic and Visitor Intent:-

- $\checkmark$  As we discussed earlier, searchers enter many different types of queries. These are typically classified into three major categories:
  - Navigational query
  - Informational query
  - Transactional query

✓ The user types in **buy digital camera.** Although there is no information in the query about which one he/she wants to buy, the intent still seems quite clear.

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- ✓ The searcher types in **canon powers hot G10.** The chances are very high that this user is looking to buy that particular camera.
- ✓ Part of an SEO plan is to understand how the various relevant types of searches relate to the content and architecture of your website.

## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

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SRNO	QUESTIONS	ANSWERS
1	Give the name another of Branding is	Visibility
2	Total numbers of objectives are	4
3	Full form Of ROI.	Return on investment
4	Search engine marketing requires	Constant Efforts

### Q.2 Explain about developing an SEO Plan Prior to Site Development.5M

- ✓ It is widely understood in the industry that search engine optimization should early as possible, to the entire site development strategy, from choosing a content Management system (CMS) and planning site architecture to developing on-page content.
- ✓ SEO plans have many moving parts, and SEO decisions can have a significant Impact on other departments, such as development, other marketing groups, and Sales.
- ✓ Getting that input as soon as possible will bring the best results for a business at the least possible cost.

**4** Business Factors That Affect the SEO Plan:-

Here are some examples of business issues that can impact SEO:

- 1. Revenue/business model
- 2. Target customers
- **3.** Competitor strategies

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- 4. Branding goals
- 5. Budget for content development
- 6. How your potential customers search for products like yours
- 1. Revenue/business model:-
- $\checkmark$  It makes a difference to the SEO practitioner if the purpose of the site is to sell products, sell advertising, or obtain leads.

### 2. Target customers:-

 $\checkmark$  Who are you trying to reach? This could be an age group, a gender group, or as specific as people looking to buy a house within a 10KM radius of Rajkot, Gujarat.

### 3. Competitor strategies:-

 $\checkmark$  The competitive landscape is another big factor in your SEO plan. Competition may be strongly entrenched in one portion of the market online, and it may make sense to focus on a different segment or you may be the big dog in your market but you have specific competitors you want to fend off.

### 4. Branding goals:-

There may be terms that it is critical for you to own, you have to perform more Brainstorming to define your products for branding reasons.

### 5. Budget for content development:-

- ✓ An important part of content development in website is ensuring the quality of your content, as well as your capacity to commit to the ongoing development of highquality on-page site content.
- $\checkmark$  To develop quality content you must be decided first your budget and then develop content of your site for optimization like link building process.

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- 6. How your potential customers search for products like yours:-
- $\checkmark$  Understanding what customers do when they are searching for products or services like yours is one of the most basic functions of SEO.
- $\checkmark$  This involves mapping the actual search queries that your target customers use when they go to a search engine to solve their current problem.

# ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Full Form OF CMS is	Content Management System
2	Total no. of business factors are	6
3	Examples Of CMS languages	Word press and joomla
4	Your regular customer of website is also known as	Potential Customers

## Q.3 Explain Understanding Your Audience and Finding Your Niche in detail.3M/5M

- $\checkmark$  A nontrivial part of an SEO plan is figuring out who you are targeting with your Website. This is not always that easy to determine.
- ✓ Many factors enter into this, including the competition, the particular strengths or Weaknesses of your own company, and more.
  - 1. Mapping Your Products and Services
  - 2. Content Is King
  - 3. Segmenting Your Site's Audience
- **4** Mapping Your Products and Services:-
- $\checkmark$  Successful SEO requires a thorough understanding of the business itself. What Products, services, and types of information and resources do your organization Have to offer?

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- $\checkmark$  You will also need to understand the broad market categories that your products fall Into, as each of these categories might relate to sections of your website that you may Want to create.
- $\checkmark$  You also should consider business development and the company's expansion strategy At the outset of the SEO planning process. Consider Amazon, which began as a Bookseller but has evolved into a general purpose e-tailor.

# 4 Content Is King:-

- ✓ One aspect of determining the desired audience for your website is determining who You want to reach, which requires an understanding of what you have to offer visitors To your site, both now and in the future.
- ✓ You may have a deep library of "how to" content, great videos, a unique photo Gallery or an awesome tool that people are interested in using.
- $\checkmark$  Each of these can be valuable in building a world-class website that does well in the Search engines.
- ✓ The content you have available to you will affect your keyword research and site Architecture, as your site content is the major source of information that search Engine use to determine what your site is about.
- ✓ As we discussed in "Algorithm-Based Ranking Systems: Crawling, indexing."
- $\checkmark$  To establish itself as a leader. Site must bring something new and unique to the Market. Perhaps it can offer a solution to a problem that no one else has been able to Solve before, perhaps it focuses on a specific vertical niche and establishes itself as a Leader in that niche—for example, by being the first to release a high-quality video Series on the topic it covers.

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### 4 Segmenting Your Site's Audience:-

- ✓ Let's not forget the audience itself! It is important for the SEO practitioner to Understand the target audience.
- ✓ Similar things can happen with gender. For example, women and men may not search For their shoes the same way, search terms are different in gender categories.
- ✓ Another major criterion to consider might be location. Searchers in Delhi may Want a different version of your product than searchers in Mumbai.
- $\checkmark$  For that matter, because they want different products, they may use different search Terms, which requires extensive keyword research—yet another critical aspect of the SEO process.

## ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Targeted Audience means	Capable to purchase your
		products and services.
2	Targeted content means	Identify proper data for
		generate relevancy.
3	Which option is used to promote site	Content

### Q.4 Write a note on SEO for Raw Traffic.2M/3M

- ✓ Optimizing for search engines and creating keyword-targeted content helps a site rank for key search terms, which typically leads to direct traffic and referring links as more and more people find, use, and enjoy what you've produced.
- Thousands of sites on the Web leverage this traffic to serve advertising, directly monetizing the traffic sent from the engines.

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### > Here are some factors to think about when considering SEO for raw traffic:

- 1. When to employ SEO for raw traffic.
- 2. Keyword targeting.
- 3. Page and content creation/optimization.
- ✤ When to employ SEO for raw traffic:-
- ✓ Use it when you can monetize traffic without actions or financial transactions taking place on your site (usually through advertising).
- ✤ Keyword targeting:-
- ✓ Keyword targeting in this scenario can be very broad. The goal here isn't typically to select specific keywords, but rather to create lots of high-quality content that naturally targets interesting/searched-for terms.
- ✓ Concentrate efforts on great content, and use keyword-based optimization only as a secondary method to confirm the titles/headlines of the works you create.
- Page and content creation/optimization:-
- ✓ A shallow, highly crawl able link structure is critical to getting all of your content indexed—follow good information architecture practice and use intelligent, detailed category and subcategory structures to get the most benefit out of your work. You'll also need to employ good on-page optimization (titles, headlines, internal linking, etc.)

# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SRNO	QUESTIONS	ANSWERS
1	Total numbers of factors for RAW traffic	3
	is	
2	Raw traffic is needed through	Advertisement
3	On page optimization means	Proper optimization of single
		individual page.

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### **Q.5 Write a note on SEO for Ecommerce Sales.2M/3M**

- $\checkmark$  One of the most direct monetization (something conversion into money) strategies for SEO is driving relevant traffic to an ecommerce shop to boost sales.
- $\checkmark$  Search traffic is among the best quality available on the web, primarily because a search user has expressed a specific goal through his/her query, and when this matches a product or brand the web store carries, conversion rates are often extremely high.

### > Here are some factors to think about when considering SEO for ecommerce sales:

- 1. When to employ SEO for ecommerce sales.
- 2. Keyword targeting.
- 3. Page and content creation/optimization.

#### When to employ SEO for ecommerce sales::-

✓ Use it when you have products/services that are directly for sale on your website.

#### \* Keyword targeting:-

- ✓ Paid search advertising is an excellent way to test the efficacy and potential ROI of keyword targets.
- ✓ You'll often find that the more specific the query is—brand-inclusive, productinclusive, and so on—the more likely the visitors are to make the purchase.

#### \* Page and content creation/optimization:-

 $\checkmark$  You'll typically need to do some serious link building, along with internal optimization, to achieve high rankings for competitive, high-value keywords that bring in conversion-focused traffic.

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## Q.6 Write a note on SEO for Mindshare/Branding.2M/3M

- ✓ A less popular but equally powerful application of SEO is its use for branding purposes.
- ✓ Bloggers, social media/community websites, content producers, news outlets, and dozens of other web publishers have found tremendous value in appearing atop the SERPs and using the resulting exposure to bolster their brand recognition and authority.

✓ Online marketers have observed that being at the top of the search rankings around a particular subject has a positive impact on traffic and its consideration authority.

## Here are some factors to think about when considering SEO for Mindshare or Branding.

- 1. When to employ SEO for mindshare/branding.
- 2. <u>Keyword targeting.</u>
- 3. Page and content creation/optimization.
- When to employ SEO for mindshare/branding:-
- ✓ Using it when branding or communicating a message is your goal. If you do not have direct monetization goals for the moment or for the foreseeable future, this is the approach for you.
- ✓ This approach can also be used on portions of ecommerce sites that are not about conversion but more about long-term branding and mindshare.
- ✤ Keyword targeting:-
- ✓ A keyword focus is less critical here—you'll likely have a few broad terms that receive the high traffic you want, but the long tail may be far more achievable and the better target.
- ✓ Focus on keywords that are going to bring you visitors who are likely to be interested in and remember your brand.

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- Page and content creation/optimization:-
- $\checkmark$  Make an accessible site, use good link structure, apply best practices, and focus on links for domain authority rather than chasing after specific keywords.

### ✓ 1 WORD OUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Mindshare is useful for branding	Yes
	process	
2	E commerce business is boost up using	Keyword targeting,
		Page and content
		optimization.

#### Q.7 Write a note on SEO for Lead Generation and Direct Marketing.2M/3M

- $\checkmark$  Although lead generation via the Web is less useful than an ecommerce transaction, it is arguably just as valuable and important for building customers, revenue, and longterm value.
- $\checkmark$  Millions of search queries have commercial intents that can't be (or currently aren't) fulfilled directly online.
- $\checkmark$  These can include searches for services such as legal consulting, contract construction, commercial loan requests, alternative energy providers, or virtually any service or product people source via the Web.

### Here are some factors to think about when considering SEO for Lead Generation and Direct Marketing.

- 1. When to employ SEO for lead generation and direct marketing.
- 2. Keyword targeting.
- 3. Page and content creation/optimization.

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- ✤ When to employ SEO for lead generation and direct marketing:-
- ✓ Use it when you have a non-ecommerce product/service/goal that you want users to accomplish on your site or for which you are hoping to attract inquiries/direct contact over the Web.
- ✤ Keyword targeting:-
- $\checkmark$  As with ecommerce, choose phrases that convert well, have reasonable traffic, and have previously performed in PPC campaigns.
- Page and content creation/optimization:-
- ✓ You'll need a solid combination of on-site optimization and external link building to many different pages on the site to be competitive in the more challenging arenas.

## Q.8 Write a note on SEO for Reputation Management.2M/3M

- ✓ Since one's own name—whether personal or corporate—is one's identity, establishing and maintaining the reputation associated with that identity is generally of great interest.
- $\checkmark$  You may accomplish this using social media, major media, bloggers, your own sites and sub domains, and various other tactics.
- $\checkmark$  SEO enables this process through both content creation and promotion via link building. Although reputation management is among the most challenging of SEO tasks (primarily because you are optimizing many results for a query rather than one), demand for these types of services is rising as more and more companies become aware of the issue.
- > Here are some factors to think about when considering SEO for reputation management:
  - 1. When to employ SEO for reputation management:
  - 2. Keyword targeting
  - 3. Page and content creation/optimization

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- When to employ SEO for reputation management:-
- ✓ If you're trying to either protect your brand from negative results, for reputation management SEO is the only path to success.
- ✤ Keyword targeting:-
- $\checkmark$  Chances are this is very easy—the keyword you are targeting is your personal name, your brand name, or some common variant (and you already know what it is).
- $\checkmark$  You might want to use keyword research tools just to see whether there are popular variants you're missing.
- Page and content creation/optimization:-
- $\checkmark$  Unlike the other SEO tactics, reputation management involves optimizing pages on many different domains to demote negative listings.
- $\checkmark$  This involves using social media profiles, public relations, press releases, and links from networks of sites you might own or control, along with classic optimization of internal links and on-page elements.

#### Q.9 Write a note on SEO for Ideological Influence.2M/3M

- ✓ For those seeking to way public (or private) opinion about a particular topic, SEO can be a powerful tool.
- $\checkmark$  By promoting ideas and content within the search results for queries likely to be made by those seeking information about a topic, you can influence the perception of even very large groups.
- $\checkmark$  Politicians and political groups and individuals are the most likely employers of this tactic, but it can certainly be applied to any subject, from the theological to the technical or civic.

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### Here are some factors to think about when considering SEO for Ideological Influence :

- 1. When to employ SEO for ideological influence.
- 2. Keyword targeting
- 3. Page and content creation/optimization
- ✤ When to employ SEO for ideological influence:-
- $\checkmark$  Use it when you need to change minds or influence decisions/thinking around a subject.
- ✤ Keyword targeting:-

✓ It's tough to say for certain, but if you're engaging in these types of campaigns, you probably know the primary keywords you're chasing and can use keyword research query expansion to find others.

Page and content creation/optimization:-

✓ This is classic SEO, but with a twist. Leverage your combined links and content to espouse your philosophical preferences.

# ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Reputation management involves	Website and website owner both
2	Ideological Influence is used for	Public and private opinion.

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## **Conclusion:**

- $\checkmark$  To bring this all together, your objectives, tactics, and strategies need to be aligned. They need to take into account your market, your business, and the competition.
- $\checkmark$  The best strategy is the one that gets you to your goals the fastest. Don't spread yourself too thin. Remember to ask yourself the tough questions, such as:
- Does your company need direct sales, traffic, branding, or some combination of these?
- Are there specific influencers you're trying to reach with a message?

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- Is the organization/brand subject to potentially negative material that needs to be controlled/mitigated?
- Do you have products/services you sell, either directly over the Web or through leads?

### Ch – 4 First Stages Of SEO

## **INTRODUCTION:-**

- $\checkmark$  SEO projects require forethought and planning to obtain the best results, and SEO needs to be considered during, and incorporated into, all stages of a website development or redevelopment project.
- ✓ For example, the site architecture (including the selection of a content management system, or CMS), the marketing plan (including branding concepts), and much more are affected.
- $\checkmark$  In this chapter, we will discuss several aspects of how SEO projects start, including:
  - Putting together an SEO plan
  - Performing a technical SEO audit of a site
  - Setting a baseline for measuring results and progress
- $\checkmark$  These are the things you want to do at the very beginning of your SEO efforts for any website.

### Q.1 Explain the Major elements of planning in detail.3M/5M

✓ As any experienced SEO consultant will tell you, you should incorporate your SEO strategy into the site planning process long before your site goes live.

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- ✓ Your strategy should be well outlined before you make even the most basic technology choices, such as the hosting platform and your CMS.
  - 1. Technology Choices.
  - 2. Market Segmentation.
  - 3. Where You Can Find Great Links.
  - 4. Content Resources.
  - 5. Branding Considerations.
  - 6. Competition.

## **4** Technology Choices:-

- ✓ As we already suggested, SEO is a technical process, and as such, it impacts major technology choices.
- ✓ For example, a CMS technology can facilitate or help to develop best SEO strategy.
- ✓ Sometimes in non CMS web platforms do not allow you to access titles and Meta descriptions that vary from one web page to the next, create hundreds (or thousands) of pages of duplicate content, or make page redirection issues.

## **4** Market Segmentation:-

- ✓ Another critical factor to understand is the nature of the market in which you are competing. This tells you how competitive the environment is in general, and augmented with additional research.
- Method you can use to get a very quick read on competitiveness is using a Keyword tool such as the Traffic Estimator tool.

## **4** Where You Can Find Great Links:-

✓ Getting third parties to link their websites to yours is a critical part of SEO.

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- ✓ Without inbound links, there is little to no chance of ranking for competitive terms in search engines such as Google, whose algorithm relies heavily on link measuring and weighting criteria.
- ✓ An early part of the SEO brainstorming process is identifying the great places to get links, as well as the types of content you might want to develop to encourage linking from other quality websites.

# Content Resources:-

- $\checkmark$  Content is a king.
- ✓ The driver of any heavy-duty link campaign is the quality and volume of your content. If your content is of average quality and covers the same information dozens of other sites have covered, it will not attract many links. If, however, you are putting out quality content, or you have a novel tool that many will want to use, you are more likely to receive external links.

# **4** Branding Considerations:-

- ✓ Most companies have branding concerns of its various products.
- Where the nature of the brand makes a particular SEO strategy pretty compelling. Ultimately, your goal is to detail SEO efforts with branding as seamlessly as possible.
   Competition:-
- ✓ The competitor discovers a unique, highly converting set of keywords.
- ✓ The competitor discovers a targeted, high-value link.
- ✓ The competitor saturates a market segment, justifying your focus elsewhere.
- ✓ Weaknesses appear in the competitor's strategy, which provide opportunities For Exploitation.

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Conclusion:-

Understanding the strengths and weaknesses of your competition from an SEO Perspective is a significant part of your own SEO strategy.

# ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Major elements for optimization are	Technology Choices. Market Segmentation. Where You Can Find Great Links. ContentResource, Branding Considerations, Competition.
2	From Competitors we discovers	Unique Keywords and links
3	Which technology is best for developing search engine friendly website?	CMS technology

## Q.2 Explain about Identifying the Site Development Process and its Players.3M/5M

- $\checkmark$  Before you start the SEO process, it is imperative to identify who your target audience is, what your message is, and how your message is relevant.
- $\checkmark$  There are no web design tools or programming languages that tell you these Things. Your Company's marketing, advertising, and PR teams have to set the Objectives before you can implement them—successful SEO requires a team effort.

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> Your SEO team should be:-

- **4** Cross-functional and multidisciplinary
- **4** Consisting of the team manager
- **4** The technical team & The creative team
- **4** The data and analytics team (if you have one)
- **4** The major stakeholders from marketing
- **4** Advertising and PR
- 1. Cross-functional and multidisciplinary:
- ✓ In this team Senior and expert members are there to create strong SEO plan which includes cross functional connection between various departments of company to apply optimization in multidisciplinary way.

# 2. Consisting of the team manager:

✓ The team manager wants to know who the target audience is. What does the marketing team knows about them? How did we find them? What metrics will we use to track them? All of this is key information that should have an impact on the project's technical implementation.

# 3. The technical team and The creative team:

✓ The technical and creative team is responsible for delivering the project. They take direction from marketing, advertising, and PR on what needs to be accomplished, but from there on out they have to put the pieces into place.

# 4. The data and analytics team (if you have one):

✓ In most of the organizations they don't have separate Data and analytics team But if this team is available then they think about appropriate budget and product data and Its analytics as per the market trend.

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## 5. The major stakeholders from marketing:

✓ Generally they are responsible to arrange budget for the site marketing and based on the analytics report they release budget for the optimization.

## 6. Advertising and PR:

- ✓ Advertising messages need to be well thought out and prepared. You do not want your team bickering over whether to optimize for "hardcore widget analysis" or "take your widgets to the next level."
- ✓ Advertising serves multiple purposes, but its most fundamental purpose is to compel people to take a specific action.
- $\checkmark$  The PR team has to take your story to the media and entice them into writing and talking about it. What message do they want to deliver? You have to mirror that message in your content.

**Conclusion:** 

 $\checkmark$  Ongoing feedback is essential because the success of your project is determined solely by whether you're meeting your goals. A successful SEO team understands all of these interactions and is comfortable relying on each team member to do his part.

## ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Main player/person for website development is	Project Manager
2	Optimization and development teams includes	Advertizing, PR, Data Analytics, Technical, Creative and Marketing team.
3	Which team guides/instruct technical team members?	Marketing, Advertizing and PR team instruct Technical term

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# Q.3 Explain your Site's Information Architecture in detail.3M/5M

- ✓ Whether you're working with an established website or not, you should plan to research the desired site architecture (from an SEO perspective) at the start of your SEO project. This task can be divided into two major components:
  - Technology decisions
  - Structural decisions
  - Technology decisions:
- Technological decisions are based on site URL structure and language that is used to develop site.
- ✤ Dynamic URLs:-
- ✓ Although Google now states that dynamic URLs are not a problem for the company, this is not entirely true, nor is it the case for the other search engines.
- ✓ Make sure your CMS does not end up rendering your pages on URLs with many convoluted parameters in them.
- Session IDs or user IDs in the URL:-
- ✓ It used to be very common for CMSs to track individual users surfing a site by adding a tracking code to the end of the URL.
- ✓ Although this worked well for this purpose, it was not good for search engines, because they saw each URL as a different page rather than variants of the same page. Make sure your CMS does not ever serve up session IDs.
- ✤ Superfluous flags in the URL:-
- ✓ Related to the preceding in URL is the notion of extra junk being present in the URL.
- ✓ This probably does not bother Google, but it may bother the other search engines, and it interferes with the user experience for your site.

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- Links or content based in JavaScript, Java, or Flash:-
- $\checkmark$  Search engines often cannot see links and content implemented using these technologies. Make sure the plan is to expose your links and content in simple HTML text.
- Content behind forms (including pull-down lists):-
- ✓ Site developer may hide its site content from search engines, to hide content developer use content behind forms option.
- ✓ Making content accessible only after the user has completed a form (such as a login)
- ✓ Do not use these techniques unless you want to hide your content!
- Temporary (302) redirects:-
- $\checkmark$ This is also a common problem in web server platforms and CMSs. The 302 redirect blocks a search engine from recognizing that you have permanently moved the content and it can be very problematic for SEO as 302 redirects block the passing of Page Rank.

## Structural Decisions:

- One of the most basic decisions to make about a website concerns internal linking and navigational structures, which are generally mapped out in a site architecture document.
- $\checkmark$  What pages are linked to from the home page?
- $\checkmark$  What pages are used as top-level categories that then lead site visitors to other related pages?
- ✓ For search engines, the navigation structure helps their crawlers determine what pages you consider the most important on your site, and it helps them establish the relevance of the pages on your site to specific topics.

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✤ Target keywords:-

- $\checkmark$  Keyword research is a critical component of SEO.
- ✓ What search terms/keywords do people use when searching for products or services similar to yours? How do those terms match up with your site hierarchy?
- ✓ Ultimately, the logical structure of your pages should match up with the way users think about products and services like yours.
- Cross-link relevant content:-
- $\checkmark$  Linking between articles that cover related material can be very powerful. It helps the Search engine as certain with greater confidence how relevant a web page is to a particular topic.
- ✓ The "Frequently Bought Together" and "What Do Customers Ultimately Buy after Viewing This Item?" sections are brilliant ways to group products into categories that establish the relevance of the page to certain topic areas, as well as to create links between relevant pages.
- ✓ In the Amazon system, The "Customers Who Bought..." data is part of Amazon's internal databases, and the "Tags Customers Associate..." data is provided directly by the users themselves.

✤ Use anchor text:-

- $\checkmark$  Anchor text is one of the golden opportunities of internal linking.
- $\checkmark$  As an SEO practitioner, you need to have in your plan from the very beginning a way to use keyword-rich anchor text in your internal links. Avoid using text such as "More" or "Click here," and make sure the technical and creative teams understand this.

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- Use breadcrumb navigation:-
- $\checkmark$  Breadcrumb navigation is a way to show the user where he is in the navigation hierarchy.
- ✤ Minimize link depth:-
- $\checkmark$  Search engines (and users) look to the site architecture for clues as to what pages are most important.
- $\checkmark$  A key factor is how many clicks from the home page it takes to reach a page. A page that is only one click from the home page is clearly important.
- ✓ Standard SEO advice is to keep the site architecture as flat as possible, to minimize clicks from the home page to important content. Do not go off the deep end, though; too many links on a page are not good for search engines.

## ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Information architecture is base on	Technological decisions and structural decisions.
2	Google supports the concept of dynamic URL.	Yes
3	Superfluous flags means	Unwanted characters in URL.
4	One of the beat opportunities of internal linking is	Use of anchor text.
5	What is breadcrumb navigation?	Breadcrumb navigation is a way to show the user where he is in the navigation hierarchy.
6	Search engine crawlers does not support	JavaScript, Java &Flash files.

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# Q.4 Explain Auditing an Existing Site to Identify SEO Problems in detail.3M/5M.

- ✓ Auditing an existing site is one of the most important tasks that SEO professionals encounter.
- ✓ SEO is still a relatively new field, and many of the limitations of search engine crawlers are nonnutritive.
- ✓ In addition, many web developers, unfortunately, are not well versed in SEO, But in Today's industry it is now not a big issue for the expert developers.
- ✓ Even more unfortunately, some stubbornly refuse to learn, or, worse still, have learned the wrong things about SEO.

✤ Now in auditing part, it required following 4 major critical aspects.

- 1. Elements of an audit.
- 2. Importance of keyword review.
- 3. Keyword cannibalization.
- 4. Server & hosting issue.

## **4** 1. Elements of an Audit:-

The following sections identify what you should look for when performing a site audit.

# > Usability:-

- ✓ It is a very good place to start auditing. Usability affects many factors, including conversion rate as well as the propensity of people to link to a site.
- ✓ In this element it includes spider ability, health checkup of search engines and keywords.

# 1. Accessibility/spider ability:

 $\checkmark$  Make sure the site is friendly to search engine spiders.

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# 2. Search engine health check:

✓ Open your site and your products in search engines to check how many of your page and products results appear in search engines.

## 3. Keyword health checks:

 $\checkmark$  In this auditing it compares your site keywords with user's keyword. If keywords are matched then optimization of website is proper and perfect.

## Duplicate content checks:-

 $\checkmark$  This element is useful to find duplicate content on your site. Search commands like inurl and intitle are helpful to check duplicate content in any site.

# ➢ URL check:-

✓ Make sure you have clean, short, descriptive URLs. Descriptive means keyword-rich but not keyword-stuffed.

## > Title tag review:-

- ✓ Make sure the title tag on each page of the site is unique and descriptive also check to make sure the title tag is fewer than 70 characters long.
- $\checkmark$  If you want to include your company brand name in the title, consider putting it at the end of the title tag, not at the beginning, as placement of keywords at the front of a URL brings ranking benefits.

## Content review:-

✓ Important element to check content in your site especially in main web pages of your website with proper header tags.

## > Meta tag review:-

 $\checkmark$  Make sure every page has a unique Meta description. If it is possible in your site then it is good indication of high ranking.

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## Sitemaps file and robots.txt file verification:

- ✓ For this verification developer must required help web master tools from search engines.
- ✓ Most famous tool is Google webmasters tool.

## Redirect checks:

 $\checkmark$  It is responsible to check all the redirection links on the website.

### Internal linking checks:

- ✓ Look for pages that have excessive internal links. Google advises 100 per page as a maximum, although it is OK to increase that on more important and heavily linked-to pages.
- ✓ Make sure the site makes good use of anchor text in its internal links.

## > Avoidance of unnecessary sub domains:

✓ It is preferable that developer should avoid the use of sub domain for the betterment of search engines.

## ➤ Geolocation:

✓ If the domain is targeting a specific country, then it is recommended that search engine must follow the policy of this specific country.

## External linking:

- ✓ All the links from your website are targeted to another websites is known as external linking.
- ✓ Use a back linking tool such as Open Site Explorer (http:// www.opensiteexplorer.org) or Majestic SEO (http://www.majesticseo.com) to collect data about your links.

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### Page load time:

- ✓ If any website required more time to load web pages then it is very difficult for crawling and indexing process of search engines.
- ✓ Generally few seconds are enough for display different web pages and its content.

## > Image alt tags:

 ✓ Search engines can't easily tell what is inside an image, and the best way to provide them with some clues is with the alt attribute and the filename of the image.

### > Code quality:

✓ Powerful coding is required in site. Poor coding can have some undesirable impacts.

# **4** <u>2. The Importance of Keyword Reviews:</u>

✓ Another critical component of an architecture audit is a keyword review. Basically, this involves the following steps.

### Step 1: Keyword research:-

✓ It is vital to get this done as early as possible in any SEO process. Keywords drive onpage SEO, so you want to know which ones to target in site to generate traffic.

### Step 2: Site architecture:-

- ✓ The procedure of site architecture is very tricky because you have to think and put different keyword in the terms of your product and services.
- ✓ You need a sequence (hierarchy) of products/services that leads site visitors to your money pages (i.e., the pages where conversions are most likely to occur). It is not easy.

## Step 3: Keyword mapping:-

✓ Once you have a list of keywords and a good sense of the overall architecture, start mapping the major relevant keywords to URLs (not the other way around).

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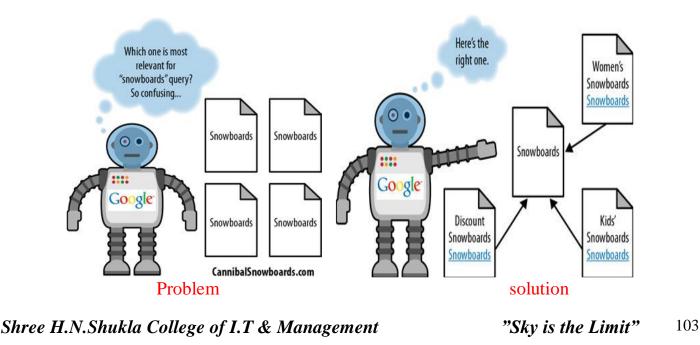
✓ When you do this, it is a very easy job to spot pages based on keywords and revenue generates very fast.

### Step 4: Site review:-

- Once you are armed with your keyword mapping, the rest of the site review becomes a lot easier.
- ✓ Now when you are looking at title tags and headings in site review please check they also include the right keywords or not.

# **4** 3. Keyword Cannibalization:-

- ✓ Keyword cannibalization typically starts when a website's information architecture calls for the targeting of a single term or phrase on multiple pages of the site.
- ✓ In website Single keyword available in multiple pages with same meaning so duplication of keyword issue is generated and it is known as keyword cannibalization.
- ✓ This is often done unintentionally, but it can result in several or even dozens of pages that have the same keyword target in the title and header tags. Figure shows the problem.



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- The difference in this example is that instead of every page targeting the single term snowboards, the pages are focused on unique, valuable variations and all of them link back to an original, canonical source for the single term.

### Server and Hosting Issues:-

- $\checkmark$  The following are some server and hosting issues that can negatively impact search engine rankings:
  - 1. Server timeouts
  - 2. Slow response times
  - 3. Shared IP addresses
  - 4. Blocked IP addresses
  - 5. Bandwidth and transfer limitations
  - 6. Server geography

### ✤ Server timeouts:

- $\checkmark$  If website does not reply in proper time on the request of search engines crawler then it is consider as a server timed out issue.
- ✓ Due to this issue website pages may not make it into the index at all, and will almost certainly rank very poorly (as no index able text content has been found).
- ✤ Slow response times:-
- ✓ It is not a major issue like server timed out issue. But if website is providing slow then users required more time to access the content of website.
- $\checkmark$  If this issue isn't solved within time then users may go for another website option Instead of your website.
- Shared IP addresses:-

In this issue some websites share its IP address into the its neighbor to take the Benefits of full links in Its IP address but sometimes untrusted neighbors creates Issues.

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Blocked IP addresses:-

As search engines crawl the Web, they frequently find entire blocks of IP addresses Filled with nothing but egregious web spam.

Bandwidth and transfer limitations:-

Many servers have set limitations on the amount of traffic that can run through to the Site.

✤ Server geography:-

This isn't necessarily a problem, but it is good to be aware that search engines do use The location of the web server when determining where a site's content is relevant From a local search perspective.

Since local search is a major part of many sites' campaigns and it is estimated that Close to 40% of all queries have some local search intent, it is very wise to host in the Country where your content is most relevant.

## ✤ 1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Site Auditing Means	Complete verification of website.
2	Auditing has how many parameters	4
3	What is keyword cannibalization?	In website Single keyword available in multiple pages with same meaning so duplication of keyword issue is generated and it is known as keyword cannibalization.
4	Major server and hosting issue is	Server timed out issue.
5	Google maximum supports internal links in one page is	100 links per page.

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6 For auditing of elements which Google tool is useful	Google webmaster tool
--	-----------------------

# Q.5 Explain different tools for the measurement of seo projects.3M/5M

- ✓ It is very important to identify current server statistics with the help of measurement tools for the SEO based project.
- ✓ There are four different tools to measure optimization projects.
  - 1. Web Analytics tool
  - 2. Log file tracking tool
  - 3. Web Masters tool
  - 4. Search analytics tool

# **4** 1. Web Analytics tool:-

- Analytics software can provide you with a rich array of valuable data about what is taking place on your site.
- ✓ It supports total numbers of unique visitors per day, tracking website traffic and its up and down situation, it also identifies popular search terms that is searched by the users, this tool also indicates most popular pages and most converting pages on your site.
- ✓ High-quality, free analytics tools are available with required authentication, such as Yahoo! Web Analytics and Google Analytics.

# **4** 2. Log file Tracking:-

✓ Log files contain a detailed click-by-click history of all requests to your web server.

✓ If you use a third-party hosting company for your site, chances are that it provides some sort of free log file analyzer, such as AWStats, Webalizer, or something similar.

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### **4** 3. Webmaster Tools:-

- $\checkmark$  To identify and verify different valuable sources of website, web masters tools are helpful.
- ✓ Google and Bing search engines has its own Webmaster Tools to identify different sources of websites.

### **4** 4. Search Analytics:-

- $\checkmark$  Search analytics is a new and emerging category of tools.
- ✓ Search analytics tools specifically monitor how your website interacts with the search engines.
- ✓ Compete (http://www.compete.com) offers search-specific analytic tools, as do many smaller vendors.[NOTE: THIS SITE IS SHUTDOWN ON AUGUST 2016.]

# ✤ 1 WORD OUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	Example of Log file tracking tools is	Aw stats, weblizer
2	Example of web analytics software is	Google analytics and yahoo analytics.
3	Popular Web masters tools are	Google and bing web master tool.

## Q.6 Explain about Determining Top Seo Competitors in details.3M/5M

- $\checkmark$  Understanding the competition should be a key component of planning your SEO strategy.
- $\checkmark$  The first step is to understand who your competitors in the search results really are. It can often be small players who give you a run for your money.

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- ✓ Now, we discuss two most important aspects about SEO competitors.
  - 1. Seeking the best.
  - 2. Uncovering their secrets.
- 1. Seeking the Best:-
- ✓ Look for competitors whose efforts you would like to emulate (or "embrace and extend," as Bill Gates would put it).
- ✓ Usually a website that consistently dominates the upper half of the first page of search results in the search engines for a range of important keywords that are popular and relevant to your target audience.
- To assess competitors' competence at SEO, you need to answer the following questions:
  - Are their websites fully indexed by Google and Yahoo or other search engines?
  - Do their product and category pages have keyword-rich page titles (title tags) that are unique to each page?
  - Do their product and category pages have reasonably high Page Rank scores? Is anchor text across the site, is keyword-rich?
  - Are the websites getting penalized?
  - Are they spamming the search engines with "doorway pages"?
  - According to Google, Doorway pages are typically large sets of poor-quality pages.

## 2. Uncovering Their Secrets:-

- What keywords are they targeting? You can determine this by looking Meta keywords tag at the html coding of website.
- Who's linking to their home page?
- If it is a database-driven site, what technology tricks are they using to get search engine spiders such as Googlebot to cope with the site being dynamic?

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- You can check to see whether they are using the same server software as you used in your site.
- $\checkmark$  To get the answers of above questions you are required to access following tools.
  - <u>Https://www.news.netcrafts.com</u> OR
  - Compete.com OR
  - Alexa.com.
  - If you have the budget for higher-end competitive intelligence tools, you can use comScore.com or Hitwise.com.
- ✓ The tools are most useful but limited in its accuracy when making relative comparisons between sites in the same market space.

### ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SRNO	QUESTIONS	ANSWERS
1	Which site is useful to identify secrets from competitors?	Compte.com, Alexa.com, News.netcrafts.com
2	Which aspects are needed to verify competitors planning?	Seeking the best, Uncovering their secrets.
3	Alexa.com provides accurate data about competitor's site.	NO

#### Q.7 Explain about Historical Progress of Seo in detail.5M

- ✓ Measuring the previous results of SEO changes can be challenging.
- $\checkmark$  This difficulty only increases the importance of measuring past seo progress.
- ✓ In this section we will discuss methods for measuring the results from your SEO efforts.

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\* <u>Methods for measuring the results from SEO efforts.</u>

- 1. Maintain a Timeline of Site Changes
- 2. Types of Site Changes That Can Affect SEO
- 3. Previous SEO Work

#### 1. Maintain a Timeline of Site Changes:-

- ✓ Website developer must keep a log file to exactly know about all the changes in site.
- ✓ If you're not keeping a timeline then without timeline you can still gauge the immediate effects of content additions/revisions, link acquisitions, and development changes, but visibility into how technical modifications to the website might have altered the course of search traffic, whether positively or negatively, is obscured.
- ✓ If you can't map changes you'll be optimizing blind and could miss powerful signals that could help dictate your strategy going forward.
- There are many scenarios in which you will want to try to establish cause and effect, such as:
- > If search traffic spikes or plummets(Decrease):-
- ✓ Sudden changes in organic traffic are obviously notable events.
- ✓ If traffic plummets, you will be facing lots of questions about traffic reducing process.
   Site Changes are recommended to reducing plummets in search traffic.
- > When gradual traffic changes begin:-
- ✓ Changes do not always come as sudden spikes or plummets.
- ✓ If you see the traffic beginning a gradual descent, you will want to be able to assess the likely reasons.
- > To track and report SEO progress:-
- ✓ Accountability is a key component of SEO. Budget managers will want to know what return they are getting on their SEO investment.

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#### 2. Types of Site Changes That Can Affect SEO:-

- ✓ Your log should track all changes to the website, not just those that were made with SEO in mind. Organizations make many changes that have a big impact on it.
- $\checkmark$
- ✓ Here are some examples:
  - Adding content areas/features/options to the site.
  - Changing the domain of the site.
  - Modifying URL structures. Changes to URLs on your site will likely impact your Rankings, so record any and all changes.
  - Implementing a new CMS. This is a big one, with a very big impact.
  - Establishing new partnerships means your site is earning new links or linking out to New places.
  - Making changes to navigation/menu systems (moving links around on pages, Creating new link systems, etc.).
  - Implementing redirects either to or from the site.
- ✓ When you track these items, you can create an accurate storyline to help correlate causes with effects.
- ✓ If, for example, you've observed a spike in traffic from Yahoo! that started four to five days after you switched your menu links from the page footer to the header, it is likely that there is a causal relationship.
- ✓ NOTE: Without such documentation it could be months before you noticed the surge—and there would be no way to trace it back to the responsible modification. Your design team might later choose to switch back to footer links, your traffic might fall, and no record would exist to help you understand why. Without the lessons of history, you are doomed to repeat the same mistakes.

#### 3. Previous SEO Work:-

✓ When you are brought on to handle the SEO for a particular website, one of the first things you need to find out is which SEO activities have previously been attempted.

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- ✓ There may be valuable data there, such as log files of changes that you can match up with analytics data to gauge impact.
- ✓ You should also pay particular attention to understanding the types of link-building activities that took place in previous optimization planning.

#### ✤ <u>1 WORD QUESTION ANSWERS:-</u>

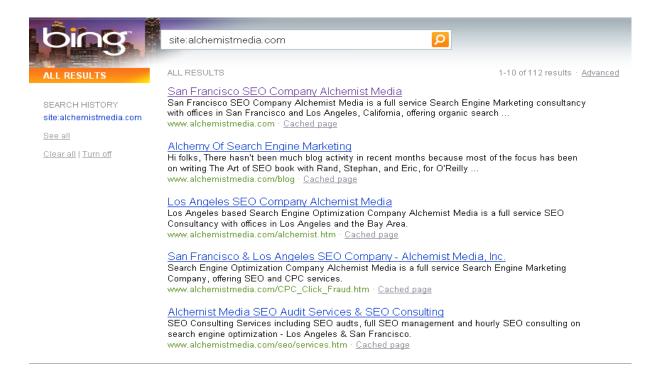
SRNO	QUESTIONS	ANSWERS
1	What is timeline?	Website developer must keep a log file to exactly know about all the changes in site.
2	If you change domain of your site then it creates big impact on your optimization results	Yes
3	TO check previous seo work which file is used?	Server/site Log file

#### Q.8 Explain about Benchmarking\_Current Indexing Status in detail.3M

- ✓ The search engines have an enormous task—that of indexing the world's online content; well, more or less. The reality is that they try hard to discover all of it, but they do not choose to include all of it in their index.
- ✓ This can happen for a variety of reasons, such as the page being inaccessible to the spider, being penalized, or not having enough link juice to merit inclusion.
- ✓ When you launch a new site, or add new sections to an existing site, or are dealing with a very large site, not every page will necessarily make it into the index.

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- ✓ To get a handle on this you will want to actively track the indexing level of your site. If your site is not fully indexed, it could be a sign of a problem (not enough links, poor site structure, etc.).
- ✓ Getting basic indexation data from search engines is pretty easy.
- ✓ All three major search engines support the same basic syntax for that, which is site: yourdomain.com. Figure shows a sample of the output from Bing.



#### Q.9 Write a note on Benchmarking Current Rankings.3M

People really love to check their search rankings. Many companies want to use this as a measurement of SEO progress over time, but it is a bit problematic for a variety of reasons. Here is a summary of the major problems with rank checking:

- Google results are not consistent.
- Different geographies (even in different cities within the United States) often give different results.

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- Different data centers give different results (and you can hit multiple data centers from a single location at different times).
- It appears to match up only on very heavily trafficked, consistent search results anything mid-tail or long tail is invariably inaccurate.
- It is extremely slow to update, so even though news results or geographic results might be mixed in (or even new sites or pages that have a large amount of recent link growth), the API won't update for days or sometimes weeks.
- Obsessing over rankings (rather than traffic) can result in poor strategic decisions.
- ✓ So, indulge your desire to check rankings by going to the search engine and typing in a few queries, but be sure to also keep an eye on your visitor and conversion statistics.

#### Q.10 Write a note on Benchmarking Current Traffic Sources and Volume.2M

- ✓ The most fundamental objective of any SEO project should be to drive the bottom line. For a business, this means generate more revenue with affordable ROI.
- ✓ The SEO practitioner must focus on increasing the volume of relevant traffic to the site.
- ✓ This is a more important objective than anything related to rankings or number of links obtained.
- ✓ More relevant traffic should mean more revenue for the business (or more conversions, for those whose websites are not specifically selling something).
- Today's web analytics tools make the gathering of such data incredibly easy by Using free web analytics software like Google Analytics and Yahoo! Web Analytics.
- ✓ These tools are sufficient for many smaller sites, though larger sites will probably need to consider a paid solution such as Omniture.com, Insight, or Webtrends.com.

#### ◆ <u>1 WORD QUESTION ANSWERS:</u>-

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SRNO	QUESTIONS	ANSWERS
1	In Optimization website needs to be full	Full index.
2	or partial indexed. For traffic volume verification available paid tools are	Omniture.com, Insight, or Webtrends.com
3	Is it possible to identify exact site ranking.	NO

#### Q.11 Explain Leveraging Business Assets for SEO in detail.3M/5M

- ✓ Chances are your company/organization has a lot of valuable commodities beyond the website that can be put to good use to improve the quality and quantity of traffic.
- ✓ Traffic that you receive through search engine optimization efforts. We discuss some of these things as follow.

#### 1. Other Domains You Own/Control:-

- > If you have multiple domains, the major items to think about are:
- ✓ Manage multiple domains with proper rights and permissions.
- ✓ Redirection process from main domain to sub domain and sub domain to main domain.
- ✓ In Domain name use relevant keywords based on your product.
- $\checkmark$  If you have domains with separate sites then links all the domains intelligently.
- 2. Partnerships On and Off the Web:-
- ✓ Partnerships between sites can be leveraged particularly on the link-building structure.
- ✓ If you have business partners then you can implement link strategies between their sites and yours.

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#### 3. Content or Data you've never put online:-

- ✓ Chances are that you have content that you never published on your website. This content can be immensely valuable to your SEO efforts.
- ✓ However, many companies are not savvy (Understand) of publishing that content in a manner that is friendly to search engines.
- ✓ You should publish articles related to your site and products.
- ✓ You should take all of your email newsletters and make them accessible on your site.
- $\checkmark$  If you have unique data sets or written material related to your site content, you should apply it to relevant pages on your site.

#### 4. Customers Who Have Had a Positive Experience:-

- ✓ Customers are a terrific resource for earning links, but did you also know they can write? If they can write then publish it.
- Customers and website visitors can share all kinds of positive content/responces about site.

#### 5. Your Fans:-

- $\checkmark$  People who have used your product or services and would love to share their experience about your site then they all consider as a fans.
- ✓ Normally fans also known as your potential site customers who have trust in your site, products and services.

#### ✓ 1 WORD QUESTION ANSWERS:-

HNSh	ukla College of I.T & Management	"Sky is the Limit"
		customers
3	Who promote your product?	Your fans and potential
	is	
2	Your valuable business asset resource	Customers
	in optimization?	
1	How many sites business assets are useful	5
SRNO	QUESTIONS	ANSWERS

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#### Q.12 Write a note on website SWOT analysis.3M/5M. Or

Explain SWOT analysis with the combination of your business data and Historical data.3M/5M.

- ✓ A classic staple of business school is the SWOT analysis—identifying strengths, weaknesses, opportunities, and threats faced by a business or project.
- ✓ By combining data from your business asset assessment and historical tracking data (and visitor analytics), you can create some very compelling analyses of your organization and its marketplace.

#### ➤ SWOT means.....

S – Strengths, W- Weakness, O- Opportunities, T- Threats

Strengths	Weakness
1. Simple and attractive website.	1. Poor content.
2. Appropriate content.	2. Poor site development
3. Short URL.	3. Wrong keywords
4. Easy to operate.	4. Wrong selection of web
5. Easy to Understand.	hosting server.
6. Developing language.	5. Server timed out issue.
7. Keywords research.	6. Slow site response time.
8. Search engines friendly Robors.txt file.	7. Bandwidth limitations.
9. Updates related to Audience and competitors.	
<b>Opportunities</b>	<u>Threats</u>
1. Up gradation from Non CMS to CMS	1. Cyber Attack.
language.	2. Security.
2. Solve normal issues related to site	3. Virus Issue.
operation.	4. Internet Speed.
3. Perform keyword targeting process	5. Authentication issue.
based on your product relevancy.	
4. Upgrade your site after understanding	
of competitors site planning.	

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#### **UNIT 3: Developing an SEO-Friendly Website**

- Making Site Accessible to Search Engines
- Creating an Optimal Information Architecture
- Root Domains, Sub domains, and Micro sites
- Optimization of Domain Names/URLs
- ➢ Keyword Targeting
- Content Optimization
- Duplicate Content Issues Controlling
- Content with Cookies and Session IDs
- Content Delivery and Search Spider
- Control
- Redirects, Content Management System
- ➤ (CMS) Issues
- Optimizing Flash

#### UNIT -3

#### **Developing SEO friendly Website**

#### INTRODUCTION:

In this chapter, we will examine the major elements of how to assess the search engine friendliness of your site. Making your site content accessible to search engines is the first step toward creating visibility in search results. Once your website content is accessed by a search engine, it can then be considered for relevant positioning within the SERPs.

#### Q.1 Explain about making site accessible to Search Engines.3M/5M

The first step in the SEO design process is to ensure that your site can be found and crawled by the search engines. This is not as simple as it sounds, as there are many popular web designs and implementation constructs that the crawlers may not understand.

Following options are used to found and crawled WebPages from search engines.

- 1. Index able content.
- 2. Spider able link structures.
- 3. XML sitemaps.

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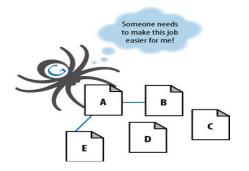
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#### Index able Content:-

- $\checkmark$  To rank well in the search engines, your site's content—that is, the material available to visitors of your site-should be in HTML text form.
- $\checkmark$  For example, while the search engines do crawl images and **Flash files**, these are content types that are difficult for search engines to analyze, and therefore they do not help them determine the topical relevance of your pages.
- $\checkmark$  It is difficult to read and crawl the flash file by the search engine.
- $\checkmark$  However, in our experience the preference is almost always given to HTML-based files.
- ✓ The search engines also face challenges with "identifying" images from a relevance perspective, as there are minimal text-input fields for image files in GIF, JPEG, or PNG format (namely the filename, title, and alt attribute).
- $\checkmark$  The search engines also face challenges with "identifying" images from a relevance perspective, as there are minimal text-input fields for image files in GIF, JPEG, or PNG format (namely the filename, title, and alt attribute).

#### **4** Spider able Link Structures:-

 $\checkmark$  We strongly recommend taking the time to build an internal linking structure that spiders can crawl easily.



- ✓ In Figure, Google's spider has reached Page A and sees links to pages B and E.
- $\checkmark$  However, even though pages C and D might be important pages on the site, the spider has no way to reach them (or even to know they exist), because no direct, crawl able links point to those

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#### **4** XML Sitemaps:-

- ✓ Google, Yahoo!, and Bing (from Microsoft, formerly MSN Search, and then Live Search) all support a protocol known as XML Sitemaps.
- $\checkmark$  Google first announced it in 2005, and then Yahoo! and MSN Search agreed to support the protocol in 2006. Using the Sitemaps protocol you can supply the search engines with a list of all the pages you would like them to crawl and index.
- $\checkmark$  Adding a URL to a Sitemap file does not guarantee that it will be crawled or indexed. However, it can result in pages that are not otherwise discovered or indexed by the search engines getting crawled and indexed.
- ✓ Verification/registration of XML Sitemaps may indicate positive trust/authority signals.
- $\checkmark$  The crawling/inclusion benefits of Sitemaps may have second-order positive effects, such as improved rankings or greater internal link popularity.
- $\checkmark$  Sitemaps use a simple XML format that you can learn about at http://www.sitemaps.org. XML Sitemaps are a useful and in some cases essential tool for your website.

#### > What to include in a Sitemap file:

- $\checkmark$  When you create a Sitemap file, you need to take care in situations where your site has multiple URLs that refer to one piece of content.
- $\checkmark$  You can use the Sitemap file as one way to suggest to the search engines which URL points to the preferred version of a given page.

#### Where to upload your Sitemap file:

 $\checkmark$  When your Sitemap file is complete, upload the file to your site in the highest-level directory you want search engines to crawl (generally, the root directory), such as www.yoursite.com/ sitemap.xml.

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#### \*1 WORD QUESTION ANSWERS:-

SRNO	QUESTIONS	ANSWERS
1	XML STANDS FOR	Extensible Markup Language
2	What is sitemap?	XML sitemap is a list of your website's URLs. It acts as a roadmap to tell search engines what content is available and how to reach it
3	Where to upload your Sitemap file	Root directory of domain <u>www.yoursite.com/</u> sitemap.xml.

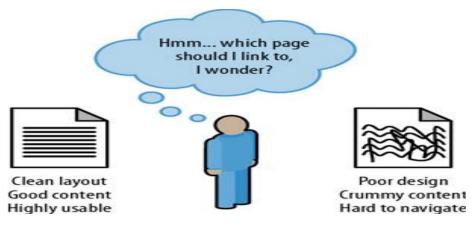
#### Q.2 Explain about Optimal Information Architecture (IA) in detail.3M/5M

- Making your site friendly to search engine crawlers also requires that you put some thought into your site information architecture. A well-designed architecture can bring many benefits for both users and search engines.
  - 1. The Importance of a Logical, Category-Based Flow
  - 2. Usability and search friendliness
  - 3. An analogy
  - 4. Site Architecture Design Principles
  - 5. Category structuring
  - 6. Topical relevance
  - 7. Taxonomy and ontology

#### **4** The Importance of a Logical, Category-Based Flow:

- ✓ The search engines face myriad technical challenges in understanding your site.
- ✓ Crawlers are not able to perceive web pages in the way that humans do, and thus significant limitations for both accessibility and indexing exist.

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- $\checkmark$  Logical and properly constructed website architecture can help overcome these issues and bring great benefits in search traffic and usability.
- $\checkmark$  At the core of website information architecture are two critical principles: usability, or making a site easy to use; and information architecture, or crafting a logical, hierarchical structure for content.



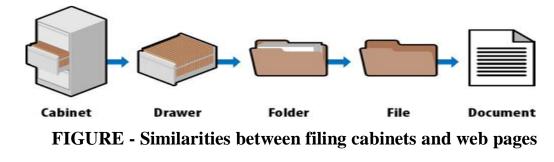


#### **4** Usability and search friendliness:

- $\checkmark$  Search engines are trying to reproduce the human process of sorting relevant web pages by quality.
- $\checkmark$  If a real human were to do this job, usability and the user experience would surely play a large role in determining the rankings.

#### **4** An analogy:

 $\checkmark$  Look at how a standard filing cabinet is organized. You have the individual cabinet, drawers in the cabinet, folders within the drawers, files within the folders, and documents within the files.



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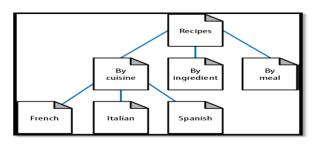


## Figure - It shows what it looks like when you apply this logic to the popular Website, Craigslist.org.

- This principle applies perfectly to the process of SEO, where good information architecture dictates:
- As few clicks as possible to get to any given page.
- One hundred links or fewer links per page.
- A logical, semantic flow of links from home page to categories to detail pages.

**4** Site Architecture Design Principles:

- ✓ When planning your website, remember that nearly every user will initially be confused about where to go, what to do, and how to find what he wants.
- $\checkmark$  Well-organized site architecture helps solve these problems and provides semantic and



- usability benefits to both users and search engines.
- ✓ As Figure demonstrates, a recipes website can use intelligent architecture to fulfill visitors' expectations about content and create a positive browsing experience.

FIGURE - Structured site architecture Designing site architecture

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> The process itself should not be overly arduous, if you follow this simple protocol:

- 1. List all of the requisite content pages (blog posts, articles, product detail pages, etc.).
- 2. Create top-level navigation that can comfortably hold all of the unique types of Detailed content on the site.
- 3. Reverse the traditional top-down process by starting with the detailed content and Working your way up to an organizational structure capable of holding each page.
- 4. Once you understand the bottom, fill in the middle. Build out a structure for sub
- 5. Navigation to sensibly connect top-level pages with detailed content. In small sites, there may be no need for this level, whereas in larger sites, two or even three levels of sub navigation may be required.
- 6. Include secondary pages such as copyright, contact information, and other Non essentials.
- 7. Build a visual hierarchy that shows (to at least the last level of sub navigation) each page on the site.

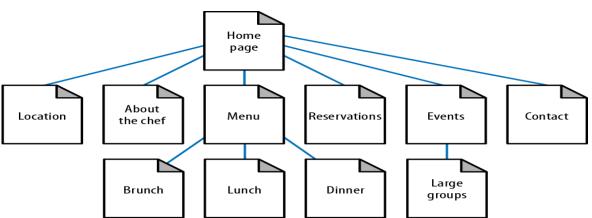
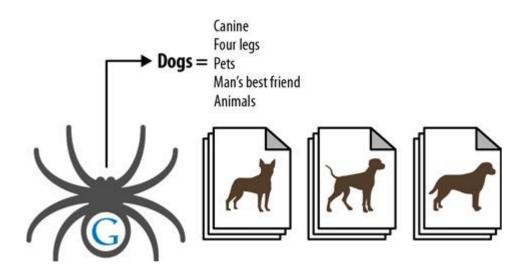


Figure: Second example of structured site architecture

#### **4** Category structuring:

- $\checkmark$  As search engines crawl the Web, they collect an incredible amount of data (millions of gigabytes) on the structure of language, subject matter, and relationships between content.
- $\checkmark$  As shown in Figure, search engine spiders can learn semantic relationships as they crawl thousands of pages that cover a related topic (in this case, dogs).

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#### Spiders learning semantic relationships

#### **4** Topical relevance:

✓ Naturally, this pattern of relevance-based scoring extends from single relationships between documents to the entire category structure of a website. Site creators can best take advantage of this by building hierarchies that flow from broad, encompassing subject matter down to more detailed, specific content.

#### **4** Taxonomy and ontology:

- ✓ In designing a website, you should also consider its taxonomy and ontology. The taxonomy is essentially a two-dimensional hierarchical model of the architecture of the site.
- ✓ You can think of ontology as mapping the way the human mind thinks about a topic area. It can be much more complex than taxonomy, because a larger number of relationship types can be involved. One effective technique for coming up with an ontology is called card sorting.

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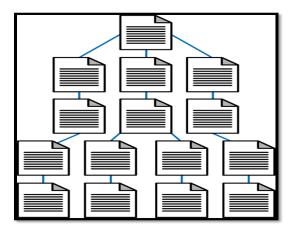
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#### \*1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	What is analogy?	You have the individual cabinet, drawers in the cabinet, folders within the drawers, files within the folders, and documents within the files.
2	What is Topical Relevance?	It describes single relationship between documents and its category.
3	What is ontology?	It is a mapping process in this process they work about the thinking process of human in particular topic.

#### Q.3 State the difference between Flat and Deep Architecture.3M

- ✓ One very strict rule for search friendliness is the creation of flat site architecture. Flat sites require a minimal number of clicks to access any given page, whereas deep sites create long paths of links required to access detailed content.
- ✓ Figure 1 in contrast, a flat site (see Figure 2) allows users and search engines to reach most content in just a few clicks.



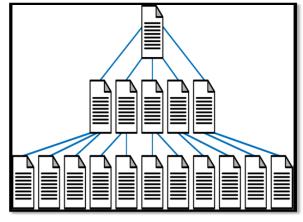


FIGURE 1 Deep site architecture FIGURE 2. Flat site architecture

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FLAT ARCHITECTURE	DEEP ARCHITECTURE
It has minimum no. of clicks to reach the	It has maximum no. of clicks to reach the
web pages.	WebPages.
It creates short path and link architecture.	It creates long path and link architecture.
For crawling it is very easy.	For crawling it is difficult.
It is also easy for visitors.	It is complex for visitors.
As per the search engine it is good	As per the search engine it is not good
architecture.	architecture.
It prepares root tree concept.(figure 2)	It prepares random tree concepts.(figure1)

#### **Q.4 what is PAGINATION?**

Definition: Pagination, the practice of creating a sequence of pages to break up long Lists of elements or long articles.

- ✓ Some ecommerce sites use pagination for product catalogs that have more products than they wish to show on a single page), is problematic for many reasons.
- ✓ Reasons to avoid pagination :
- 1. Pagination provides virtually no topical relevance.
- 2. Pagination can potentially create duplicate content problems or be seen as indicative of poor-quality content.
- 3. Pagination can create spider traps, and having hundreds or thousands of extraneous, low-quality pages can be detrimental to search visibility.

#### Q.5 Explain Search-Friendly Site Navigation.2M/3M

- ✓ Website navigation is something that web designers have been putting considerable thought and effort into since websites came into existence.
- ✓ Even before search engines were significant, navigation played an important role in helping users find what they wanted.
- ✓ It plays an important role in helping search engines understand your site as well.

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#### Basics of search engine friendliness:

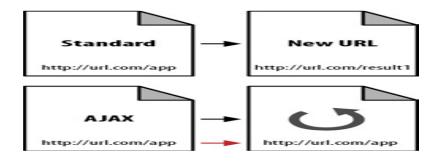
- $\checkmark$  The search engine spiders need to be able to read and interpret your website's code to properly spider and index the content on your web pages.
- $\checkmark$  Do not confuse this with the rules of organizations such as the World Wide Web Consortium (W3C), which issues guidelines on HTML construction.
- ✓ Although following the W3C guidelines can be a good idea, the great majority of sites do not follow these guidelines, so search engines generally overlook violations of these rules as long as their spiders can parse the code.

#### Q.6 List Site elements that are problematic for spiders.1M/2M

- $\checkmark$  While simple HTML is not a problem for the spiders, many other types of content may appear on a web page that work well for humans but not so well for search engines. Here are some of the most common problem areas.
- ✓ Java, images, audio, and video. Adobe Shockwave files, Java embeds, audio, and video (in any format) present content that is largely uncrawlable by the major engines.

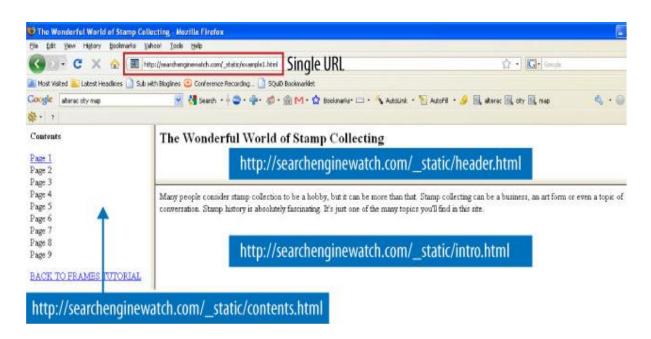
#### Q.7 Explain Frames and URL issue in detail.3M

- $\checkmark$  For search engines, the biggest problem with frames and iframes is that they often hold the content from two or more URLs on a single page.
- $\checkmark$  For users, the issue is that search engines, which direct searchers to only a single URL, may get confused by frames and direct visitors to single pages (orphan pages) inside a site intended to show multiple URLs at once.



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- $\checkmark$  Figure shows an example page that illustrates how multiple pages are combined into a single URL with frames, which results in link distribution and spidering issues.



#### Search engine–friendly navigation guidelines:

 $\checkmark$  Although search engine spiders have become more advanced over the years, the basic premise and goals remain the same: spiders find web pages by following links and record the content of the pages they find in the search engine's index (a giant repository of data about websites and pages).

#### Implement a text link-based navigational structure:

✓ If you choose to create navigation in Flash, JavaScript, or some other technology the search engine may be unable to parse, make sure to offer alternative text links in HTML for spiders to ensure that automated robots (and visitors who may not have the required browser plug-ins) can reach your pages.

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#### Beware of "spider traps":

 $\checkmark$  Even intelligently coded search engine spiders can get lost in infinite loops of links that pass between pages on a site.

#### Watch out for session IDs and cookies:

 $\checkmark$  If you limit the ability of a user to view pages or redirect based on a cookie setting or session ID, search engines may be unable to crawl your content.

#### > Be mindful of server, hosting, and IP issues:

- $\checkmark$  Server issues rarely cause search engine ranking problems—but when they do, disastrous consequences can follow.
- $\checkmark$  The engines are acutely aware of common server problems, such as downtime or overloading, and will give you the benefit of the doubt (though this will mean your content cannot be spidered during periods of server dysfunction).

#### \*1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	Search engines navigation	Flash, JavaScript
	does not support	
2	Problematic elements for	Java, images, audio, and video. Adobe
	crawlers are	Shockwave files, Java embeds, audio, and
		video (in any format)

#### Q.8 Explain Root Domains, Sub domains, and Micro sites in detail.3M/5M

 $\checkmark$  Among the common questions that arise when structuring a website (or restructuring) one) are whether to host content on a new domain, when to use subfolders, and when to employ micro sites.

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#### Individual pages/URLs:-

These are the most basic elements of the Web: filenames much like those that have been Found on computers for decades, which indicate unique documents.

A typical URL might look something like: http://www.yourdomain.com/page.html.

#### > Subfolders:-

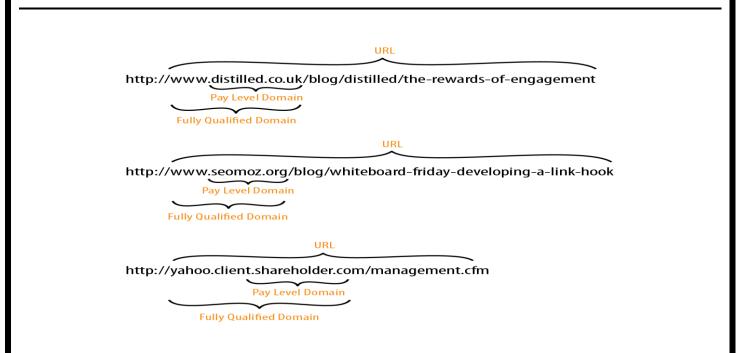
- $\checkmark$  The folder structures that websites use can also inherit or be assigned metrics by search engines (though there's very little information to suggest that they are used one way or another).
- ✓ In the URL http://www.yourdomain.com/blog/post17.html, /blog/ is the subfolder and post17.html is the name of the file in that subfolder.

> Sub domains/fully qualified domains (FQDs)/third-level domains:-

- $\checkmark$  In the URL http://blog.yourdomain.com/page.html, three kinds of domain levels are present. The top-level domain (also called the TLD or domain extension) is .com, the second-level domain is your domain, and the third-level domain is blog. The thirdlevel domain is sometimes referred to as a sub domain.
- $\checkmark$  The word sub domain when referring to www, although technically, this too is a sub domain.
- > Complete root domains/host domains/pay-level domains (PLDs)/second-level domains:-
- $\checkmark$  The domain name you need to register and pay for, and the one you point DNS settings toward, is the second-level domain (though it is commonly improperly called the "top-level" domain).
- ✓ In the URL http://www.yourdomain.com/page.html, yourdomain.com is the secondlevel domain. Other naming conventions may refer to this as the "root" or "pay-level" domain. FIGURE Breaking down some example URLs

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#### > When to Use a Subfolder:-

✓ If a subfolder will work, it is the best choice 99.9% of the time. Keeping content on a single root domain and single sub domain (e.g., http://www.yourdomain.com) gives the maximum SEO benefits, as the engines will maintain all of the positive metrics the site earns around links, authority, and trust and will apply these to every page on the site.

#### When to Use a Sub domain:-

✓ If your marketing team decides to promote a URL that is completely unique in content or purpose and would like to use a catchy sub domain to do it, using a sub domain can be practical. Maps.google.com is an example of where the marketing considerations make a sub domain an acceptable choice.

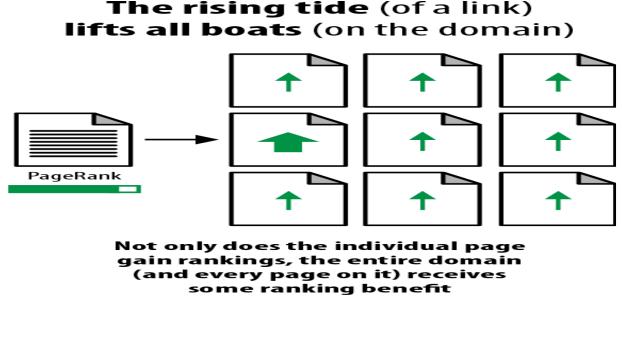
#### > When to Use a Separate Root Domain:-

✓ If you have a single, primary site that has earned links, built content, and attracted brand attention and awareness, it is very rarely advisable to place any new content on a completely separate domain.

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#### Q.9 what is Micro sites? 1M/2M

- $\checkmark$  Micro sites are a concept of minimum optimization to avoid access of multiple sites.
- $\checkmark$  There is a lot of debate about micro sites, and although we generally recommend that you do not saddle yourself with the hassle of dealing with multiple sites and their SEO risks and disadvantages, it is important to understand the arguments, even if there are only a few, in favor of doing so.
- When you own a specific keyword search query domain
- When you plan to sell the domains
- > As discussed earlier, if you're a major brand building a "secret" or buzz-worthy micro site.
- Multiple sites split the benefits of links:
  - $\checkmark$  A single good link pointing to a page on a domain positively influences the entire domain & every page on it.
  - ✓ 100 links to Domain A  $\neq$  100 links to Domain B+1 link to Domain A (from Domain B)



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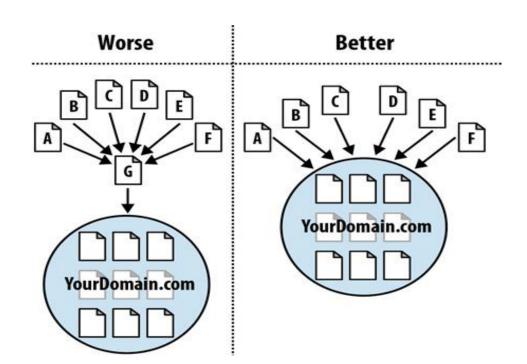


FIGURE How direct links to your domain are better

#### ✓ When to Use a TLD(TOP LEVEL DOMAIN) Other than .com

There are only a few rare situations in which you should consider using a TLD other than .com:

- When you own the .com and want to redirect to a .org, .tv, .biz, etc., possibly for Marketing/ branding/geographic reasons. Do this only if you already own the .com and Can redirect.
- When you can use a .gov, .mil, or .edu domain (.jobs, though technically restricted to HR and hiring organizations, is available to anyone who hires and doesn't have any Special search benefits).
- When you are serving only a single geographic region and are willing to permanently Forego growth outside that region (e.g., .co.uk, .de, .it, etc.).
- When you are a nonprofit and want to distance your organization from the commercial World. In this case, .org may be for you.

#### \*1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	TLD means	Top level Domain
2	What are micro sites	It is a concept of minimum optimization to avoid multiple no. of sites.

#### Q.10 Explain Optimization of Domain Names/URLs in detail.5M

✓ Two of the most basic parts of any website are the domain name and the URLs for the pages of the website. This section will explore guidelines for optimizing these important elements.

#### > Optimizing Domains:

✓ When a new site is being conceived or designed, one of the critical items to consider is the naming of the domain, whether it is for a new blog, a company launch, or even just a friend's website.

#### Brainstorm five top keywords:

✓ When you begin your domain name search, it helps to have five terms or phrases in Mind that best describe the domain you're seeking.

#### 1. Make the domain unique:

- ✓ Having your website confused with a popular site that someone else already owns is a recipe for disaster.
- ✓ Thus, never choose a domain that is simply the plural, hyphenated, or misspelled version of an already established domain.

#### 2. Choose only .com-available domains or the ccTLD for your country:

✓ If you're not concerned with type-in traffic, branding, or name recognition, you don't need to worry about this one.

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 $\checkmark$  However, if you're at all serious about building a successful website over the long term, you should be worried about all of these elements, and although directing traffic to a .net or .org is fine, owning and 301'ing the .com, or the ccTLD for the country your website serves (e.g., .co.uk for the United Kingdom), is critical.

#### 3. Make it easy to type:

 $\checkmark$  If a domain name requires considerable attention to type correctly due to spelling, length, or the use of unmemorable words or sounds, you've lost a good portion of your branding and marketing value.

#### 4. Make it easy to remember:

 $\checkmark$  Remember that word-of-mouth marketing relies on the ease with which the domain can be called to mind.

#### 5. Keep the name as short as possible:

 $\checkmark$  Short names are easy to type and easy to remember (see the previous two rules).

#### 6. Create and fulfill expectations:

 $\checkmark$  When someone hears about your domain name for the first time, he should be able to instantly and accurately guess what type of content he might find there.

#### 7. Avoid trademark infringement:

 $\checkmark$  This is a mistake that isn't made too often, but it can kill a great domain and a great company when it is. To be sure you're not infringing on anyone's registered trademark with your site's name, visit the US Patent and Trademark office site (http://www.uspto.gov/trademarks/index.jsp) and search before you buy.

#### 8. Set yourself apart with a brand:

 $\checkmark$  Using a unique monitor is a great way to build additional value with your domain name.

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#### **10. Reject hyphens and numbers:**

 $\checkmark$  Both hyphens and numbers make it hard to convey your domain name verbally and fall down on being easy to remember or type. Avoid Roman or spelled-out numerals in domains, as both can be confusing and mistaken for the other.

#### 11. Don't follow the latest trends:

 $\checkmark$  Website names that rely on odd misspellings (as do many Web 2.0–style sites), multiple hyphens (such as the SEO-optimized domains of the early 2000s), or uninspiring short adjectives (such as "top...x," "best...x," "hot...x") aren't always the best choice.

#### 12. Use an AJAX domain selection tool:

 $\checkmark$  Websites such as Name boy and Domjax make it exceptionally easy to determine the availability of a domain name. Just remember that you don't have to buy through these services. You can find an available name that you like, and then go to your registrar of choice.

SR.NO	QUESTIONS	ANSWERS
1	Developer must not include	Never choose a domain that is simply the plural, hyphenated, or misspelled version of an already established domain.
2	Domain name must be	Small, unique and easy to type & remember

#### \*1 WORD QUESTION ANSWERS:-

#### Q.11 Explain about Picking the Right URLs in detail.

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#### Or Explain keyword targeting in URLs.5M

- ✓ Search engines place some weight on keywords in your URLs. Be careful, however, as the search engines can interpret long URLs with numerous hyphens in them (e.g. Buy-this-awesome-product-now.html) as a spam signal.
- ✓ What follows are some guidelines for selecting optimal URLs for the pages of your site(s).

Describe your content:

- ✓ An obvious URL is a great URL. If a user can look at the address bar (or a pasted link) and make an accurate guess about the content of the page before ever reaching it, you've done your job.
- ✓ Keep it short Static is the way the search engines treat static URLs differently than dynamic ones. Users also are not fond of URLs in which the big players are?, &, and =. They are just harder to read and understand.
- ✓ Descriptive are better than numbers, If you're thinking of using 114/cat223/ you should go with /brand/adidas/ instead
- ✓ Keywords never hurt, if you know you're going to be targeting a lot of competitive keyword phrases on your website for search traffic, you'll want every advantage you can get.
- ✓ Sub domains aren't always the answer First off, never use multiple sub domains (e.g., product.brand.site.com); they are unnecessarily complex and lengthy. Use fewer folders
- ✓ A URL should contain no unnecessary folders (or words or characters, for that matter). Hyphens separate best
- ✓ When creating URLs with multiple words in the format of a phrase, hyphens are best to separate the terms (e.g., /brands/dolce-and-gabbana/), but you can also use plus signs (+).

#### **4** Keyword Targeting:-

✓ This practice has long been a critical part of search engine optimization, and although other metrics (such as links) have a great deal of value in the search rankings, keyword usage is still at the core of targeting search traffic.

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 $\checkmark$  The first step in the keyword targeting process is uncovering popular terms and phrases that searchers regularly use to find the content, products, or services your site offers. There's an art and science to this process, but it consistently begins with a list of keywords to target.

#### 📥 Title Tags:

- $\checkmark$  Do keep in mind, however, that a title tag for any given page must directly correspond to that page's content.
- $\checkmark$  Place your keywords at the beginning of the title tag.
- $\checkmark$  Limit length to 65 characters (including spaces).
- ✓ Use a divider. (-,>,/)
- $\checkmark$  Target searcher intent.
- $\checkmark$  Be consistent.

#### **4** Meta Description Tags:

- $\checkmark$  Meta descriptions have three primary uses:
- To describe the content of the page accurately and succinctly
- To serve as a short text "advertisement" to click on your pages in the search results
- To display targeted keywords, not for ranking purposes, but to indicate the content to Searchers
- $\checkmark$  Here are seven good rules for Meta descriptions:
- Tell the truth.
- Keep it succinct. Be wary of character limits—currently Google displays up to 160 characters,
- Author ad-worthy copy.(short and sweet)
- Analyze psychology.
- Include relevant keywords.
- Don't employ descriptions universally.

#### **Heading (H1, H2, H3) Tags:**

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- $\checkmark$  The Hx tags in HTML (<h1>, <h2>, <h3>, etc.) are designed to indicate a headline hierarchy in a document. Thus, an  $\langle h1 \rangle$  tag might be considered the headline of the page as a whole, whereas <h2> tags would serve as subheadings, <h3>s as tertiarylevel headlines, and so forth.
- $\checkmark$  The search engines have shown a slight preference for keywords appearing in heading tags, notably the <h1> tag (which is the most important of these to employ).

#### **d** Document Text:

 $\checkmark$  As far as the search engines are concerned, however, the text in a document—and particularly the frequency with which a particular term or phrase is used— has very little impact on how happy a searcher will be with that page.

#### **4** Image Filenames and alt Attributes:

 $\checkmark$  The filename Image alt text in html coding.

#### **4** Boldface Text:

 $\checkmark$  Some SEO professionals who engage in considerable on-page optimization testing have noticed that, all else being equal, a page that includes the targeted keyword(s) in <b> or <strong> tags (HTML elements that boldface text visually) outrank their counterparts that do not employ boldface.

#### 4 Long-Tail Keyword Targeting:

✓ Developer also focuses on Long tail keywords.

SR.NO	QUESTIONS	ANSWERS
1	<h2> is used for</h2>	Subheading in webpage
2	Maximum character in title	65 to 70 characters
	tag is	
3	Maximum character in Meta	150 to 160 characters
	tag is	

#### \*1 WORD OUESTION ANSWERS-

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#### Q.12 Explain Content Optimization in detail.3M/5M

- $\checkmark$  Content optimization relates to how the presentation and architecture of the text, image, and multimedia content on a page can be optimized for search engines. Many of these recommendations are second-order effects.
- ✓ If you regularly practice the techniques in this section, you'll earn better consideration from the engines and from the human activities on the Web that influence their algorithms.

#### **4** Content Structure:

 $\checkmark$  Because SEO has become such a holistic part of website development and improvement, it is no surprise that content formatting-the presentation, style, and layout choices you select for your content—is a part of the process.

### possible source of confusion Arial: (II) ustration

# Verdana: (II) ustration the difference is clear

#### **4** Content length and word count:

- $\checkmark$  Content length is another critical piece of the optimization puzzle that's mistakenly placed in the "keyword density" or "unique content" bucket of SEO.
- ✓ Lengthy pieces often don't fare particularly well on the Web (with the exception, perhaps, of the one-page sales letter), whereas short-form and easily digestible content often has more success.

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#### **4** Visual layout:

 $\checkmark$  Last but not least in content structure optimization is the display of the material. Beautiful, simplistic, easy-to-use, and consumable layouts instill trust and garner far more readership and links than poorly designed content wedged between ad blocks that threaten to overtake the page.

#### **4** CSS and Semantic Markup:

 $\checkmark$  Cascading Style Sheets (CSS) is commonly mentioned as a best practice for general web design and development, but its principles provide some indirect SEO benefits as well.

#### **4** Google used to recommend keeping pages smaller than 101 KB:

- $\checkmark$  It used to be a common belief that there were benefits to implementing pages that were small in size.
- $\checkmark$  Now, however, search engines deny that code size is a factor at all, unless it is really extreme. Still, keeping file size low means faster load times, lower abandonment rates, and a higher probability of the page being fully read and more frequently linked to.
- $\checkmark$  You can use CSS code to provide emphasis, to quote/reference, and to reduce the use of tables and other bloated HTML mechanisms for formatting, which can make a positive difference in your SEO.

#### **4** Schema.org and Micro formats:

- ✓ In June 2011, Google, Bing, and Yahoo! came together to announce a new standard for markup called Schema.org.
- $\checkmark$  You can see a copy of the announcement at <u>http://googleblog.blogspot.com/</u> 2011/06/introducing-schemaorg-search-engines.html.
- $\checkmark$  This represented a new level of commitment by the search engines to the concept of marking up content, or more broadly, allowing the publisher to provide information about the content to the search engines.

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#### ✓ \*<u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Text based Web page size is.	101KB
2	Schema.org was developed in which year	June 2011
3	CSS stands for	Cascading Style Sheets

#### Q.13 List types of content.1M

 $\succ$  There are 4 types of content.

- ✓ Unique Content
- ✓ Snippets Content
- ✓ Shingles Content
- ✓ Duplicate Content.

#### Q.14 How to Avoid Duplicate Content on Your Own Site.1M/2M

- ✓ Here is a summary of the guidelines on the simplest solutions for dealing with a variety of scenarios:
- Use the canonical tag. This is the next best solution to eliminating the duplicate pages.
- Use robots.txt to block search engine spiders from crawling the duplicate versions of Pages on your site.
- Use the robots No Index Meta tag to tell the search engine not to index the duplicate Pages.

 $\checkmark$  Be aware, however, that if you use robots.txt to prevent a page from being crawled, using No Index or No Follow on the page itself will not make sense: the spider can't read the page, so it will never see the No Index or No Follow tag.

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#### Q.15 what's a Cookie? 1M/2M

- ✓ A cookie is a small text file that websites can leave on a visitor's hard disk, helping them to track that person over time.
- ✓ Cookies are the reason Amazon.com remembers your username between visits and the reason you don't necessarily need to log in to your Hotmail account every time you open your browser.
- ✓ Cookie data typically contains a short set of information regarding when you last accessed a site, an ID number, and, potentially, information about your visit.



#### Q.16 What Are Session IDs? 1M/2M

- ✓ Session IDs are virtually identical to cookies in functionality, with one big difference:
- ✓ When you close your browser (or restart), session ID information is (usually) no longer stored on your hard drive.
- ✓ Figure illustrates. The website you were interacting with may remember your data or actions, but it cannot retrieve session IDs from your machine that don't persist (and session IDs by default expire when the browser shuts down).
- ✓ In essence, session IDs are like temporary cookies (although, as you'll see shortly, there are options to control this).

#### **Reference topic:** How Do Search Engines Interpret Cookies and Session IDs?

✓ They don't. Search engine spiders are not built to maintain or retain cookies or session IDs and act as browsers with this functionality shut off.

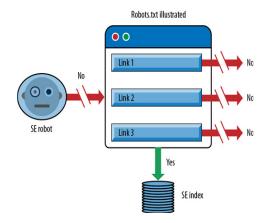
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 $\checkmark$ Despite the occasional access engines are granted to cookie/session-restricted pages, the vast majority of cookie and session ID usage creates content, links, and pages that limit access.

#### Q.17 Explain the robots.txt file in detail.2M/3M

- $\checkmark$ This file is located the level (e.g., on root of your domain http://www.yourdomain.com/robots .txt), and it is a highly versatile tool for controlling what the spiders are permitted to access on your site. You can use robots.txt to:
  - Prevent crawlers from accessing nonpublic parts of your website
  - Block search engines from accessing index scripts, utilities, or other types of code
  - Avoid the indexation of duplicate content on a website, such as "print" versions of HTML pages, or various sort orders for product catalogs Auto discover XML Sitemaps.



- Google, Yahoo!, Bing, Ask, and nearly all of the legitimate crawlers on the Web will follow the instructions you set out in the robots.txt file.
- Commands in robots.txt are primarily used to prevent spiders from accessing pages and subfolders on a site, though they have other options as well.

## Q.18 Explain the Meta robots tag in detail.1M/2M

 $\checkmark$  The Meta robots tag has three components: cache, index, and follow. The cache component instructs the engine about whether it can keep the page in the engine's public index, available via the "cached snapshot" link in the search results (see Figure).

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# rain storm

About 159,000,000 results (0.42 seconds)

# Images for rain storm - Report images



Touring Ride in Rura Undiana®: RAINSTORM™ Ultra-Marathon ... 🖅 🔍

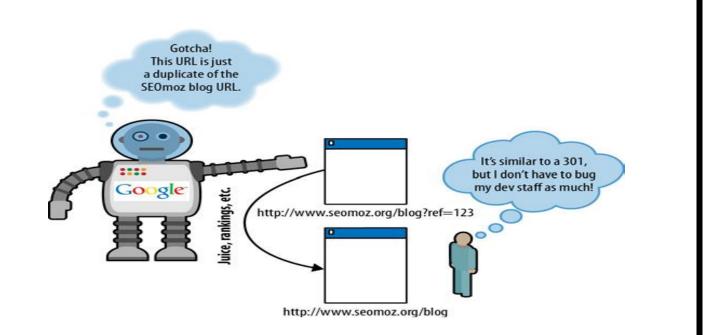
www.triri.org/storm.html - Cached

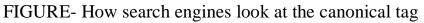
The ultra-marathon bicycle tour from the folks who brought you the premier bicycle tour in Central Indiana. One of the best bicycle tours in the midwest. Century ...

# Q.19 Explain the canonical tag in detail.1M/2M

- $\checkmark$  This tag is useful to identify duplicate content in your particular webpage.
- ✓ In February 2009, Google, Yahoo!, and Microsoft announced a new tag known as the canonical tag (sometimes referred to as rel="canonical").
- This tag was a new construct designed explicitly for the purposes of identifying and dealing with duplicate content. Implementation is very simple and looks like this: k rel="canonical" href="http://www.seomoz.org/blog" />

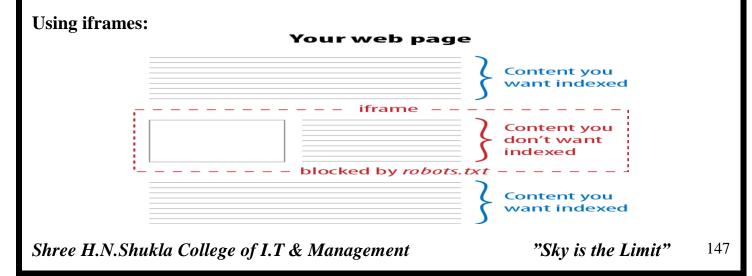
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## Q.20 Explain Blocking and cloaking by IP address range in detail.2M/3M

- ✓ You can block particular bots from crawling entire IP addresses or ranges through server-side restrictions on IPs.
- ✓ Most of the major engines crawl from a limited number of IP ranges, making it possible to identify them and restrict access.
- ✓ This technique is, ironically, popular with webmasters who mistakenly assume that search engine spiders are spammers attempting to steal their content, and thus block the IP ranges to restrict access and save bandwidth.



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#### Hiding text in images

 $\checkmark$  As we discussed previously, the major search engines still have very limited capacity to read text in images (and the processing power required makes for a severe barrier). Hiding content inside images isn't generally advisable, though, as it can be impractical for alternative devices (mobile devices, in particular) and inaccessible to others (such as screen readers).

## **Q.21** what is redirect? Explain in detail.3M/5M

 $\checkmark$  A redirect is used to indicate when content has moved from one location to another. For example, suppose you have some content at http://www.yourdomain.com/old.html, and you decide to restructure your site.

 $\checkmark$  As a result of this restructuring, your content may move to http://www.yourdomain.com/critical-keyword.html.

## **Why and When to Redirect:**

- You have old content that expires, so you remove it.
- You find that you have broken URLs that have links and traffic.
- You change your hosting company.
- You change your CMS.
- You want to implement a canonical redirect (redirect all pages on http://yourdomain.com to http://www.yourdomain.com).
- You change the URLs where your existing content can be found for any reason.

## Good and Bad Redirects:

- $\checkmark$  It turns out that there is more than one way to perform a redirect, and they are not all created equal.
- $\checkmark$  There are two major types of redirects that can be implemented, tied specifically to the HTTP status code returned by the web server to the browser. These are:

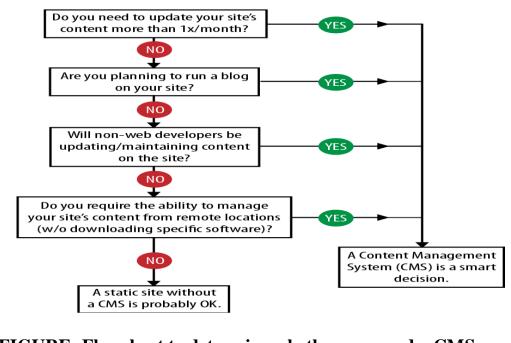
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- ➤ "301 moved permanently"
- $\checkmark$  This status code tells the browser (or search engine crawler) that the resource has been permanently moved to another location, and there is no intent to ever bring it back.
  - ➤ "302 moved temporarily"
- $\checkmark$  This status code tells the browser (or search engine crawler) that the resource has been temporarily moved to another location, and that the move should not be treated as permanent.
- $\checkmark$  Both forms of redirect send a human or a search engine crawler to the new location, but the search engines interpret these two HTTP status codes in very different ways.

## Q.22 Explain about Content Management System (CMS) Issues in detail.3M/5M

- $\checkmark$  When looking to publish a new site, many publishers may wonder whether they need to use a CMS, and, if so, how to ensure that it is SEO-friendly.
- $\checkmark$  It is essential to determine whether a CMS is necessary before embarking on a web development project. You can use the flowchart in Figure to help guide you through the process.



Do You Need A CMS For Your Site?

FIGURE- Flowchart to determine whether you need a CMS

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- ✓ The next step involves understanding how to ensure that a CMS will be search engine—friendly. Here is a list of basic SEO issues that you should be aware of when dealing with CMSs (both prebuilt and custom-made).
- ✓ By dealing with these, you will ensure a relatively smooth platform for content delivery:
- Title tag customization and rules
- Static, keyword-rich URLs
- Meta tag customization
- Enabling custom HTML tags
- Internal anchor text flexibility
- Intelligent categorization structure
- Image-handling and alt attributes
- URLs free of tracking parameters and session IDs
- Customizable URL structure
- Keywords in URLs
- Multilevel categorization structure
- Breadcrumb navigation
- Keyword-rich intro copy on category-level pages
- XML Sitemap generator
- HTML4, HTML5, or XHTML validation
- Pingbacks, trackbacks, comments, and anti spam mechanisms

✓ The problem with comments/trackbacks/pingbacks is that they are vectors for spam, so if you have one or more of these features enabled, you will be spammed. Therefore, effective spam prevention in the form of Akismet, Mollom, or Defensio is a must.

# Q.23 Explain about Selecting a CMS.3M

- ✓ There are many factors to consider when choosing an existing CMS. Many CMSs are free, but some of them are proprietary, with a license cost per site.
- ✓ The majority of CMSs were not designed with security, stability, search friendliness, and scalability in mind, though in recent years a few vendors have developed excellent CMSs that have search friendliness as their primary focus.

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- $\checkmark$  Popular CMS solutions that the authors have experience with include Joomla, Drupal, Pixel silk, and Word Press. Each of these has strong support for SEO, but each of them requires some configuration for optimal results.
- $\checkmark$  Make sure you get that help up front to get the SEO for your site off to a strong start. Electing a CMS is an important process. If you make the wrong choice, you will doom Your site to failure. Like most software, CMSs are a moving target—what's missing Today may be a new feature tomorrow.

## Third-Party CMS Add-ons:

- $\checkmark$  Many CMS platforms offer third-party plug-ins or add-ons that extend the core functionality of the CMS. In the Word Press plug-in directory alone there are over 15,000 plug-ins.
- $\checkmark$  Plug-ins provides a simple way to add new SEO features and functionality, making the CMS much more flexible and future-proof. It is particularly helpful when there is an active community developing plug-ins.
- $\checkmark$  Google announced in November 2011 that it is continuing to expand its ability to execute JavaScript, and it is known that Google can now index Face book Comments.
- $\checkmark$  It may be able to read reviews implemented with Bazaar Voice or Power Reviews in the near future, but what it can and cannot execute is not fully known.
- $\checkmark$  To be safe, one novel solution to the JavaScript problem is to execute the JavaScript, extract the content from its encrypted form, and present it in plain-text format so that the search engines can see it.

## \*1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	CMS stand for	Content Management System

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2	Crawler friendly site developed with which language.	CMS language
3	If you make the wrong choice in selecting CMS then it creates	Failure

## Q.24 what is Flash? Explain it.2M/3M

- ✓ Flash is popular on the Web, but it presents challenges to the search engines in terms of indexing the related content.
- ✓ This creates a gap between the user experience with a site and what the search engines can find on that site.
- ✓ It used to be that search engines did not index Flash content at all. In June 2008, Google announced that it was offering improved indexing of this content (<u>http://googlewebmastercentral</u>.blogspot.com/2008/06/improved-flash-indexing.html). This announcement indicates that Google
- ✓ Here are some reasons why Flash is still not fully SEO-friendly:
- Different content is not on different URLs
- The breakdown of text is not clean
- Flash gets embedded
- Flash doesn't earn external links like HTML
- SEO basics are often missing
- A lot of Flash isn't even crawl able.
  - ✓ Note that it used to be that you could not test the crawl ability of Flash, but the Adobe Search Engine SDK does allow you to get an idea as to how the search engines will see your Flash file.

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## **4** Flash Coding Best Practices:(Advanced Topic For Knowledge)

## ✓ Flash Meta tags:

 $\checkmark$  Beginning with Adobe/Macromedia Flash version 8, there has been support for the addition of **title and description Meta tags to any .swf file.** Not all search engines are able to read these tags yet, but it is likely that they will soon.

# ✓ Adobe Flash Search Engine SDK:

- $\checkmark$  Flash developers may find the SDK useful for server-based text and link extraction and conversion purposes, or for client-side testing of their Flash content against the basic Adobe (formerly Macromedia) Flash Search Engine SDK code.
- $\checkmark$  Tests have shown that Google and other major search engines now extract some textual content from Flash .swf files. It is unknown whether Google and others have implemented Adobe's specific Search Engine SDK technology into their spiders, or whether they are using some other code to extract the textual content.

## ✓ Internal Flash coding:

 $\checkmark$  Search engines currently do not read traced text (using the trace() function) or text that has been transformed into a shape in Flash (as opposed to actual characters). Only character-based text that is active in the Flash stage will be read (see Figure).

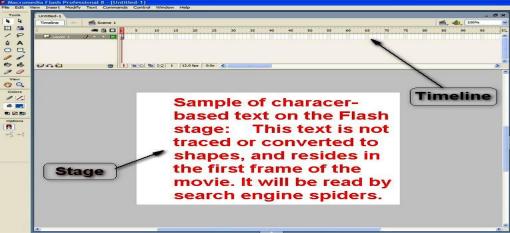


FIGURE- Example of spider-readable text inside a Flash program

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- ✓ Search engine spiders do not see dynamically loaded content (text added from an external source, such as an XML file).
- $\checkmark$  The font size of text does not affect search engines; they read any size font.
- ✓ Special characters such as <, >, &, and "are converted to HTML character references (<, &gt;, &amp;, and &quote;) and should be avoided.

# > SWF Object and No Script tags:

- ✓ Because alternative content workarounds for SEO of Flash files have been historically abused by spammers, we cannot recommend using these tactics to optimize your Flash files without providing a critical disclaimer.
- ✓ Google and other search engines do not algorithmically ban sites for using SWFObject and No Script tags; it usually requires human intervention to evoke a penalty or outright ban.
- ✓ The opportunity for abuse is obvious upon viewing the code. This small piece of code is placed

Within the <head> tags:

```
<script type="text/JavaScript" src="swfobject.js"></script>
```

```
<script type="text/javascript" src="swfobject.js"></script>
```

<div id="flashcontent">

Text, links, and graphics placed here are replaced by the Flash movie. Search engine spiders will read this information, but the browser with an active Flash plugin will show the Flash movie instead.

```
</div>
```

```
<script type="text/javascript">
```

```
var so = new SWFObject("whatever.swf", "themovie", "200", "100", "7", #336699");
so.write("flashcontent");
```

```
</script>
```

- $\checkmark$  In the body of the text, the code looks something like Figure 6-48.
- ✓ FIGURE shows that Information between the <div> HTML tags is read by search engine spiders

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 $\checkmark$  The **No Script tag** has been abused in "black hat" SEO attempts so frequently that caution should be taken when using it. Just as SWF Object and <div> tags can be misused for link and keyword stuffing, so too can the No Script tag.

#### Scalable Inman Flash Replacement (sIFR):

- $\checkmark$  SIFR is a technique that uses JavaScript to read in HTML text and render it in Flash. The essential fact to focus on here is that the method guarantees that the HTML content and the Flash content are identical.
- $\checkmark$  One great use for this is to render headline text in an ant aliased font (this is the purpose for which sIFR was designed). This can provide a great improvement in the presentation of your site.

## > Conclusion:-

- $\checkmark$  By now you should be aware that a search engine-friendly website is the first step toward SEO success. In the next chapter we will demonstrate how links are also a critical piece of the SEO puzzle—particularly when targeting highly competitive terms.
- $\checkmark$  However, if you have not made your site crawler-friendly and optimized, all of your other efforts—whether they be link development, social media promotion, or other tactics to improve search visibility and increase search traffic—will be wasted.

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#### <u>UNIT 4:-</u>

## KEYWORD RESEARCH & DEVELOPING AN SEO-FRIENDLY WEBSITE

Thinking StrategicallyUnderstanding the Long Tail of the Keyword Demand CurveTraditional Approaches: Domain Expertise, Site Content AnalysisKeyword Research ToolsDetermining Keyword Value/Potential ROILeveraging the Long Tail of Keyword DemandTrending, Seasonality, and Seasonal Fluctuations in Keyword DemandConclusionThe Opportunities in Vertical SearchOptimizing for Local SearchOptimizing for Image SearchOptimizing for News, Blog, and Feed SearchOthers: Mobile, Video/Multimedia SearchConclusion

## Keyword Research

#### Q.1 what is keyword research? 1M

- Keyword research is an important variable (changing) process is required for identifying keywords relevant to your products and services that strongly required for the search engines crawling activity.
- ✓ Keyword research enables you to predict different keywords related to the demands common market conditions, current trends etc.
- $\checkmark$  They also ensure that you are producing keywords based on products and services.

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## Q.2 what is Keyword research tool? 1M

- ✓ Keyword research tool is responsible to store different keywords that are types by the searchers.
- $\checkmark$  This keyword research tools are not responsible for site ranking.

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## Q.3 what is keyword? 1M

- $\checkmark$  Keyword is a query or phrase defines by the searcher or visitor in search query box.
- ✓ There are no specific rules for typing any keywords in search query box, but it is recommended that keyword must be short with fewer words.

## ✤ 1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	Keyword means	Query or Phrase
2	Keyword research means	To identify relevant keywords to our products and services.
3	Keyword research tool responsible for	Keyword research process

## Q.4 Explain the Theory behind Keyword Research process.2M/3M Or

Explain strategic thinking about keyword research process.2M/3M

- ✓ Keyword research is one of the most important, valuable, and high-return activities in the search engine marketing field.
- $\checkmark$  Keyword research enables you to predict shifts in demand, respond to changing market conditions, and ensure that you are producing the products, services, and content that web searchers are already actively seeking.
- $\checkmark$  To understand the value of a keyword, you need to research further, make some hypotheses, test, and iterate—the classic web marketing formula.

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#### **4** Thinking Strategically about keyword research:-

- $\checkmark$  Keyword research tools provide valuable insight into the thinking of your potential customers.
- $\checkmark$  When users go to search engines and type out their search queries, they may use language that is entirely different from what you expect.
- $\checkmark$  Other aspects include the demographics of your target population (male/female, age, income, etc.), where they live, and the time of year.
- $\checkmark$  Demand for seasonal products such as Valentine's Day cards, for example, peaks sharply at the relevant time of year and then declines rapidly.
- $\checkmark$  The keyword research tools provide you different methods to investigate all these keyword research factors.

## ✤ 1 WORD QUESTION ANSWERS:-

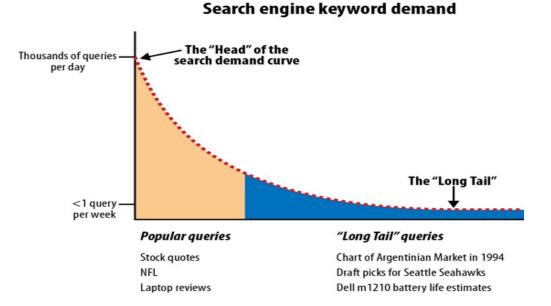
SR.NO	QUESTIONS	ANSWERS
1	Strategically thinking about keywords	Seasonal products based
	required	research
2	Keyword research is important in	Marketing of your brand.

## Q.5 Explain Understanding the Long Tail of the Keyword Demand Curve in detail. 3M/5M.

 $\checkmark$  It is wonderful to deal with keywords that <u>have 5,000 searches per day</u>, or <u>even 500</u> searches per day, but in reality these "popular" search terms may actually comprise less than 30% of the overall searches performed on the Web.

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- ✓ The <u>remaining 70% lie</u> in what's commonly called the "long tail" of search. See Figure.
- ✓ The tail contains hundreds of millions of unique searches that might be conducted only a few times in any given day, or even only once ever, but when assessed in aggregate they comprise the majority of the world's demand for information through search engines.



#### \* Traditional Approaches: Domain Expertise, Site Content Analysis:-

- ✓ Start by generating a list of terms and phrases that are relevant to your industry and pertain to what your site or business offers.
- ✓ The brainstorming phase should ideally result in a list of several dozen to several hundred or more keyword searches that will bring relevant visitors to your site.

#### ✓ <u>One easy way to begin this process is to gather your team in a conference room</u> <u>and then follow these steps:</u>

- 1. Produce a list of key one- to three-word phrases that describe your products/services.
- 2. Spend some time coming up with synonyms that your potential customers might use For those products and services. Use a thesaurus to help you with this process.

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- 3. Create taxonomy of all the areas of focus in your industry. You can also look at sites That are leaders in the industry and study their site hierarchies as a way to start your Thinking about taxonomy.
- 4. Broaden your list by thinking of higher-level terms of which your products or Services are a subset.
- 5. Review your existing site
- 6. List all your various brand terms.
- 7. List all your products. If your site has a massive number of products, consider Stepping back a level (or two) and listing the categories and subcategories.
- 8. Have your team imagine they are potential customers, and ask them what they would Type into a search engine if they were looking for something similar to your product Or service.
- 9. Use your web analytics tool to see what terms people are already using to come to Your site, or what terms they are using within your site search tool if you have one.

# \* Include Competitive Analysis:-

- 7. Review your competitors' websites and see what key phrases they use for their Products and services that compete with yours.
- 2. Record what no branded terms they use for their business.
- 3. Read any articles they have written that are published on sites other than their own.
- 4. Observe what the media may have had to say about them.
- ✓ Once you have completed these steps you will have in hand a rich set of terms of interest. The next step is to expand those terms of interest using keyword research tools.

# ◆ <u>1 WORD QUESTION ANSWERS:</u>-

SR.NO	QUESTIONS	ANSWERS
1	Lon tail of keyword means	Those keywords who is available in search engine database but not popular and not much more used in optimization.

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2	Percentage of popular keywords is	30%
3	Percentage of non popular keywords means long tail keywords are	70%

## Q.6 Explain about Keyword Research Tools in detail.3M/5M

✓ A wide variety of options are available for performing keyword research, including tools provided by the search engines, tools developed by third parties, and tools for complex keyword analysis of terms culled during research.

## > Things to Keep in Mind:-

✓ Each tool will provide different search counts than the others. Rather than focusing on the exact search counts of various terms, you should think of each tool as a good way to get a general comparison of two search terms.

## > Different popular keyword research tools:-

✓ It is great to get this data from search engine queries, and it can certainly help you get a sense of the importance of a given keyword.

## 1. Google's Ad Words Keyword Tool and Traffic Estimator:-

- ✓ Google provides a couple of tools specifically designed for use in keyword research. Although they are primarily meant to help Google's paid search customers.
- ✓ Google's Ad Words Keyword Tool and Traffic Estimator get their data from Google's search query database.
- 2. Microsoft's ad Center Keyword Generation Tool:-
- Microsoft's ad Center Keyword Generation Tool generates keyword suggestions based on a search term or website you enter.
- ✓ Entering a keyword in the search box will return data that includes search Phrases that contain the keyword you provided.

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✓ For example, a search for ice cream returns ice cream maker, ice cream Recipes, ice cream shop, etc. As you can see in Figure, the term ice Cream had, according to Microsoft, 856,543 searches in the month.

o display a list of g	cheracea key					
Search based on:				Refine search		
	KeywordExample: car		ar	Language and market:	English - United States +	
	website				Both -	
				Age group:	All	
				Business category:	All categories	*
						Search
lse these generate	d keywords t	o build yo	our keywo or the key	ord list. The generat words you select.	ed keywords are not gu	aranteed to meet our
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FIGURE- Microsoft ad Center Keyword Generation Tool basic output

- 3. Word tracker:-
- ✓ Popular free keyword research tool to identify long tail of keywords research.
- ✓ This tool is capable to identify keywords from your competitors also with very simple and easy way.
- ✓ When you enter a keyword or phrase in the search box, Word tracker displays the best search terms that include the keyword or phrase that is relevant for your site.
- 4. Keyword Discovery tools(Keyword.io and keywordtool.io):-
- ✓ Another popular third-party free tool for keyword research is keyword.io and Keywordtool.io tools.

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## 1. Keyword.io:-

Popular free keyword research tool to identify best popular keywords from google, Yandex, yahoo, you tube, Amazon etc.

2. Keywordtool.io:-

Popular free keyword research tool to identify popular keywords that is most relevant for your product and services only from Google search engines.

#### 5. Google Trends

- ✓ Google Trends allows you to compare two or more search terms to see their relative popularity and seasonality/trending over time.
- $\checkmark$  If you enter the terms into the search bar and separate them with commas, you'll see the requested terms' trend history depicted in different colors on a graph spread over a certain time period.
- $\checkmark$  You can modify the results by changing the time period and/or region.
- ✓ With Google Trends, users can also see Google's estimate of which cities, regions, and languages performed the largest number of searches for a particular keyword.
- $\checkmark$  Google Trends is a great, easy tool for comparing keywords and identifying which are more popular; in addition, you can examine this data over many years with seasonality factored in.

#### 6. Experian Hit wise:-

- $\checkmark$  Experian Hit wise offers a wide range of web statistics via its service.
- ✓ One component of the Experian Hit wise suite, Hit wise Search Intelligence, is a powerful keyword research tool for analyzing the long tail of search data.

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- > Where it gets its data: Hit wise derives its data from more than 25 million people's interaction with the Internet (10 million from the United States). Hit wise collects anonymous Internet usage information from a combination of ISP data partnerships and opt-in panels.
- **Cost:** Hit wise is not an inexpensive tool. The website does not list pricing information, but you should be ready to spend \$20,000 if you plan to engage with this tool.
- 7. ComScore Search Planner: Like Hit wise, comScore Search Planner is a tool that provides a wide range of data as a result of monitoring the behavior of actual users on the Internet.
- > Where it gets its data. ComScore monitors the behavior of approximately 2 million users.
- **Cost:** Pricing for comScore Search Planner is available only upon contacting the company. The primary audience for the product is mid-size to large companies with developed SEM/SEO strategies, but the company has some smaller clients as well.
- ✤ 1 WORD QUESTION ANSWERS:-

SR.NO	QUESTIONS	ANSWERS
1	Name of Paid keyword research tools are	Google ad wards tool, Microsoft ad center, Hitwise.com, Comscore.com.
2	Which tool is responsible for keyword comparison	Google trends tool
3	Which free tools are available for keyword research process	Keyword.io, Keywordtool.io, Word tracker

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## Q.7 Explain about determining Keyword Value/Potential ROI in detail.3M/5M

- ✓ Once you have obtained the keyword data by doing research with your favorite tools, you need to analyze which keywords have the highest value and the highest ROI.
- ✓ Unfortunately, there are no simple ways to do this, but we will review some of the things you can do in this section.

**4** Estimating Value, Relevance, and Conversion Rates:

- ✓ When researching keywords for your site, it is important to judge each keyword's value, relevance, and potential conversion rate. If a keyword is strong in all three criteria, it is almost certainly a keyword you want to plan to optimize for within your site.
- 1. Determining keyword value:-
- ✓ When judging the value of a keyword, you should contemplate (Thinking) how useful the term is for your site. How will your site benefit from targeting different keywords?
- 2. Identifying relevant keywords:-
- ✓ How relevant is the term/phrase to the content, services, products, or information on your site?
- ✓ It is important to categorize your keywords into terms with high and low relevance. Generally, keywords of higher relevance will be more beneficial to your site in that they more closely represent your site as a whole.
- 3.Determining conversion rates:-
- ✓ The many different types of conversions create distinct opportunities for targeting various keywords.
- ✓ Although one keyword may work well for purchase conversions, another may be well suited to getting users to subscribe to something on your site.

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- ✓ To know which keywords to target now (and which to pursue later), it is essential to understand the demand for a given term or phrase, as well as the work that will be required to achieve the desired rankings.
- ✓ To get a rough idea of the level of competition faced for a particular term or phrase, the following metrics are valuable:
  - Search demand volume (how many people are searching for this keyword)
  - Number of paid search competitors to get in the top four positions
  - Strength (age, link power, targeting, and relevance) of the top 10 results
  - Number of search results using advanced operators.

## **4** Testing Ad Campaign Runs and Third-Party Search Data:-

✓ One of the things we have emphasized is the imprecise nature of the data that keyword tools provide.

Organic position	Click-through rate		
1	42.1%		
2	11.9%		
3	8.5%		
4	6.1%		
5	4.9%		

TABLE 5-2. Click-through rates by SERP position

## **4** Using Landing Page Optimization:-

- ✓ Landing page optimization (sometimes also called conversion optimization) is the practice of actively testing multiple variations of a web page (or website) to see which one performs the best.
- Typically, this is done as part of an effort to improve the conversion performance of the site.
- ✓ The simplest form of this type of test is called an A/B test. A/B tests involve creating two different versions of a page, and then randomly picking which version to show to a new visitor to the site (old visitors get the version they saw the last time they visited).
- ✓ You then measure the behavior of the visitors in response to the two different versions to see which group of visitors completes more conversions on the site.

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## ✓ <u>1 WORD QUESTION ANSWERS:</u>-

SR. NO	QUESTIONS	ANSWERS
1	Conversion means	In site if user convert from visitor to customer then it known as conversion.
2	Conversion ratio means	Total no. of converted visitors into customers is known as conversion ratio.
3	Conversion optimization also known as	Landing page optimization

## Q.8 Explain Leveraging the Long Tail of Keyword Demand in detail.5M

- ✓ As we discussed at the beginning, the long tail of search is where 70% of search queries occur. Only 30% of those precious queries happen in the more obvious terms that people use, the so-called "head terms."
- ✓ In May 2007, Google Vice President Udi Manber indicated that 20% to 25% of all search queries that Google receives on a given day are queries that Google is seeing for the first time. You can think of this as the "ultra-long tail."
- ✓ The long tail of search queries in a given industry is typically not accurately visible via any of the major keyword research services or search engine ad databases (Google Ad Words, Yahoo! Search Marketing, and MSN ad Center). With this in mind, let's outline a few methods for finding long-tail terms.

## Extracting Terms from Relevant Web Pages:-

- 1. Extract the top 10 to 50 most common search phrases at the head of the distribution Graph from your existing keyword research in the industry.
- 2. Search Google and Bing for each term.

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- 3. For each page in the top 10 to 30 results, extract the unique usable text on the page.
- 4. Remove stop words ('a', 'an', 'the' etc...) and filter by phrase size.
- 5. Remove instances (examples/suggestions) of terms/phrases already in your keyword Research database.
- 6. Sort through the most common keywords first, as you feel is Valuable.

# Identifying Long-Tail Patterns:-

 $\checkmark$  You can also take another option at determining long-tail information.

- ✓ As a hypothetical example using digital camera, here are some searches for two different brands and models of digital cameras that have been pulled (for this demonstration) from the Keyword Discovery database. Each of these received only one search:
- consumer comments on Nikon 5.1 mp coolpix 13 digital camera
- New Nikon coolpix p3 8 1 mp digital camera memory
- Nikon 3 2 mp coolpix digital camera
- Nikon 51 mp coolpix s1 digital camera and cradle
- Nikon 6 mp coolpix digital camera
- Nikon 7 1 mp coolpix 7900 digital camera
- Nikon 81 mp coolpix 8800 digital camera
- Nikon coolpix 4800 4 mp digital camera
- Nikon coolpix 5200 51 mp digital camera
- Nikon coolpix 5400 51 mp digital camera Nikon coolpix 13 6 mp digital camera us a warranty
- Nikon coolpix p2 51 mp digital camera
- Best buy sonny cyber shot dsc t7 51 mp digital camera
- Brand new sony cyber shot dsc h1 51 mp digital camera
- Camera digital sony cyber shot 51 mp
- Sony cyber shot 10.1 mp digital camera
- Sony cyber shot 6.0 mp digital cameras
- Sony 5 mp cyber shot dsc t9 digital camera
- Sony 72 mp cyber shot dsc p200 digital camera information
- Sony 72 mp cyber shot dsc w7 digital camera

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- ✓ Approximately 48% begin with the brand name and end with digital camera.
- ✓ Approximately 35% are ordered brand, model name, model number, megapixel, digital camera.
- ✓ Approximately 22.5% are ordered brand, megapixel, model name, digital camera.
- $\checkmark$  An overall 60% follow the overall pattern of brand, model name, and digital camera.

## Editorial Content Strategies for Long-Tail Targeting:-

✓ One of the most difficult aspects of capturing traffic from the long tail of search is creating relevant, targeted content.

1 Canon digital camera (search)	2,582	698,000	39.8	0.004
2 🗷 canon digital cameras ( <u>search</u> )	564	1,350,000	2.39	0.000
3 Canon digital camera reviews (search)	392	21,000	88.0	0.019
4 🖉 canon digital camera in vietnam (search)	288	10	27,600	28.8
5 Compare canon digital cameras (search)	244	1,220	180	0.201
6 Canon digital camera accessories	117	8,950	6.42	0.013
7 Canon digital camera software (search)	115	2,800	8.45	0.041
8 Canon digital camera windows 7 screen fix (search)	105	0	<del></del>	-
9 canon digital camera lens (search)	100	4,820	3.59	0.021
0	95	6,390	10.4	0.015

FIGURE Sample long-tail data

## > User-Generated Content Strategies for Long-Tail Targeting:-

- ✓ User-generated content (UGC) can be a great way to obtain lots of content that will help attract long-tail traffic.
- ✓ Popular ways of doing that include providing users with forums, a place to post reviews or blog comments, or a way to upload videos or images, among others.
- ✓ As users submit content, they do the hard work of writing the text you need to capitalize on the long tail.

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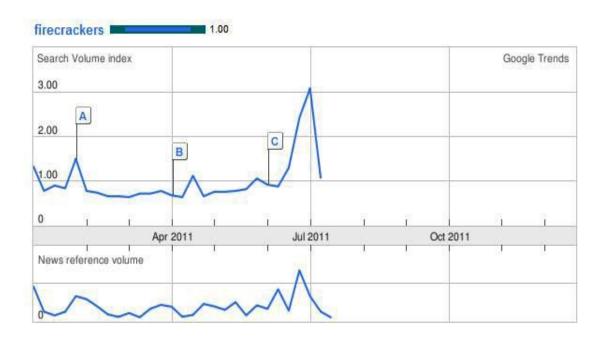
✓ If you want to write holiday-related content, it will be important to have your site visible in the SERPs for those search queries prior to that holiday's buying season so that you'll get optimum traffic for those terms.

#### ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR. NO	QUESTIONS	ANSWERS
1	Popular terms also known as	Head terms.
2	Full form of UGC is	User Generated Content.
3	Optimization of long tail keywords provides benefits in business	YES.

# Q.9 Explain Trending, Seasonality, and Seasonal Fluctuations in Keyword Demand in detail.2M/3M

- ✓ One of the micro options of keyword research, and any fully developed SEO strategy, is that the use of keywords varies significantly over time.
- ✓ For instance, major holidays inevitably lead to bursts of keyword volume related to those holidays.
- Examples could be searches such as Halloween costumes, gift ideas for Christmas, or Valentine's candy.
- ✓ Figure shows an example for firecrackers: searches start consistently increasing in early June. Likewise, with Valentine's Day, the searches start in mid-December.
   ✓ In most cases searches start increasing about two to three months before the holiday.



## ✤ <u>1 WORD QUESTION ANSWERS:-</u>

SR.	QUESTIONS	ANSWERS
NO		
1	Trending keywords are useful in current	Yes
	business	
2	Keyword research process is	Keyword research is a
		complex and time-
		consuming task, but the
		rewards are high.

## Conclusion:-

- ✓ Keyword research is a complex and time-consuming task, but the rewards are high.
- ✓ Once you learn where the keyword search volume is, you can begin to think about how that affects the information architecture and the navigation structure of your site.

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## **UNIT 5: Digital Technology Trends**

## **4** Virtual Reality, Augmented Reality (AR):

- Introduction of AR
- Opportunities for augmented REALITY
- Introduction to Virtual Reality (VR),
- ➢ Needs of VR
- Difference between AR and VR

## **4** Digital Business:

- Introduction to digital business,
- digital business opportunities
- difference between digital business and ecommerce,
- Risk and barriers to digital business adoption

## **4** Block Chain Technology:

- ➤ What is block chain technology?
- ➢ Block chain feature,
- ➢ How Block Chain Work?

## Q.1 what is AR? Explain opportunities for Augmented Reality in detail.3M/5M

## **4** Definition:

✓ Augmented reality (AR) is a type of interactive, reality-based display environment that takes the capabilities of computer generated display, sound, text and effects to enhance the user's real-world experience.

Or

✓ Augmented reality (AR) is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information.

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- Augmented Reality and app development using AR hold immense promise for businesses.
- ✓ Augmented reality development has become the mainstream for digital businesses today.
- ✓ This is because AR technology can be applied towards marketing, gaming, entertainment, fashion, art, education, and almost any other business domain.
- ✓ In fact, this technology is getting more improved day by day, combining real life with super-imposed images or animations through graphics, smell, and sounds.
- ✓ According to Statista, the total number of active AR and VR users is forecast to reach 175 million by the end of 2020.
- ✓ Moreover, the global augmented reality market is expected to grow significantly to about 100 billion U.S. dollars by 2021.
- ✓ Augmented Reality and mobile app development can bring many different business opportunities.
- **☑** Helpful in Marketing
- $\blacksquare$  Education with Fun
- ☑ Sports Apps
- **☑** Real-Time Shopping Experience
- **☑** Data Visualization
- **Medical Apps**
- **☑** Painting Apps
- **☑** Teleconference Apps
- $\ensuremath{\boxdot}$  Maps and Tourism

## 1) Helpful in Marketing:-

✓ Augmented Reality development opens up various business possibilities for marketing domain, and if used creatively, it can generate more loyalty and commitment for the brands and their products.

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- ✓ Suppose you are walking around the store with a Smartphone in your hands, seeing the price and features of the products you want to purchase, along with special offers and discounts for them.
- ✓ With Augmented Reality mobile application development, it can be more effective and fun for clients.

## 2) Education with Fun:-

- $\checkmark$  Schools are already becoming digitalizing lesson plans, using computers and mobile applications in the classroom.
- $\checkmark$  Now, think of what you could do with Augmented Reality app development. For instance, see a 3D galaxy on the screens of their tablets or smart phones. Whether it be any subject, including history, biology, science, etc. everything can be illuminated with the help of Augmented Reality.

## 3) Sports Apps:-

- $\checkmark$  When it comes to hobbies, sports fans are probably the most passionate users.
- $\checkmark$  Some like to enjoy the game in person and support their favorite team in the stadium, while others prefer to watch the game from the screen of their TVs or smart phones.
- ✓ With Augmented Reality development, you can get live statistics, including the trajectory of the ball and its speed in the stadium.

## 4) Real-Time Shopping Experience:-

- $\checkmark$  The problem faced by people while purchasing furniture is that they have almost no idea how it will really fit inside. This is part of the reason people often hire visual designers who can show the final image.
- ✓ With AR mobile apps, you can place any furniture in your apartment without having to physically take it there. There have been a number of such Augmented Reality apps that allow you to do that.
- $\checkmark$  You can even scale the furniture and change the colors, so you can choose the perfect sofa for your living room. The use of Augmented Reality makes your online shopping experience more real and personable.

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#### 5) Data Visualization:-

- ✓ Without visualization, statistics and analytics are actually very hard to understand.
- ✓ That's why we have these tables, circular charts, and info graphics. All this help us to see the information and to present not only pure numbers but something visual.
- ✓ Augmented Reality development can be a great tool when it comes to showcasing data and sharing it with people. Today, all companies need it.

#### 6) Medical Apps:-

- ✓ Medical applications are some of the biggest trends at the moment, being the second most popular type of application after games for smart phones. Augmented Reality can provide additional possibilities for users of medical applications.
- ✓ This is because doctors will be able to see a 3D image of an MRI while talking to patients or analyzing their movements.

#### 7) Painting Apps:-

- ✓ Measuring objects and walls are not the only things that Augmented Reality is capable of when it comes to amazing interiors.
- ✓ With AR development, you can also paint the walls of a certain color and show how the room will work with a painting on the wall.
- $\checkmark$  These applications should also be able to calculate the necessary materials and labor costs.

#### 8) Teleconference Apps:-

- ✓ We can say that visualization is a very important part of any project, and Augmented Reality apps are all about making things visual and allowing users to see them from all angles.
- $\checkmark$  It can give engineers the ability to place their prototype on a board table so that everyone can understand the subject.
- ✓ Similarly, with AR, you can walk through a construction site and see the sections colored to indicate when each phase will end. This could help engineers share

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their vision of the project with others, which would make the interaction more clear and productive.

#### 9) Maps and Tourism:-

- ✓ Augmented Reality app development can give you more information about all the places you want to visit, and the maps combined with an AR guide can give you a great experience in exploring the city.
- ✓ Moreover, museums can also take advantage of this technology by telling their visitors more about the items they see and giving them life.

#### Conclusion:-

So far, we have seen the various business opportunities for Augmented Reality. This would surely boost your business revenue to several times more than expect in next upcoming years.



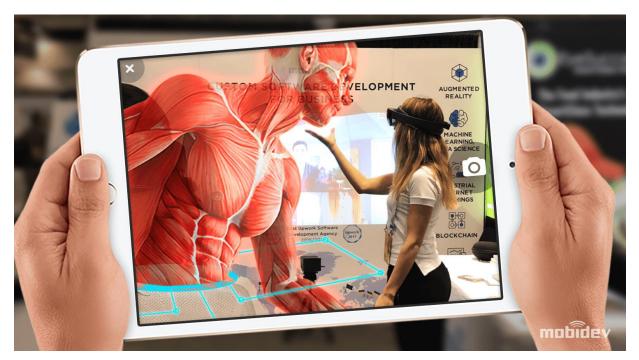
**4** Images for references:

**Real-Time Shopping Experience Example** 

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**Education With Fun example** 



**Educational Study Example** 

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Map and Tourism Example

## Q.2 what is VR? Explain needs of Virtual reality in detail.2M/3M

- Definition: Virtual reality (VR) refers to a computer-generated simulation in which a person can interact within an artificial (three-dimensional) environment using electronic devices, (such as special goggles with a screen or gloves fitted) with sensors.( In this simulated artificial environment), the user is able to have a realistic-feeling experience.
- ✓ Potential clients, media people, investors and peers in other industries who want to grasp the potential knowledge and use of the VR market and to understand how with immersive technologies they can create the real value.
- ✓ Now, let's have a look at 5 common, real-life scenarios that happen in the interaction: VR company-client-users-general market.
- ✓ These reasons can show you what is required for VR to become part of our life yet as much as some futurists have predicted to happen in the close future:
- 1. The enterprise industries and clients need more clarity what value in digital business so VR is best option as compare to other technologies.
- 2. Great technology to update our present gadgets like smart phones

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- 3. If Users need to understand better aspects of anything, VR provides effective technology solutions to upgrade the knowledge.
- 4. The business model for VR apps need to be better defined for users, vendors and parties that pay for such a service.
- 5. The design of VR devices is friendlier for a typical user of different platforms.

## Q.3 State the difference between AR and VR.3M/5M

AR	VR
AR stands for augmented reality	VR stands for Virtual Reality
Completely digital and totally depended	Completely digital and totally
to the real world.	independent to from the real world.
It is not enclosed with 100% reality	It is not enclosed with 100% reality
It gives natural experience.	It gives synthetic experience.
In AR technology development it	In VR technology development it
requires 3 to 7 years	requires 2 to4 years.
GPS, Digital compass, Qr code are the	Games, Headsets and joysticks are the
examples of the AR technology.	examples of VR technology.

#### \*1 WORD QUESTION ANSWERS:

SR.NO	QUESTIONS	ANSWERS
1	AR stands for	Augmented Reality
2	VR stands for	Virtual Reality
3	AR is	Augmented reality (AR) is a type of interactive, reality-based display environment that takes the capabilities of computer generated display, sound, text and effects to enhance the user's real- world experience.
4	VR is	Computer generated simulation

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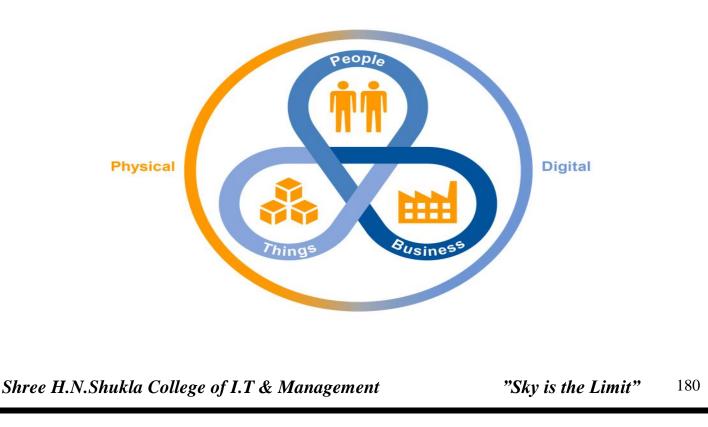
5	Examples of AR are	GPS, Digital compass, Qr code are the examples of the AR technology.
6	Examples of VR are	Games, Headsets and joysticks are the examples of VR technology.

## Q.4 what is digital business? 1M

- Digital Business is a way to promote your products or ideas without any physical demands.
- ✓ It's the growing platform for this generation. Most of the physical stores are moving to digital world as they foresee the scope of it.
- ✓ Example: Core banking system in India.

#### Q.5 Explain opportunities of digital business in detail.3M/5M

The present and future of business is now digital business, which defines as business that blurs the digital and physical worlds as people, business, and things intertwine and feedback to each other through technology:



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- ✓ All the present offline businesses now converted into new digital business with the following opportunities.
- 1. Market Opportunity
- 2. Adoption Rates
- 3. Recommendations
- 4. Best Offers on digital platforms
- 5. Expansion
- 6. Revenue

# **4** Market Opportunity:-

- ✓ Digital business provides powerful facilities with IOT technology in the field of marketing.
- ✓ An example is a Smartphone application that automatically tracks a person's activity levels and communicates data with the person or another remote interface.
- ✓ By 2020, estimates show the number of IoT devices should surge to approximately 30 billion, and personal communication devices will rise to 7.3 billion. Seven billion people will be actively using these technologies.

# **4** Adoption Rates:-

- ✓ Currently, only 22% of organizations see themselves as digital businesses ready to leverage the big data being produced; however, "64% of boards reported that they already have a director with a digital business background."
- ✓ Fortunately, digital business is always new and If handled and implemented skillfully, rewards range from increased revenues to market advantages that competitors cannot match.

# Recommendations:-

- ✓ Skillfully wielding digital business practices enables a business to serve clients more effectively, produce better results, and obtain real-time data to analyze, which ultimately lead to higher revenue flows, enhanced company awareness, and a competitive edge.
- $\checkmark$  The examples below may be the best way to illustrate a strategy.

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- ✓ Example: A European IT solutions provider made Wi-Fi access points available to visitors of its client's retail stores, since most customers have mobile phones automatically Wi-Fi-enabled. Each access to the store's network would provide log (if not additional survey) data that could be extrapolated.
- $\checkmark$  At the minimum, the retailer could know how many visitors entered each store, the aggregate of number and average duration of visits, and how many visitors were new versus repeating.

## **4** Best Offers on digital platforms:-

 $\checkmark$  There are various platforms to obtain digital business for customers with Proper product details including prices, schemes and discounts.

#### **4** Expansion:-

- $\checkmark$  There is no limit of digital business in today's internet platform.
- $\checkmark$  If owner of the online website prepares proper planning then digital business easily promotes your business very effectively.

#### **4** Revenue :-

 $\checkmark$  Digital business is a useful to generate appropriate satisfactory revenue using marketing, advertising and promotion of your site and site products.

#### Q.5 what is digital business adoption? Explain Risk and Barriers in digital business adoption? 3M

- 4 If you convert your business from offline mode to online mode then simply it is considered as a digital business adoption.
- $\checkmark$  All believes you're in e-business if you "use technology to optimize channels by automating business operations" and use the web "to sell and drive efficiencies."
- ✓ Then there came d-business. You're a digital or d-business if you, "build new business models by extending potential customers from people to things."
- > For example, you promote your ultra marathon sneakers to wearable fitness devices that are tracking runs of more than 5 miles.

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## **4** Common barriers to digital business adoption

➢ Gartner have identified common risk and barriers to digital business adoption.

## **1. CHANGE-RESISTANT CULTURE**

✓ Organizations have developed a culture of hierarchy and clear boundaries between areas of responsibilities and resistance to change embedded within organizational culture.

# 2. LIMITED COLLABORATION

✓ In the early stages of digital business adoption, there tends to be a lack of willingness to share and collaborate.

## **3. NOT READY**

✓ Oftentimes, the business just doesn't have the skills or resources to make the transformation happen.

## 4. TALENT GAPS

- ✓ This is a huge barrier for organizations. It comes about because most organizations follow a traditional structure organized by function such as IT, sales, and supply chain.
- ✓ Change is usually slow in these kinds of environments.

## **5. OUTDATED PRACTICES**

✓ Even if the above issue is resolved, a barrier can be that the organizational processes are too traditional.

## 6. ITS NOT EASY

- ✓ The most obvious barrier to digital business adoption is that it can be expensive and technically challenging. Sometimes, it's just too hard.
- The best way to do this is to use a Digital Adoption Platform. It accelerates, simplifies, and enhances the adoption of digital into the business.

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#### Q.6 State the difference between E commerce and digital business.3M

E-commerce	Digital Business
Buying and Selling of goods and services through the internet is known as E commerce.	Any communication process performed in the presence of electronically media is known as digital business.
E-commerce is the major component of digital business.	Digital business is not a component of e-commerce.
It includes money transactions only.	It includes monetary transactions as well as allied activities.
In this communication is based on Internet.	In this communication is based on internet as well as Intranet and Extranet networks.
It requires website for the performing actions.	It requires websites as well as CRM (customer relationship manager) and ERP (enterprise resource planning) concepts.

#### \*1 WORD QUESTION ANSWERS:-

SR. NO	QUESTIONS	ANSWERS
1	Full form of IOT	Internet Of things
2	What is talent gap?	This is a huge barrier for organizations. It comes about because most organizations follow a traditional structure — organized by function such as IT, sales, and supply chain.
3	E commerce requires for doing business.	Website

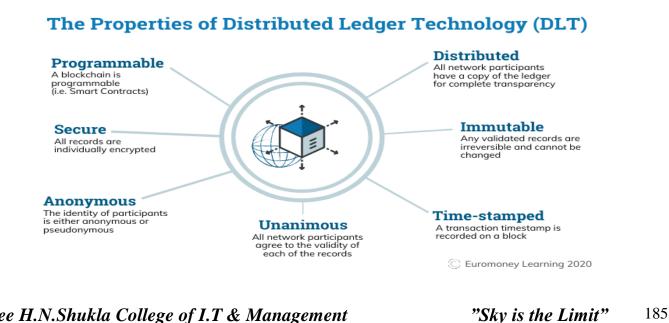
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4	Digital business is useful in which options	Digital business is a useful to generate appropriate satisfactory revenue using marketing, advertising and promotion of your site and site products.
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what is block chain technology? Explain its features. 3M **Q.7** Or what is BCT? Explain with DLT (Distributed Ledger Technology) concept.3M

- $\checkmark$  Block chain is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system.
- $\checkmark$  A block chain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the block chain. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the block chain, a record of that transaction is added to every participant's ledger. The decentralized database managed by multiple participants is known as Distributed Ledger Technology (DLT).
- $\checkmark$  Block chain is a type of DLT in which transactions are recorded with an immutable cryptographic signature called a hash.



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- $\checkmark$  This means if one block in one chain was changed, it would be immediately apparent it had been tampered with. If hackers wanted to corrupt a block chain system, they would have to change every block in the chain, across all of the distributed versions of the chain.
- $\checkmark$  Block chains such as Bit coin is constantly and continually growing as blocks are being added to the chain, which significantly adds to the security of the ledger.

# Q.8 Explain how block chain technology works.2M/3M

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- $\checkmark$  When a block stores new data then it is added into the block chain.
- $\checkmark$  Block chain creates multiple blocks that works together and define single digital e tranjectional details.
- $\blacktriangleright$  In block chain technology it works with four (4) different processes.
- 1. A transaction must occur.
- 2. Transaction must be verified.
- 3. Transaction must be stored.
- 4. Transaction must be completed in the form of blocks.
- Now we discuss all this four processes one by one.

# 1. A transaction must occur:-

- $\checkmark$  In this process if user wants to purchase mobile phone from the Amazon website then this user first login into the official site of Amazon company.
- ✓ After login user check various details of different mobile phones and select best one out of them.
- $\checkmark$  Now all the product and personal details of users including payment option is ready in first block.

# 2. Transaction must be verified:-

 $\checkmark$  In these process details of block one has been verified by the block chain technology concept. This is considering as a block number two.

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#### 3. Transaction must be stored:-

 $\checkmark$  After verification process now website is responsible for the block three Processes, in this process, Details related to the costumers as well as products will be stored into the web server database.

## 4. Transaction must be completed in the form of blocks:-

- $\checkmark$  In this Process product will be deliver to the client location and once client receives the product the last block transaction will be completed by the Amazon.
- $\checkmark$  In short, Block chain technology provides perfect communication process between online website to the client.
- > Conclusion:

In 21<sup>st</sup> century the concept of digital technology develops increasingly in all different fields of business.

## \*1 WORD QUESTION ANSWERS:-

SR. NO	QUESTIONS	ANSWERS
1	DLT stand for	Distributed Ledger technology
2	BCT means	Block Chain Technology
3	How many process required for Block chain technology.	4 processes