CVDMM(N) 102

Digital Promotion Strategies, Tools & Freelancing

Minor / Minor Vocational

School of Vocational Studies

उत्तराखण्ड मुक्त विश्वविद्यालय

BOARD OF STUDIES,
SCHOOL OF VOCATIONAL STUDIES, UTTARAKHAND OPEN UNIVERSITY, HALDWANI
Academic Session 2023 - 24

Chairman
Hon'ble Vice-Chancellor, Uttarakhand Open University, Haldwani.

Convener
Dr. Ashutosh Kumar Bhatt, Director In-charge, School of Vocational Studies,
Uttarakhand Open University, Haldwani.

Members of Board of Studies, School of Vocational Studies

Prof. Manoj Kumar Pandey, Director,
Department of Computer Engineering & Applications, Amrapali Institute, Haldwani, Nainital.

Dr. Sandeep Budhani, Associate Professor & Head,
School of Computing, Graphic Era Hill University, Bhimtal, Nainital.

Mrs. Deepika Lohani, Instructor, Govt. Industrial Training Institute, Kaladhungi, Haldwani, Nainital.

Dr. Deepika Verma, Assistant Professor, Department of Home Science, School of Health Sciences,
Uttarakhand Open University, Haldwani.

Dr. Gopal Datt, Assistant Professor & Programme Coordinator,
School of Vocational Studies, Uttarakhand Open University, Haldwani.

Programme Coordinator

Dr. Gopal Datt, Assistant Professor
School of Vocational Studies, Uttarakhand Open University, Haldwani.

Unit Writers	Unit No.
Mr. Gaurav Joshi, Assistant Professor, M.B. Govt. P.G. College, Haldwani, Nainital.	1
Dr. Ashutosh Kumar Bhatt, Assistant Professor, Birla Institute of Applied Sciences, Bhimtal, Nainital.	2, 9
Dr. Gopal Datt, Assistant Professor, School of Vocational Studies, Uttarakhand Open University.	3
Prof. Abhay Saxena, Dean, School of Technology, Management & Communication, Dev Sanskriti Vishwavidyalaya, Haridwar.	4, 6
Mr. Praveen Tripathi, Assistant Professor, SGRR College of Computer Applications & IT, SGRR University, Dehradun.	5, 7, 11, 12, 17
Mr. Harvendra Kumar Patel, Assistant Professor, Rajshree Institute of Management & Technology, Bareilly, U.P.	8
Dr. H. S. Jalal, Associate Professor, Amrapali Group of Institutes, Haldwani, Nainital.	10, 16
Dr. Rajeev Kumar, Assistant Professor, College of Computing Sciences & IT, Teerthanker Mahaveer University, Moradabad, U.P.	13, 14
Dr. Naveen Tewari, Associate Professor, School of Computing, Graphic Era Hill University, Bhimtal, Nainital.	15
Dr. Mukesh Joshi, Associate Professor, School of Computing, Graphic Era Hill University, Bhimtal, Nainital.	18

Note- Wrap up material for study purpose only.

Formatting & Typesetting

Dr. Gopal Datt, Assistant Professor
School of Vocational Studies, Uttarakhand Open University, Haldwani.

CVDMM(N) 102- Digital Promotion Strategies, Tools & Freelancing

INDEX

UNIT- 1

DIGITAL PROMOTION STRATEGIES

1.1   INTRODUCTION

1.2   OBJECTIVES

1.3   DIGITAL PROMOTION STRATEGIES

1.4   WEBSITE PLANNING AND STRUCTURE

1.5   E-MAIL MARKETING

1.6   ONLINE REPUTATION MANAGEMENT

1.7   AFFILIATE MARKETING & GOOGLE AD SENSE

1.8   MOBILE MARKETING

1.9   CONTENT MARKETING

1.10   ONLINE DISPLAY ADVERTISING

1.11   E-COMMERCE MARKETING

1.12   POINTS TO REMEMBER

1.13   GLOSSARY

1.14   CHECK YOUR PROGRESS

1.15   BIBLIOGRAPHY/ REFERENCES

1.16   SUGGESTED READINGS

1.1   INTRODUCTION

Digital promotion is the use of one or more forms of electronic media to market or advertise a product or brand. Marketing or advertising platforms that may be used include social media, electronic billboards, mobile phones and tablets. An example of how a brand or organization may be used to advertise on another public website, on their own website or to use or create a mobile application to promote their product or service can be through OOH - Out of Home, digital display boards, etc.

Digital Marketing is a marketing tool used to promote products, website, blog, portal, YouTube videos and audios digitally on the internet. This includes digital skills just like organic marketing: SEO and SMM. However, in case of digital promotion, we digitally promote our product on social media Instagram, Facebook, LinkedIn, etc so that people may get aware of the products.

1.2 OBJECTIVES

After the successful completion of this unit, you will be able to:

- Understand the basic concepts of digital promotion strategies.

- Understand the concepts of website planning and mobile marketing, content marketing, and e-commerce marketing ideas.

1.3 DIGITAL PROMOTION STRATEGIES

Digital Promotion strategies take a multi-channelled approach to distribute content, news, and offers.

1.4 WEBSITE PLANNING AND STRUCTURE

Basically, website planning is how your website is connected. How your main pages lead to deeper pages on your website. You can see it as how your navigation and sitemap are built.

Why Plan a Website Structure?

Well, you wouldn't build a house without a plan, so why would you want to build your business website without it. It helps you improve user experience, SEO, internal linking and

simplicity of usage. You should understand that planning a structure isn't just about the main website; it's also about blog and internal linking.

Essential Steps for Creating a Website Structure

- **Start by Getting the Basic Insights to Your Business**- This means getting to know your own business. It's not just important when you talk to a designer or whoever will create your website. This is important when for you too.

- **Start Doing Your Keyword Research**- Next step would be to dive into the keyword research. Paid tools have even more data to give a bigger edge when doing research for your business's keywords.

- **Competition Research** - In this step, we are technically still at keywords research, but we are going to go further into the competition of your website.

- **Create Your Website's URL Structure** - Most common URL structure looks like this. You have a homepage, services, about us, references/work, blog and contact. This represents your hierarchy, URL structure, and main navigation. You get something like this, a simple website diagram.
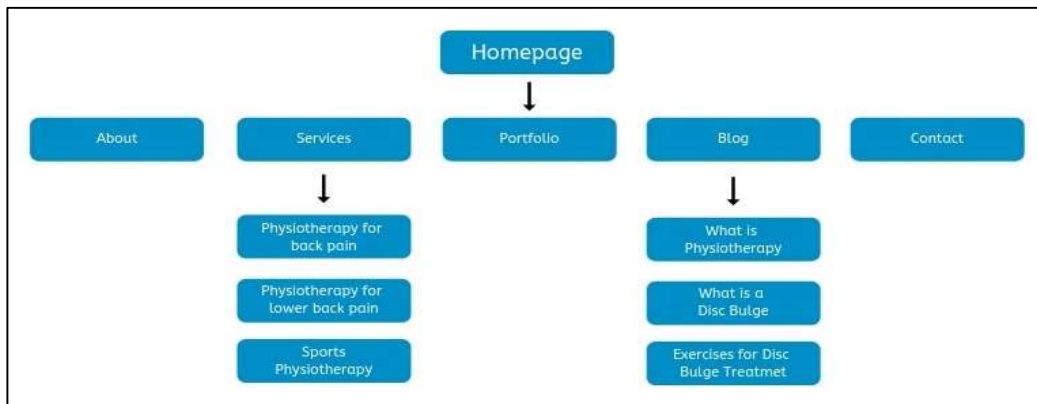
Fig. 1.2 Sample diagram of website planning

- **Create a Simple and Logical Navigation**- If you plan your website structure like shown above you shouldn't have any trouble creating the navigation for your website.

- **Create Your Navigation with HTML and CSS**- The safest way for crawlers to be able to read your navigation is to create your navigation with HTML and CSS.

- **Create an Internal Linking Strategy**- Internal linking is what makes your website structure to work for your website.

It helps the structure to be logical, help users navigate your website and it establishes your shared information's hierarchy.

Fig. 1.3Information hierarchy

- **Create a sitemap for your website**- The thing is that most search engines use sitemaps to find out about your new pages. It also helps search engine to index your pages faster than if you don't have one. There are many tools (Sitemap Generator) to do that, but most CMSes have something installed to create it.

1.5   E-MAIL MARKETING

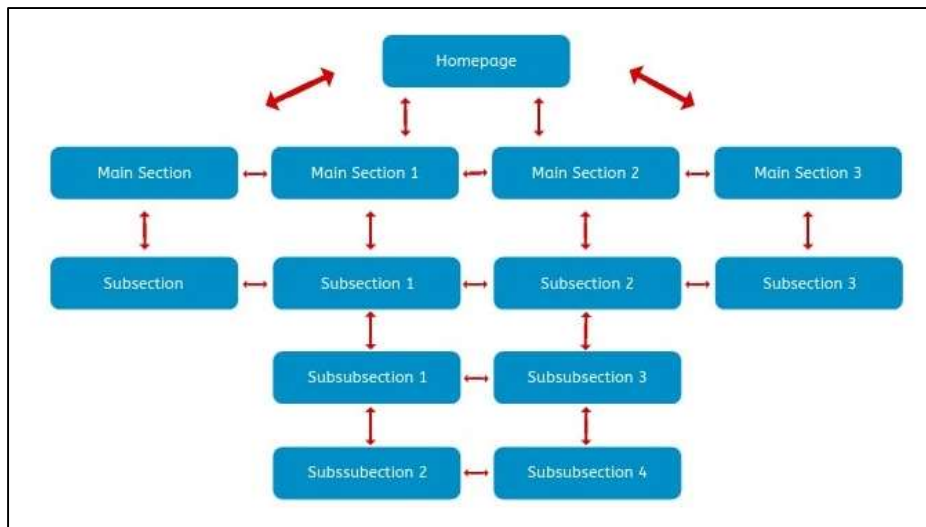E-mail marketing is the act of sending a commercial message, typically to a group of people, using email. In its broadest sense, every email sent to a potential or current customer could be considered email marketing. It usually involves using email to send advertisements, request business, solicit sales or donations and build loyalty, trust, or brand awareness. Marketing emails can be sent to a purchased lead list or a current customer database. The term usually refers to sending email messages for enhancing a merchant's relationship with current or previous customers, encouraging customer loyalty and repeat business, acquiring new customers or convincing current customers to purchase something immediately, and sharing third-party ads.

In general terms, email marketing is the use of email to promote your business. It is used to cultivate relationships with potential customers, keep current customers informed and updated on your brand, offer coupons to encourage customer loyalty, and more!

It is a direct form of marketing, similar to marketing through snail mail, but email marketing is much more efficient for your wallet and for environment since it's totally paperless!

Cheaper costs, easy to track ROI and its widespread reach are few of many benefits digital marketing offers.

1.6   ONLINE REPUTATION MANAGEMENT

Your online reputation is how others see you when they look for you online. Online reputation management (ORM) means taking control of the online conversation. Its techniques and strategies ensure that people find right materials when they look for you on the Internet.

The purpose of online reputation management is to create balance, counteract misleading trends, and allow you to put your best foot forward. Two cycles of online reputation are-

- Vicious Cycle: Ignore your online reputation and you risk falling victim to a vicious cycle of misinformation and rumours.

- Virtuous Cycle: Take care of your online reputation and you create a virtuous cycle of

positive, quality materials that reflect well on you.

Fig. 1.4Vicious Cycle

Your online reputation is forever-

If someone writes something negative about you online, it can put you at a serious disadvantage over the long term- especially if you're not aware of it. You might never know

why you didn't get that apartment you wanted, or why a job offers never materialized after that phenomenal interview. Therefore, it's important to keep tab on what people are saying about you online and take necessary steps to correct any inaccuracies.

1.7   *AFFILIATE MARKETING & GOOGLE ADSENSE*

Affiliate marketing is the process by which an affiliate earns commission for marketing another person's or a company's products. The affiliate simply searches for a product they enjoy, then promotes that product and earns a piece of the profit from each sale they make. The sales are tracked via affiliate links from one website to another.
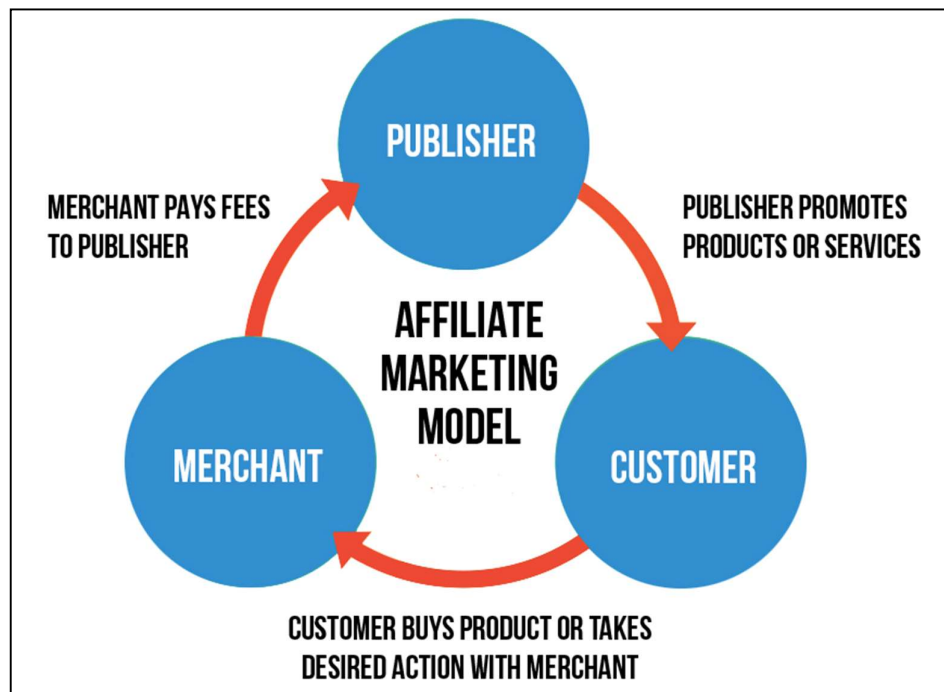
Fig. 1.5 Marketing Model

How Do Affiliate Marketers Get Paid?

A quick and inexpensive method of making money without the hassle of actually selling products, affiliate marketing has an undeniable draw for those looking to increase their income online. But how does an affiliate get paid after linking the seller to the consumer? The answer is complicated. The consumer doesn't always need to buy the product for the affiliate to get a kickback. Depending on the program, the affiliate's contribution to the seller's sales will be measured differently. The affiliate may get paid in various ways:

- Pay per sale- This is the standard affiliate marketing structure. In this program, the merchant pays the affiliate a percentage of the sale price of the product after the consumer purchases the product as a result of the affiliate's marketing strategies. In other words, the affiliate must actually get the investor to invest in the product before they are compensated.

- Pay per lead- A more complex system, pay per lead affiliate programs compensates the affiliate based on the conversion of leads. The affiliate must persuade the consumer to visit the merchant's website and complete the desired action — whether it's filling out a contact form, signing up for a trial of a product, subscribing to a newsletter, or downloading software or files.

- Pay per click- This program focuses on incentivizing the affiliate to redirect consumers from their marketing platform to the merchant's website. This means the affiliate must engage the consumer to the extent that they will move from the affiliate's site to the merchant's site. The affiliate is paid based on the increase in web traffic.

Why be an Affiliate Marketer?

Few reasons to become an affiliate marketer-

- **Passive income**- While any regular job requires you to be at work to make money, affiliate marketing offers you the ability to make money while you sleep. By investing an initial amount of time into a campaign, you will see continuous returns on that time as consumers purchase the product over the following days and weeks. You receive money for your work long after you've finished it. Even when you're not in front of your computer, your marketing skills will be earning you a steady flow of income.

- **No customer support**- Individual sellers and companies offering products or services have to deal with their consumers and ensure they are satisfied with what they have purchased. Thanks to the affiliate marketing structure, you'll never have to be concerned with customer support or customer satisfaction. The entire job of the affiliate marketer is to link the seller with the consumer. The seller deals with any consumer complaints after you receive your commission from the sale.

- **Work from home**- If you're someone who hates going to the office, affiliate marketing is the perfect solution. You'll be able to launch campaigns and receive revenue from the products that sellers create while working from the comfort of your own home. This is a job you can do without ever getting out of your routine role.

- **Cost-effective**- Most businesses require start up fees as well as a cash flow to finance the products being sold. However, affiliate marketing can be done at low costs, i.e. you can get started quickly without much hassle. There are no affiliate program fees to worry about and no need to create a product. Beginning this line of work is relatively straightforward.

- **Convenient and flexible**- Since you're essentially becoming a freelancer, you get ultimate independence in setting your own goals, redirecting your path when you feel so inclined, choosing the products that interest you, and even determining your own hours. This convenience means you can diversify your portfolio if you like or focus

solely on simple and straightforward campaigns. You'll also be free from company restrictions and regulations as well as ill-performing teams.

- **Performance-Based rewards**- With other jobs, you could work 80 hour/week and still earn the same salary. Affiliate marketing is purely based on your performance. You'll get from it what you put into it. Honing your reviewing skills and writing engaging campaigns will translate to direct improvements in your revenue. You'll finally get paid for the outstanding work you have done.

Google AdSense-

It is a program run by Google through which website publishers in the Google network of content sites serve text, images, video or interactive media advertisements targeted to the site content and audience. These advertisements are administered, sorted, and maintained by Google. They can generate revenue on either a per-click or per-impression basis. Google beta-tested a cost-per-action service, but discontinued it in October 2008 in favor of a DoubleClick offering (also owned by Google). In Q1 2014, Google earned US $3.4 billion ($13.6 billion annualized), or 22% of total revenue, through Google AdSense.

1.8   MOBILE MARKETING

Mobile marketing is a multi-channel, digital marketing strategy aimed at reaching a targeted audience on their smartphones, tablets, and/or other mobile devices, via websites, email, SMS and MMS, social media, and apps. Mobile is disrupting the way people engage with brands. Everything that can be done on a desktop computer is now available on a mobile device. From opening an email to visiting your website to reading your content, it's all accessible on a small mobile screen. Consider:

- 80% of internet users own a smartphone.

- Mobile platforms, such as smartphones and tablets, host up to 60% of digital media time for users in the U.S.

- Google anticipates search queries on mobile devices to surpass desktop searches by the end of 2015.

- Effective mobile advertising means understanding your mobile audience, designing content with mobile platforms in mind, and making strategic use of SMS/MMS marketing and mobile apps.

Create a Mobile Marketing Strategy-

A mobile marketing strategy is not a stand-alone effort, but it is a large chunk of any long-term or short-term marketing campaign—and its importance is only growing. From email, to

PPC, SEO, content, to social media marketing, there is a mobile marketing channel to reach every part of your audience where they are most comfortable.

Optimizing your website and email sends for mobile devices, taking advantage of the SMS and MMS channels, and building a native app for your most highly engaged audience are all big projects. So, start by updating your buyer personas to get a better idea of where the majority of your target audience spends its mobile time. That will give you your start line, and the rest will fall into a logical order. Mobile technology is not a fad that's going away any time soon. Optimizing your marketing strategy for mobile will give your brand an edge over the competition. Don't wait—go mobile today.

1.9   CONTENT MARKETING

Traditional marketing is becoming less and less effective by every minute; as a forward-thinking marketer, you know there has to be a better way of direct marketing as online through various mediums. Content marketing is a strategic marketing approach focused on creating and distributing valuable, relevant, and consistent content to attract and retain a clearly defined audience and ultimately drive profitable customer action.

Instead of pitching your products or services, you are providing truly relevant and useful content to your prospects and customers to help them solve their issues. Content marketing is good for your bottom line and your customers. Specifically there are three key reasons and benefits for enterprises that use content marketing: Increased sales, Cost savings, and loyal customers.

Content marketing is the present and future of marketing- Go back and read the content marketing definition one more time, but this time, remove relevant and valuable. That's the difference between content marketing and the other informational garbage you get from companies trying to sell you "stuff." Companies send us information all the time – it's just that most of the time it's not very relevant or valuable (can you say spam?). That's what makes content marketing so intriguing in today's environment of thousands of marketing messages per person per day.

1.10   ONLINE DISPLAY ADVERTISING

Display advertising (banner advertising) is a form of advertising that conveys a commercial message visually using text, logos, animations, videos, photographs, or other graphics. Display advertisers frequently target users with particular traits to increase the ads effect.

A new world with an increasingly connected consumer

Top activities conducted by users online are reading or sending email, using a search engine to find stuff and of course interacting with communities with shared interests on social networks such as Facebook or twitter. This represents an enormous opportunity for

companies to reach out to a technologically savvy audience who is continuously interacting with the World Wide Web for various interests.

How do advertisers know who to target?

In order to uniquely identify anonymous users, online advertisers today tend to make use of cookies, which are unique identifiers of specific computers, to decide which ADs to serve to a particular consumer. Cookies can track whether a user left a page without buying anything, so the advertiser can later retarget the user with ADs from the site the user visited.

As advertisers collect data across multiple external websites about a user's online activity, they can then combine this information to create a picture of the user's interests to deliver even more targeted advertising. This aggregation of data is called behavioral targeting. Advertisers can also target their audience by using contextual and semantic advertising to deliver display ADs related to the content of the web page where the ADs appear. Retargeting, behavioral targeting, and contextual advertising all are designed to increase an advertiser's return on investment, or ROI, over untargeted ads.

As advertising needs become more sophisticated, display ADs can also be personalized based on a user's geography through geotargeting. Basic information such as a user's IP address can indicate a user's rough location with a limited degree of accuracy. This information can be supplemented further through the use of a phone's GPS or the location of nearby mobile towers to have a clearer indication of the user's current position for a mind-boggling array of advertising possibilities.

What is used to measure the success of Display Marketing?

If your organization intends to activate display advertising, it is important to understand some key metrics that you will encounter throughout your engagement process such as Reach, Click through Rates, Bounce rates, Conversion rates and of course return on Investment in order to have a better picture of the performance of your online display marketing activities.

Reach

Reach for online advertisements are defined by the number of people who can potentially view your advertisement online. Typically, this will be represented by the number of visitors visiting the advertisement network you plan to use.

Click through Rate (CTR)

Typically, when we talk about online marketing, a click through rate refers to the likelihood of a user clicking on your online initiative. This is generally used as a benchmark by advertising agencies to gauge how well an advertisement or a campaign is received by the audience.

Bounce Rate (BCR)

Bounce rate is the percentage of visits that go only to one page before exiting the site. When a user bounces on a page advertised by a display advertisement, it indicates that the user was intrigued enough to click on the advertisement, but when they visited your site; they found that what they saw on the advertised page is not relevant to them.

There are a number of factors that contribute to your bounce rate. For example, visitors might leave your site from the entrance page if there are site design or usability issues. Alternatively, visitors might also leave the site after viewing a single page if they were not able to find what they were expecting.

Conversion Rate (CVR)

The conversion rate basically tells you what percentage of the people clicking through an AD ended up completing an action or a goal that the advertiser desired. This could be anything from a purchase made online, a registration for a newsletter or even a request for more information.

Return on Investment (ROI)

When brands embark on display marketing, there is always a cost involved together with a goal to be achieved. Return on investment tries to quantify how much value is obtained for every rupee spent. In its simplest form, imagine an advertisement that will run for a month before Valentine's that you are using to drive traffic from search engines to market flowers throughout India. If the cost of the campaign was Rs 10,000.00 and the sales generated by the campaign were Rs 50,000.00, this means that for every Rs 1 spent, the brand earned Rs 5 back.

1.11   E-COMMERCE MARKETING

E-commerce marketing is the practice of using promotional tactics to drive traffic to your online store, converting that traffic into paying customers, and retaining those customers post-purchase. A holistic e-commerce marketing strategy is made up of marketing tactics both on and off your website. A sound marketing strategy can help you build brand awareness, drive customer loyalty, and ultimately increase online sales. You can use e-commerce marketing to promote your online store as a whole or to drive more sales for specific products. Below is an overview of a few practical ideas to try.

1.12   POINTS TO REMEMBER

*   Digital promotion is the use of one or more forms of electronic media to market or advertise a product or brand.

*   Website planning and structure can help to improve your user experience, SEO, your internal linking and the simplicity of usage.

- Email marketing is the act of sending a commercial message, typically to a group of people, using email.

- Online reputation management (ORM) means taking control of the online conversation. Its techniques and strategies ensure that people find the right materials when they look for you on the Internet.

- Affiliate marketing is the process by which an affiliate earns a commission for marketing another person's or a company's products.

- Mobile marketing is a multi-channel, digital marketing strategy aimed at reaching a target audience on their smartphones, tablets, and/or other mobile devices, via websites, email, SMS and MMS, social media and apps.

1.13   GLOSSARY

- E-mail marketing is the act of sending a commercial message, typically to a group of people, using email.
- Online reputation management (ORM) means taking control of the online conversation. Its techniques and strategies ensure that people find the right materials when they look for you on the Internet.
- Website planning is the practice of getting to understand the goals of your business before any design work is done.
- Effective Digital promotion Strategies and tactics are- Video marketing, Marketing Automation using artificial intelligence, Social Media Marketing (SMM), E-mail Marketing, Responsive Web Design, Remarketing, Content Marketing (CM), Local Search Marketing (LSM), Search Engine Marketing (SEM) and Search Engine Optimization (SEO).
- Website planning starts with carefully considering the target audience and your services ready to deliver.
- Search Engine Optimization is an important part of website development. Each page must be carefully structured (headings, navigation, layout, titles and links) and keywords strategically employed to improve your site's chances of ranking in search engine results.

1.14   CHECK YOUR PROGRESS

Descriptive type questions-

a)   Explain the concept of Digital Promotion Strategy in brief.

b)   How do affiliate marketers get paid?

c)   What are the benefits of Social Advertising?

d) What do you understand by digital display advertising?

e) Write down the advantages of mobile marketing.

Objective type questions (True/ False)-

a) Digital promotion is the use of one or more forms of electronic media to market or advertise a product or brand. (True/ False)

b) Email marketing is the act of sending product online. (True/ False)

c) ORM means taking control of the offline conversation. (True/ False)

d) Facebook, Instagram, and Twitter are social media platforms. (True/ False)

e) An infographic is a collection of maximum text to explain a topic. (True/ False)

Answers-[a] True [b] False [c] False [d] True [e] False

1.15   BIBLIOGRAPHY/ REFERENCES

* https://en.wikipedia.org

* https://www.bigcommerce.com/blog/affiliate-marketing/

* https://venngage.com/blog/what-is-an-infographic/

* https://www.consumeracquisition.com/faq/what-is-social-advertising/

* https://sproutsocial.com/insights/topics/social-media-analytics-reporting/

* https://blog.hootsuite.com/social-media-report-template-guide/

1.16   SUGGESTED READINGS

* Alalwan, Ali Abdallah, et al. "Social media in marketing: A review and analysis of the existing literature." Telematics and Informatics 34.7 (2017): 1177-1190.

* Ryan, Damian. Understanding digital marketing: marketing strategies for engaging the digital generation. Kogan Page Publishers, 2016.

* Montalvo, Roberto E. "Social media management." International Journal of Management & Information Systems (IJMIS) 15.3 (2011): 91-96.

* Miller, Amalia R., and Catherine Tucker. "Active social media management: the case of health care." Information Systems Research 24.1 (2013): 52-70.

* Fiore, Anthony, and James Klein. "Internet-based digital promotion system." U.S. Patent Application No. 09/948,230.

UNIT- 2

SOCIAL MEDIA MANAGEMENT

2.1   INTRODUCTION

I hope you are well aware about social media, but did you ever think about how the social media can be a business game changer? Today most of the businesses get inspired by social media either positively or negatively. You have to rethink about the utilization of social media for the growth of your business. Digital marketing encompasses many moving pieces of different social media. You need to identify how to manage social media for your business, because social media plays an important role using various social media channels to effectively grow your reach, influence and conversions.

Social media management is the process of creating, scheduling, analyzing, and engaging with content posted on social media platforms, like Facebook, Instagram, and Twitter. A social media manager may be employed by a brand, individual, or business to reach new customers online or to improve and maintain their reputation. Social media managers are experts at handling social media activity, from responding to customer comments to

developing strategy on how to achieve long term marketing goals by publishing original content. However, there are also social media management tools that give you control over your own strategy.

Even if your time is limited, social media management tools and services can make your social media presence a priority. And if you aren't making social media a priority at this point in the game, you're in trouble. Social media plays an integral part in the business landscape. With 3.2 billion people using social media around the world, and 11 new users every second, it's safe to say the fad has turned into a global standard. Social media management tools and services can help you reach this huge audience and make running a social media campaign decidedly simpler.

If you're keen to kickstart your business social media strategy, there are expert services you can consult with. You can use our simple tool to get a few comparable quotes for digital marketing and social media management services. In this comprehensive guide, we'll explain how you can take advantage of social media management and traverse the media landscape in style.

How Can Social Media Benefit Your Business?

Social media management tools and services are designed to make marketing easier, which ultimately increases profits. After all, what's the point of paying for new software or services if they aren't going to improve your bottom line? Social media management tools and services come with a bevy of helpful benefits that will reinvigorate your marketing efforts and put your company in front of your target audience. Social media management can help you:

- Save time – by scheduling posts in advance, rather than burdening yourself with remembering to post at peak hours during the day.
- Increase authority – by posting multiple times a day on a wide range of platforms.
- Understand your audience – by providing in-depth analytics that explain who is following you, where they're coming from, and what they want from your business.
- Improve customer support – by creating a simple pathway for customers to inquire about your company through social media and making it simple for you to respond.
- Take control of your brand's reputation – by allowing you to monitor comments and feedback more closely, and respond as quickly as possible.
- Foster innovation- by encouraging creative collaboration across new platforms, for each social media campaign.

Clearly, social media management has benefits. But, understanding how it works is only the first step in deciding whether or not you should purchase one of these tools or services for your own business.

- **Social Media Management Cost**- Social media management tools and services vary in costs, which is why it's so important to get a tailored quote before you make a decision. Above all, you'll want an accurate estimate of how much social media management tools and services will cost for the particular scale and needs of your business.

- **Cost of Social Media Management Tools**- Most social media management tools charge by two important factors: the number of accounts you plan on managing and the number of posts you plan on scheduling in advance.

- **Social Media Accounts**- The beauty of social media management tools is your ability to schedule posts for Facebook, Instagram, Twitter, and even LinkedIn from a single platform. However, depending on how many accounts you're looking to manage, the price could go up. Whether you're popular on a wide range of platforms, or just have six different Twitter accounts that you want to manage, make sure you know exactly how much it costs to add extra accounts to your service, as it could cost you a pretty penny.

- **Social Media Posts**- The primary purpose of social media management tools is to schedule posts in advance so you don't need to perfectly time out your day to hit those peak hours. However, if you're trying to take the "quantity over quality" approach, you might need to pay a little extra. Even if you only have one account, some social media management tools will put a limit on the number of posts you can schedule in advance. The more posts you want to schedule, the higher the price, so make sure you take that into account when picking your tool.

- **Cost of Social Media Management Services**- If you're looking to truly break open the potential of a social media campaign, social media management services are the best way to go. The price is understandably a bit higher, but the results you'll see from such social media marketing specialists will be more than worth it.

Unlike social media management tools, these services offer everything from marketing strategy to paid advertising to improve your overall strategy on social media. Because of this, social media management services vary greatly in cost depending on a wide range of factors, including: Size of your company, how often you plan on posting, type of services you require, which platforms you want to share content on the level of analytics you need and whether or not you'll provide customer service through social media.

When it comes to social media management services, varying costs make it imperative to get a customized quote before you make a decision. To get a good idea of what's out there; take a look at a few tools and services we have reviewed below.

2.2   OBJECTIVES

After the successful completion of this unit, you will be able to:

- Understand social media management tools.
- Plan social media strategy for your business.
- Understand social media measurement & reporting for growing your business.

2.3   SOCIAL MEDIA STRATEGY & PLANNING

Whether you hire a social media marketing service or take advantage of a wide range of tools, you'll be able to transform your strategy from dab to fab without spending too much or wasting too much time. You'll be able to:

- Manage multiple accounts across various platforms
- Analyse social engagement
- Schedule posts in advance
- Receive comprehensive reports of analytics
- Monitor comments and respond efficiently
- Collaborate with team members on content

Irrespective of any additional software or service your company takes advantage of, the ultimate goal of social media management is to save time and improve profits. So how does social media management create specific benefits for your company? Read on.

2.4   INFOGRAPHICS

An infographic (information graphic) is a representation of information in a graphic format designed to make the data easily understandable at a glance. We use infographics to quickly communicate a message in the form of information with graphics. It is a simple way to present large amounts of information in the form of graphics. Infographics are used by all levels of management for high-level views of data. Infographics include bar graphs, pie charts, histograms, line charts, tree diagrams, mind maps, Gantt charts, and network diagrams. Such tools are often components of business intelligence software.

Infographics are great for making complex information easy to digest. They can be helpful when you want to- Provide a quick overview of a topic, explain a complex process, display research findings or survey data, summarize a long report, compare and contrast multiple options, raise awareness about an issue or cause, etc.

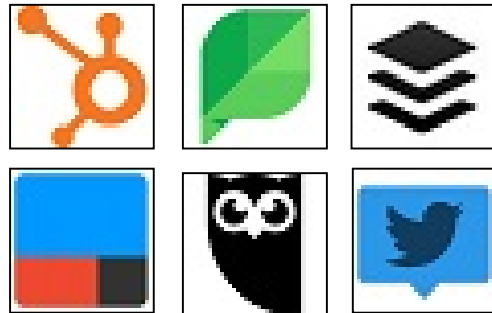## 2.5   SOCIAL MEDIA MANAGEMENT TOOLS

Engaging with your audience through social media is more important than ever. Customers interact with brands via Twitter, Facebook, Instagram, LinkedIn and more, and they expect fast responses and professional outputs. If you are just dipping your toe in the social media marketing waters, do-it-yourself tools are a great way to get started. These platforms can help you manage your own campaigns with simple, comprehensive interfaces designed for the most novice of social media manager.

Social media management tools are often very affordable and many offer free versions to test out before you buy. However, if you want to really make a difference on social media, you're going to need a bigger boat. While social media management tools can help your company increase the quantity of your content, improving the quality of your content is just as important when it comes to engaging your target audience.

Fortunately, social media management services are equipped with the knowledge and resources to manage your social media presence right. Through targeted posting, sponsored ads and a wide range of social media tactics that are far beyond common knowledge. These services can bring your social media game to the next level.

Now you know what social media management involves, its benefits, and the cost factors that will determine what sort of price quote you can expect, here are some examples of the companies that can help you. We've put together a selection of the top social media management tools and services available in 2019.

If you would prefer to be hands-on with your brand's social media, then there are some brilliant tools you can choose, to manage how you go about this. Social media for business shouldn't involve logging into a standard Facebook or Twitter account, just like you would with a personal page. Businesses need to be smarter. Social media management tools can let you schedule updates, manage customer service comments efficiently and learn about trends in how your customers interact with your brand. Some of the best social media management tools include: Buffer, Hootsuite, Sprout Social, HubSpot, Tweet Deck and many more.

If you are confident in your ability to run a successful social media campaign, social media tools will be a great start for growing your business.

2.6   SOCIAL MEDIA MEASUREMENT & REPORTING

Social media measurement, 'social media monitoring' or social listening is a way of computing popularity of a brand or company by extracting information from social media channels, such   as blogs, wikis, news sites   and   micro-blogs   such   as Twitter, social

networking sites, video/photo sharing websites, forums, message boards and user-generated content from time to time. In other words, this is the way to calibre success of social media marketing strategies used by a company or a brand. It is also used by companies to gauge current trends in the industry. The process first gathers data from different websites and then performs analysis based on different metrics like time spent on the page, click through rate, content share, comments and text analytics to identify positive or negative emotions about the brand.

Social Media Measurement process starts with defining a goal that needs to be achieved and defining the expected outcome of the process. The expected outcome varies per the goal and is usually measured by a variety of metrics. This is followed by defining possible social strategies to be used to achieve the goal. Then the next step is designing strategies to be used and setting up configuration tools that ease the process of collecting the data. In the next step, strategies and tools are deployed in real-time. This step involves conducting quality assurance tests of the methods deployed to collect the data. And in the final step, data collected from the system is analysed and if the need arises, it is refined on the run time to enhance the methodologies used. The last step ensures that the result obtained is more aligned with the goal defined in the first step.

Data Acquisition- Acquiring data from social media is in demand of an exploring the user participation and population with the purpose of retrieving and collecting so many kinds of data (e.g. comments, downloads etc.), there are several prevalent techniques to acquire data such as Network traffic analysis, Ad-hoc application and Crawling.

Network Traffic Analysis- Network traffic analysis is the process of capturing network traffic and observing it closely to determine what is happening in the network. It is primarily done to improve the performance, security and other general management of the network. However, concerned about the potential tort of privacy on the Internet, network traffic analysis is always restricted by the government. Furthermore, high-speed links are not adaptable to traffic analysis because of the possible overload problem according to the packet sniffing mechanism.

Ad-hoc Application- Ad-hoc application is a kind of application that provides services and games to social network users by developing the APIs offered by social network companies (Facebook Developer Platform). The infrastructure of Ad-hoc application allows the user to interact with the interface layer instead of the application servers. The API provides a path for application to access information after the user login. Moreover, the size of the data set collected vary with the popularity of the social media platform i.e. social media platforms having high number of users will have more data than platforms having less user base Scraping is a process in which the APIs collect online data from social media. The data

collected from Scraping is in raw format. However, having access to these types of data is a bit difficult because of its commercial value.

Crawling - Crawling is a process in which a web crawler creates indexes of all the words in a web-page, stores them, then follows all the hyperlinks and indexes on that page and again stores them. It is the most popular technique for data acquisition and is also well known for its easy operation based on prevalent Object-Orientated Programming Language (Java or Python etc.). And most important, social network companies (YouTube, Flicker, Facebook, Instagram, etc) are friendly to crawling techniques by providing public APIs Applications.

Social Media Reporting-

A social media report can be anything from a bare-bones spreadsheet listing raw numbers to a spiffy slide presentation packed with analysis. It all depends on the purpose of your report. When you're deciding what to include in your own, ask yourself the following questions:

- Who is your target audience?

- Are you reporting on ongoing results or a specific campaign?

- What information is most relevant in this context?

Your answers will guide how you structure the document. Here is a basic outline to get you started. Consider it the foundation of our social media report template, which you can download for free below. Mix and match the sections to create a custom social media reporting tool that works for your intended audience and needs as follows-

Introduction- Start your social media report with a quick summary of the intended goals, strategy, tactics, and success metrics. This provides context so your readers understand what to expect in the rest of the report.

Success snapshot- Next, provide a quick snapshot of the campaign's performance (or of your monthly or weekly performance, if it's a regular report). This is just a quick overview of the most important results. For example, you might want to list high-level data like total new followers, total engagements, or total website traffic. You'll get into the details in the next section.

Data tracking- This section is all about the numbers. For context, it's a good idea to provide some previous results as well. If you're reporting on a campaign, look for a similar past campaign so you can compare what you achieved. If you're creating a regular weekly or monthly report, track your results compared to the previous several weeks or months so you can start to see any ongoing trends.

The specific data you'll want to include in your social media marketing report will depend on the goals and related metrics that you're tracking, but here are some of the most common numbers to include for each social network:

- Number of posts
- Net followers gain or loss
- Number of likes
- Post reach
- Number of comments
- Number of shares
- Number of page/profile views
- Number of clicks on post links
- Number of clicks on the link in your bio
- Number of story views
- Number of video views
- Top performing post(s)

In addition, you may want to report on the following overall data:

- Number of leads generated
- Number of conversions
- Total revenue generated
- Total spent (on social ads)
- Social share of voice
- Social sentiment

Of course, you can include much more data if it's relevant to your campaign objectives. For a full breakdown of all the numbers you might want to include in your social media report, check out our post on social media metrics that really matter.

2.7   SOCIAL ADVERTISING

Social advertising is the process of creating and deploying clickable ads to reach target audiences through social media platforms, messaging apps, news feeds, and even outside apps and websites. Companies use social advertising campaigns to build brand awareness, generate leads, and/or capture sales revenue. Social advertising is particularly effective at driving engagement and conversions because social media platforms offer a treasure trove of highly specific and actionable user data. Audiences can be defined based on past behaviour, purchase history, and/or how well users match up with target persona demographics and interests.

Targeted audiences may be completely unfamiliar with the brand and/or product being advertised. But the message has a good chance of resonating and getting an immediate response in a data-rich and highly personalized social media environment.

Benefits of Social Advertising-

 Social media permeates daily life. It's where users keep up with friends, interests, and events on a daily basis. In 2018, there were nearly 3.2 billion social media users worldwide, and 73% of Americans were using more than one social media platform. The sheer numbers of people who can be reached through social media platforms is staggering. But there are other benefits, perhaps even more important ones that make social advertising a uniquely valuable investment.

- **Brand Awareness-** Social advertising offers start-ups and small businesses a fighting chance in a crowded, noisy field of competitors. In fact, there's no better way to reach people who would likely be interested in a new product, service, or app based on their individual characteristics, interests, and past behaviours. Likes, shares, tags, and comments can not only create a buzz for a brand or offering in a very short time but also influence user's social networks.

- **Improved Conversion Rates-** By virtue of how and where social advertising appears, and how precisely it's targeted, it's less likely to trigger people's natural resistance to sales. It's also likely to grab users' attention, as they're more actively engaged on social media platforms than with traditional channels. Responding to social ads feels as natural as it is easy; signups downloads, and purchases are just a click away. For all these reasons, social advertising offers one of the highest conversion rates of any marketing medium.

- **Efficient Return of Investment (ROI) -** Social advertising is a relatively low-cost approach that offers ultra-specific user data and unmatched targeting abilities. During the course of their campaigns, social advertisers can easily access and optimize ad performance and count on steadier, more predictable response rates as social advertising propels growth, start-ups can scale quickly on a limited budget.

- **Brand Loyalty-** Although the cost of acquiring new customers through social advertising is relatively low, loyal repeat customers tend to spend more—67% more, on average, than new customers. Social advertising not only keeps brands top of mind for past buyers but also reaffirms their choices and turns them into brand ambassadors who are eager to bring friends and family on board.

- **Marketing Insights-** Social advertisers can measure both brand sentiment and campaign performance via ad impressions and engagement, increases in followers, brand mentions, traffic driven to the website, and leads/sales generated. Advertisers can also see what's working with various target audiences and refine their social ad campaigns and branding strategies in a timely, cost-effective way.

Some Popular Social Advertising Platforms-

Some popular social media advertising channels are-

- **Facebook-** Facebook has the largest user base of any platform (2 billion users) and the largest share of display ads of any social network. It also offers the highest ROI for social advertisers.

- **LinkedIn-** LinkedIn is the world's leading career- and professional networking-oriented site. The platform currently boasts 610 million users, with 4 out of 5 in decision-making roles.

- **Pinterest-** As a hub for wedding, cooking, and fashion ideas, Pinterest has a mostly female user base. Users are free to "pin" ideas they like, including sponsored content, to their own boards for connected users to see and share. A majority of users say they use Pinterest specifically to shop, even if they wait to purchase, and 98% have tried new things they discovered on the platform.

- **Instagram**- Instagram is a highly visual platform with more than 800 million monthly users and 25 million business profiles. Half of Instagram users follow one or more brands, 60% have learned about a new product or service through the platform, and 70% have searched Instagram for a particular business.

- **Google App Campaigns-** Google App Campaigns offers broad reach and visibility. Google takes advertisers' text and creative elements from their Google play store listing to create and deploy ads across a variety of channels including Google search, Google Play, YouTube, websites, and other apps. As of this year, Google App Campaigns has helped drive 17+ billion app installs.

2.8   POINTS TO REMEMBER

- Traditional marketing is becoming less and less effective every minute; as a forward-thinking marketer, you know there has to be a better way.

- Display advertising (banner advertising) is a form of advertising that conveys a commercial message visually using text, logos, animations, videos, photographs, or other graphics.

- Social media management is the process of creating, scheduling, analyzing, and engaging with content posted on social media platforms, like Facebook, Instagram, and Twitter.

- An infographic is a collection of imagery, charts, and minimal text that gives an easy-to-understand overview of a topic.

- Some of the best social media management tools include: Buffer, Hootsuite, SproutSocial, Hubspot and TweetDeck.

2.9   GLOSSARY

- Infographics- An infographic (information graphic) is representation of information in a graphic format designed to make the data easily understandable at a glance.

- Social advertising- It is the process of creating and deploying clickable ads to reach target audiences through social media platforms, messaging apps, news feeds, and even outside apps and websites.

2.10   CHECK YOUR PROGRESS

Descriptive type questions-

a)   Why are infographics used?

b)   How can social media benefit your business?

c)   How much does Social Media Management cost?

d)   How a good social media strategy benefits your business?

e)   Design a plan to measure Facebook marketing done by you for the desired growth of your business.

2.11   BIBLIOGRAPHY/ REFERENCES

- https://en.wikipedia.org
- https://www.bigcommerce.com/blog/affiliate-marketing/
- https://venngage.com/blog/what-is-an-infographic/
- https://www.consumeracquisition.com/faq/what-is-social-advertising/
- https://sproutsocial.com/insights/topics/social-media-analytics-reporting/
- https://blog.hootsuite.com/social-media-report-template-guide/

2.12   SUGGESTED READINGS

- Alalwan, Ali Abdallah, et al. "Social media in marketing: A review and analysis of the existing literature." Telematics and Informatics 34.7 (2017): 1177-1190.

- Ryan, Damian. Understanding digital marketing: marketing strategies for engaging the digital generation. Kogan Page Publishers, 2016.

- Montalvo, Roberto E. "Social media management." International Journal of Management & Information Systems (IJMIS) 15.3 (2011): 91-96.

- Miller, Amalia R., and Catherine Tucker. "Active social media management: the case of health care." Information Systems Research 24.1 (2013): 52-70.

- Fiore, Anthony, and James Klein. "Internet-based digital promotion system." U.S. Patent Application No. 09/948,230.

UNIT- 3

BLOG WRITING

3.1   INTRODUCTION

Blog is an abbreviated form of "Web log" published on Internet. It is a kind of discussion or informational board which is frequently updated. Blog is a place where writer of the blog (blogger) writes or share their views on any topic. In other words, a blog is a type of website that is updated regularly with new contents. Most blogs contain short, informal articles called blog posts. These posts usually contain some combination of text, photos, videos, and other media. At its end, a blog is just a space on web
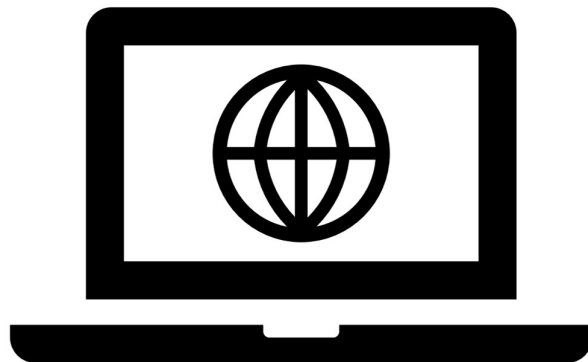
that you can create to record and express your opinions, experiences, and interests.

Some of the most-read blogs are seems online magazines because they are written by a team of people paid or free of cost to update the blog with new posts several times. However, a majority of blogs are written by one person. As a result, the average blog is fairly personal, reflecting the interests and personality of the person who writes it. Several types of bolgs are more popular, such as- Personal Blogs, Parenting Blogs, Fashion Blogs, Food Blogs, Artist's Blog, News Blogs, Political Blog, etc.

Why Blogs?

Some bloggers consider blogging as a hobby, but not all. Blogging can be a fair medium of earning while sharing your experience and knowledge with others. As many bloggers spend several hours each week writing blog posts, replying to comments, and more. There are many reasons why people write blogs. Some of the common reasons are-

- Writing a blog open up a world without borders.

- To share your experiences and expertise with others.

- To increase traffic for your website.

- To increase your SEO level.

- To position your brand as an industry leader.

- To develop better customer relationships.

3.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Differentiate between blog and website.

- Create your own blog.

- Customize your own blog.
- Know the various types of blogs.

3.3   BLOG, BLOGGING AND BLOGGER

As mentioned in the introduction part of this unit a blog is a kind of website where a blogger publishes/share information frequently. Nowadays, with the exponential growth of the Internet, more and more people have started to write online content; one of the popular mediums is to write blogs. Thousands of bloggers around the world have created a large audience group, followings and earning good amount of money. The objectives behind writing a blog is to share information about a variety of things, their day to day happenings, tips, and tricks or even professional articles that help them promote their businesses online.

A blog is a versatile platform for all their users because of its broad range of uses. It enables you to have an online presence which makes it incredibly easy to connect with readers and gather the opinions of the people as well. A blogger is a person or a group of people who writes and maintains a blog. The process of writing a blog is called blogging.

3.4   BLOG VS. WEBSITE

A blog is basically a list of articles (blogs) which is generally presented in chronological order. In blogs the recent content is shown first. Anyone can create a blog with the help of the following service providers, e.g. WordPress, Blogger, etc. Blog is a kind of personal online journal which is updated frequently and intended for public attention and usage. Basically, blogs have proved as a good medium of advertisements for an organization's website.

On the other hand, website is much broader which includes several pages and more flexible in terms of facilities. A website can be customized as per the demands of its owner/client. It is constructed under a single domain name and also consists of several pages (web page), all the pages are interconnected to each other.

S. No.	Blog	Website
2	Blogs are regularly updated with new content, which is displayed in reverse chronological order (newer posts first).	Typical websites are static in nature where content is organized in pages, and they are not updated frequently.
2	A blog is dynamic, and it is usually updated more frequently. Some bloggers publish multiple new articles a day.	A website can be static or dynamic. A static website cannot be updated frequently. Whenever you want to update its content you need to contact to your website developer, where as in dynamic websites this facility is given to the website owners/admin.
3	Blogs can be part of a larger website. Often businesses have a blog section where they regularly create content to inform and educate their customers.	Generally, in medium and small size websites, they do not maintain their own blog. If anyone wants to update their blogs it is good habit for their business.
4	All blogs can be a website or part of a website.	Not all websites can be called blogs.
5	Blogs have articles that are organized using categories and tags.	Websites use pages to organize and display content.

3.5   TYPES OF BLOGS

- **Personal Blogs-**

Personal blogs are those kinds of blogs where blogger shares his/her experiences, feelings, and innermost thoughts with audience. Some personal bloggers focus on particular interest, such as a hobby, some focus on something they are passionate about and some others focus on their struggle, etc.

- **Parenting Blogs-**

Readers of parenting blogs are willing to improve the parenting skills. These types of blogs are basically involved in social activities related to parents guiding principal, such as- kid's activities, kid's food, early education at home, etc.

- **Fashion Blogs-**

Fashion blogs are one of the most popular types of blogs on the internet. Fashion bloggers get invited to major events and also receive special perks in some cases.

- **Food Blogs-**

Food blogs are an attraction place for food lovers. It also attracts readers interested in recipes, ingredients, healthy eating, fine dining, and other food related stories.

- **Affiliate Blogs-**

Affiliate blogs are those where bloggers generate affiliate marketing commissions. Instead of promoting their own products, they write blog posts for others and get good earning. This is a kind of freelancing where someone can work freely from anywhere, anytime.

- **Artist's Blog-**

An artistic blog focuses on any type of art that the artist creates, such as paintings, drawings, sculpture, music, photography, writing, etc.

- **News Blogs-**

News blogs are those where blogger creates handful amount of daily news and generates huge visitors. These blogs are popular around the world.

- **Political Blogs-**

Political blogs specially cover news on politics, analysis of political news, opinions about political parties, etc.

- **Travel Blogs-**

Travel blogs are useful for travel tips, advice, and destination guides. Nowadays, they are becoming more popular due to cheap air travel and people are traveling more than ever.

- **Sports Blogs-**

Sports blogs may include sports related activities such as various sports, sports organization, general fitness, athletes, etc.

- **Finance Blogs-**

Financial blogs are about financial advice to manage our finances efficiently and effectively. Such blogs cater financial management, investment awareness, best investment options, etc.

- **Lifestyle Blogs-**

Lifestyle blogs are one of the popular types of blogs on the Internet. Lifestyle blogs have variety of readers; such readers are interested in culture, arts, local news, politics, etc.

- **Entertainment blogs-**

Entertainment blogs has a wide range of audience who search for enjoying videos, trending music, etc. These kinds of blogs are more popular among youngsters.

- **Freelancers' blogs-**

Freelance bloggers are those who are paid for providing services. If you are looking for a way to get paid for writing as a service and have experience in blogging, freelance blogging is the way to earn good.

3.6   IMPORTANCE OF BLOG

- Blogging improves search engine rankings.
- Blogs are trustworthy & informative.
- Blogs are expert's expression.
- Blogs are entrepreneur's platform.
- Blogs refine your thoughts.
- Blog rewards.
- Blogs open up a world without borders.
- Blogs provides opportunity to learn.
- Blogging is easy.
- Blogging develops communication skills.
- Blogging helps to develop and strengthen relationships with your customers.
- Blogging connects people to your brand.
- People trust over blogs.
- Blogging drives traffic for your website.
- Blogging encourages internal links.
- Blogging is essential for successful social linkages.

3.7   HOW TO CREATE A BLOG

You can create your own blog with any of the following e.g. Blogger, WordPress, Tumblr, Weebly, Joomla, Yola and Contentful. Here is the step-by-step process of creating blogs with "blogger.com", which is a popular platform to create a blog. The blogger.com is a Google's product, which is also known by the "blogspot.com". As- (Fig. 3.1 blogspot.com)

Fig. 3.1 blogspot.com

Step 1- Type the "blogger.com" in your browser's address bar and press enter key. (see fig 3.1)

Step 2- Click on "create your blog" button. (See the fig. 3.1)

Fig. 3.2 Create login for blog creation.
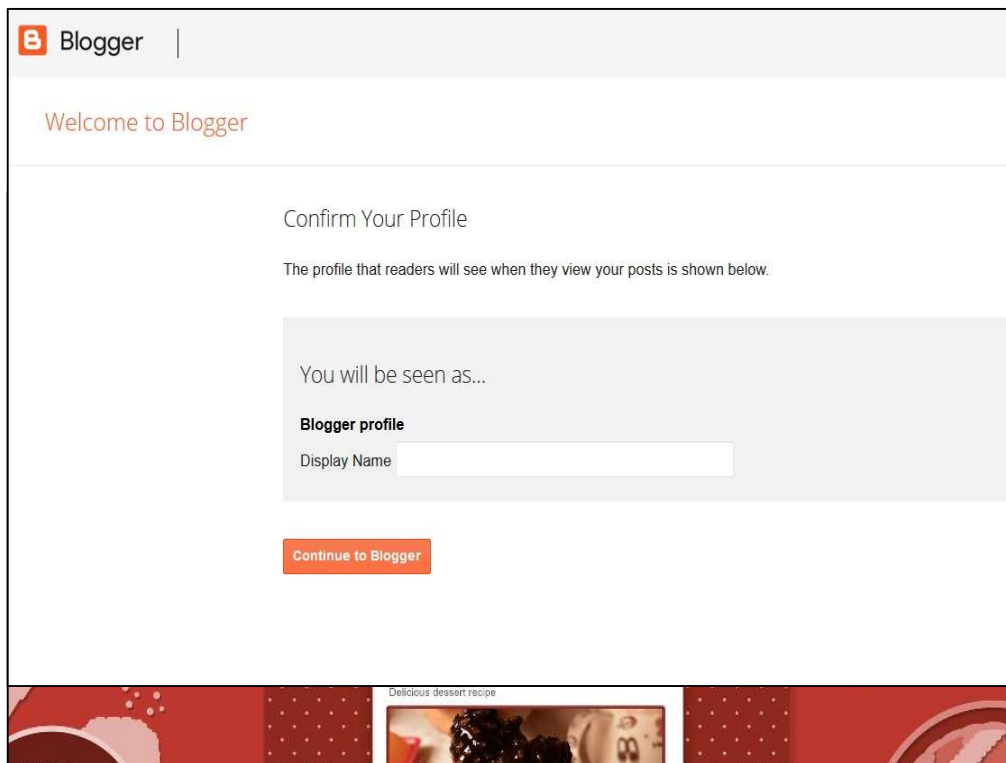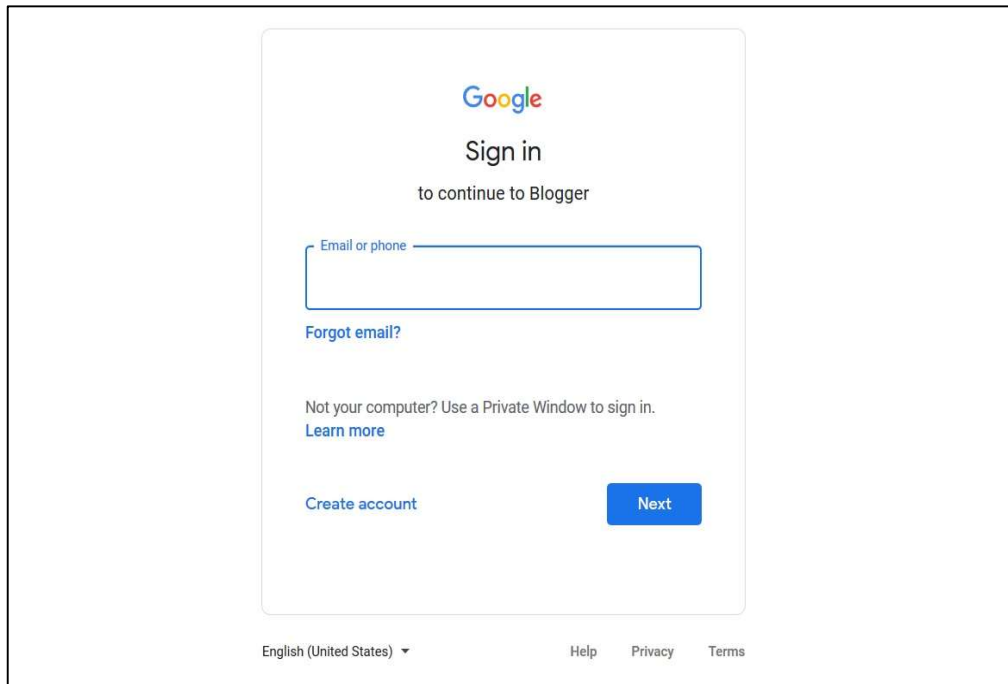
Fig. 3.3 Create blog.

Step 3- Put your google ID and password (if you have a google account, such as gmail account). If you do not have any google account than click on "create account" link displayed on the fig. 3.2.

Step 4- Please type the name of your blog profile in the "display Name" box, which you want to display in the blogger profile. For example- Vocational School. (see fig. 3.3)

Step 5- Now click on "Create New Blog" button to create a new blog. See the figure.
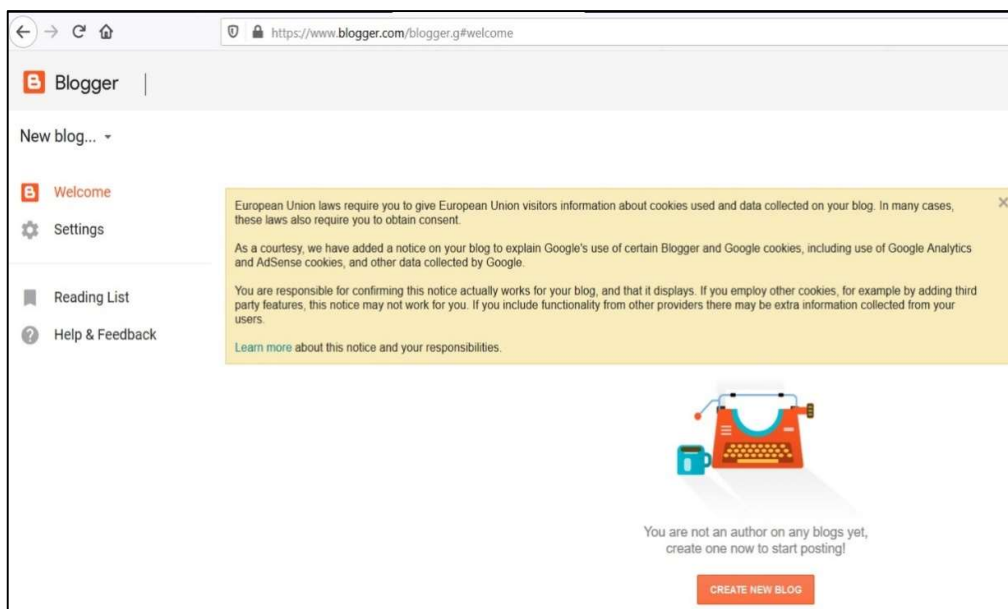
Fig. 3.4 Blog settings.

> *Note: For example*
> Title- *School of Vocational Studies, Uttarakhand Open University, Haldwani*
> Address- *VocationalStu (the complete address of your blog is-VocationalStu.blogspot.com)*
> Theme- *You can select as per your choice.*
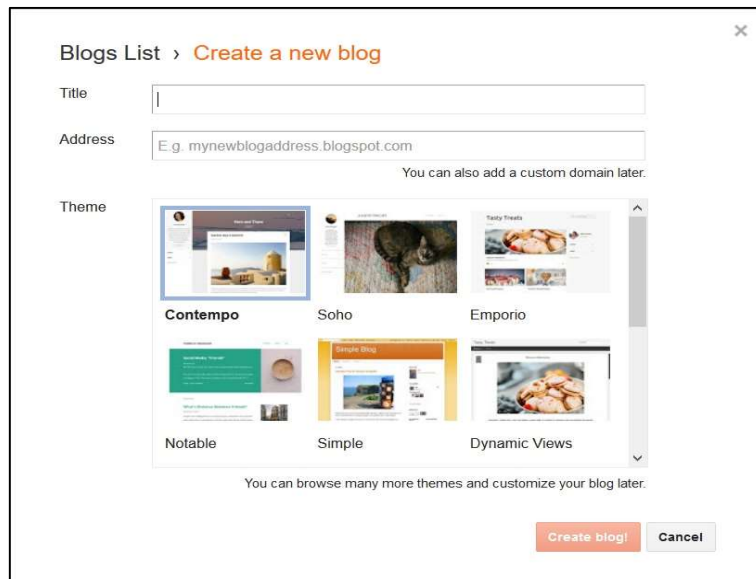
Step 6- Type the title of your blog, name of your blog (blog address) and select the theme for your blog, then finally click on create blog button, as shown in the figure.

Fig. 3.5 New Blog created and select theme.
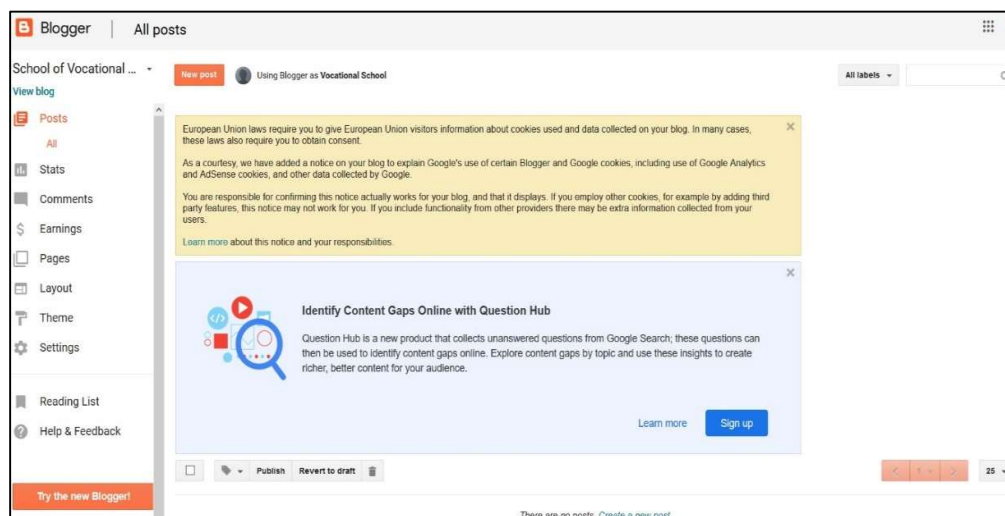
Step 7- Now, finally your blog has been created. You can enjoy blogging and can customize your blog. See the figure.

Fig. 3.6 Blog customization settings.

3.8   BLOG CUSTOMIZATION

- Create new posts-

    You can create new posts after clicking on "New Post". Also, can customize your post as- font style, font colour, add html and etc.

- Comments-

    You can view comments and can organize them.

- Add more pages-

    You can add new pages to expand your blog, and can design each page as per your choice.

- Change the layout

    This facility is very useful for any blogger, you can adjust the blog layout as per your choice.

- Change theme

    There are too many themes, you can select the theme which you want to use.

- More settings

    For better management and customization of your blog, there are few more settings available.

3.9   OPEN-SOURCE PLATFORMS FOR CREATING BLOG

This is easy to use and you can do much more with the WordPress software itself. It provides the facility of plugins, custom themes, theme modifications, etc. You may download it from WordPress.com

Blogger-

It is a Google owned platform that doesn't require any technical skill to use. Like WordPress.com, it is as basic as blogging gets. It has many built-in tools, called widgets. Blogger has fewer features, templates, and expansions to enhance site design than WordPress. Blogger can be an ideal choice for the absolute beginners. You may create your own online blog as described in this unit.

Joomla-

As a robust Content Management System (CMS), Joomla has a lot to offer bloggers in general. Video can be embedded in a blog post or added using an extension. Creating a blog in Joomla is as easy as making a section on a Joomla site called "blog" and adding content. You may download from joomla.org

Drupal-

Drupal is another popular Content Management System (CMS) and has the flexibility to be used for blogging by enabling the Blog module. The use of content boxes in Drupal makes it

ideal for displaying videos and video thumbnail images while also including other types of content. You may download from drupal.org

Medium-

It was developed by the creators of Twitter and designed to be as low-maintenance as a blog can get. Its tagline is "Everyone's stories and ideas" which reflects that this blog software was created for everyone. Posts to the Medium are published using your Twitter account on a standardized template with no customizations. This can be a drawback for bloggers who want more control. It offers an interface that is easy for readers to navigate. You can start your blog with medium.com

3.10   POINTS TO REMEMBER

- First plan your blog post, create an outline, conduct research and check facts.

- The headline of a blog post needs to be creative and magnetic; it should be able draw the attention of the readers.

- After writing initial draft of your blog, you must proofread it.

- Must consider the length of your blog. It should not be too lengthy.

- Put down better sense of readability by breaking it up into subsections.

3.11   GLOSSARY

- Joomla- Is a robust Content Management System (www.joomla.org)
- Drupal- Drupal is another popular Content Management System (www.drupal.org)
- Medium- It was developed by the creators of Twitter and designed to be as low-maintenance as a blog (www.medium.com).
- Blogger- It is a Google owned platform that doesn't require any technical skill to use (www.blogspot.com).

3.12   CHECK YOUR PROGRESS

Descriptive type questions-

a)   What do you understand by blog? Explain.

b)   How to create your own blog for business promotions.

c)   List the difference between website and a blog.

d)   Write down the importance of blog.

e)   How many types of blogs are available in the web? Write down about five most notably known blogs.

3.13   BIBLIOGRAPHY/ REFERENCES

- Available at- https://www.bloggingbasics101.com/how-do-i-start-a-blog, Accessed- January 17, 2020

- Available at- https://www.lyfemarketing.com/blog/what-is-a-blog-website, Accessed- January 17, 2020

- Available at- https://firstsiteguide.com/what-is-blog, Accessed- January 19, 2020

- Available at- https://john.do/blog-blogger-blogging, Accessed- January 19, 2020

- Available at- https://startbloggingonline.com/what-is-a-blog-definition, Accessed- January 19, 2020

- Available at- https://firstsiteguide.com/what-is-blog, Accessed- January 20, 2020

- Available at- https://makeawebsitehub.com/what-is-a-blog, Accessed- January 20, 2020

3.14   SUGGESTED READINGS

- https://businessnamegenerator.com/how-to-start-a-book-blog/

- https://www.magnet4blogging.net/books-for-bloggers/

UNIT- 4

IMAGE EDITING TOOLS AND INFOGRAPHICS- I

4.1   INTRODUCTION

Dealing with digital promotion strategies we are already aware of various tools and freelancing techniques. In order to strengthen your digital presence, image editing tools and Infographics have proved to be quite useful. It is an effective medium through which you can channelize product to the target audience i.e. your consumers.

In this digital age, the consumer is increasingly sensitive in terms of choosing and selecting the product. The promotion of your idea, concept and product to the consumer is crucial. Many competitors are also making entry into the market on regular basis. Infographic tools here have come in rescue and are making serious impact on the market within a short period of time. It is already a leading tool in digital promotion strategy for effective and smart use of images.

4.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Know about image editing tools.

- Learn how to edit images effectively.

- Understand about Infographics.

- Understand the effective use of infographics in digital promotion.

4.3   NEED OF IMAGE EDITING TOOLS

Images play a significant role in business plans, strategy and promotion. In this digital age, the ocean of knowledge flows constantly. People have an attention of merely nine seconds and get easily distracted by another image. The processing of brain is also very fast it can't read all the textual contents; rather it is desired to be confined within words or simply an image.

Why PPT, presentation board, chat board are in market? The answer is bit simple to be precise, to be smart and to be presentable. So, in simple words images are far more effective than textual contents. One diagram or a flow chart or a design can speak more than volume of textual information.

Some reasons why image editing tools are needed are as follows:

- To present data effectively.

- To depict the concept smartly.

- To convey message, idea or product within a short period of time.

- To channelize products in the digital market quickly.

Image editing is not as hard as it seems rather its way easier. Using effective tool to edit images is the basic understanding of this unit. We will learn how to select, edit, reshape, crop an image in the later part of the unit. Playing with the colours, brightness, contrast and saving the image to various formats will make this unit interesting.

4.4   POPULAR IMAGE EDITING TOOLS

Image editing is a big world and now many are making their impactful presence with the help of these tools. It starts way back with Windows in-built tool such as Photoshop, Corel draw, Adobe illustrator, Paintshop pro, Photopea, ACDsee, Polarr, Auro HDR and the list goes on. The basic concept of image editing tool is to reshape or garnish the image, so that it can draw viewer's attention, convey the message and ensure the outcome. This is how all Image editing tools work. Microsoft Word Standard 2016 and all the latest text editing tools are also equipped with the basic image editing features. Online libraries are also helping users to play effectively with image editing. Most image editing tools also assist in social media management like Facebook, twitter, Instagram posts.

Some popular images editing tools are:

- Canva
- PicMonkey
- Pixlr
- Snappa
- Pictochartetc

Canva	• Supported with a huge template
PicMonkey	• Touch up specific photo with new effects
Pixlr	• very similar to Photoshop, all facilties of paid Image tool
Snappa	• countless stock photos & icons
Pictochart	• more focused on infographics

Fig. 4.1: The popular image editing tools with specific functionality.

4.5   HOW TO USE FREE IMAGE EDITING TOOLS?

Image editing tools are diverse in nature broadly classified into free and paid versions. The basic functionality of free online image editing software's are just like paid professional software's i.e. adding filters, frames, social media support, etc. and providing real feel of professional graphic designer. In most of cases there is no registration and one can use it on desktop, mobile or even on tablets.

We are going to confine ourselves with popular free online image editing tools available in market: Pixlr.com, Befunky.com, Online-image-editor.com, Lunapic.com, Fotor.com, Fotojet.com and etc. Let's take them one by one.

Pixlr.com-

This site is available in two formats, webapp or mobile aap. There are 4 versions available i.e. Pixlrx, Pixlr Editor, Pixlr Pro and Pixlr Express. With the help of stock search, one can find the desired image and then use the editor facility in details.
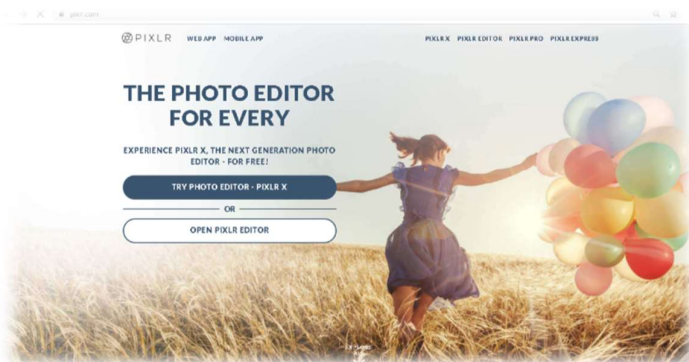
Fig. 4.2 Pixlr software

Befunky.com-

This is another image editing tool available online for free. The uniqueness of this software is cartoon, oil painting and pop art effect. The four features of every Image editor are: Crop, Exposure, Saturation and Sharpen.

They are effectively addressed into this freeware. After finishing the editing, one can save directly to Facebook, Dropbox, Twitter and Pinterset formats.

Online-image-editor.com-

This online image editor software is another free online editing tool available on net. This is quite popular in terms of dealing animated gif. The predefined animation is another feature that makes it bit different from others.
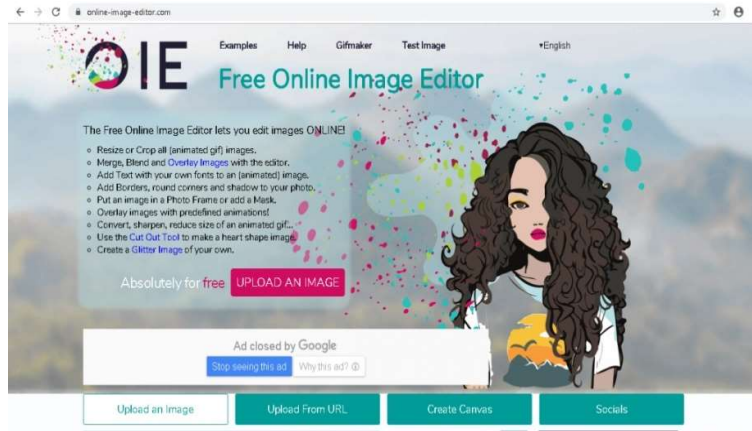
Fig. 4.3 the online Image editor software

Lunapic.com-

This software is a freeware and available on net free for all the users. The friendly approach of tools like transparent, paste, blend, effects like 200+ filters, country flags, Fairy, picasso art effect and compatibility with Twitter, Facebook, Pinterestare are some distinguished features of this Lunapic Image editor.

Fotor.com-

This free image editing tool has thousands of professional templates to start with. Countless
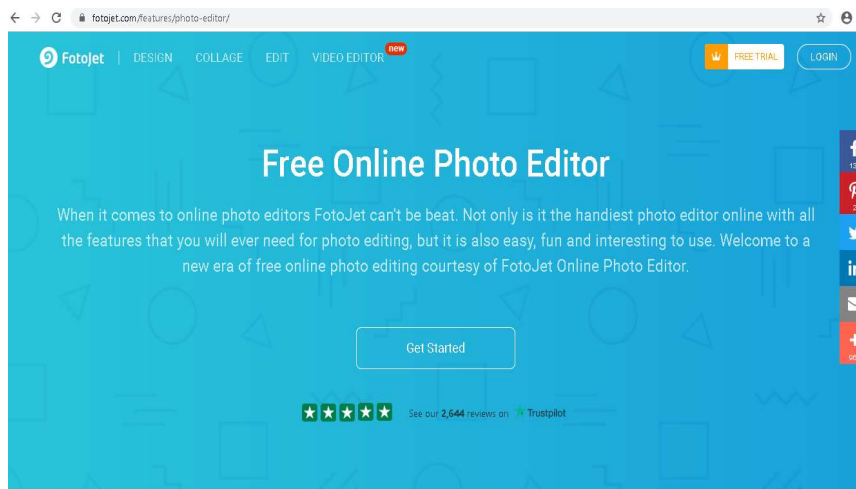
pretty stickers, portrait retouching, HDR photography are some specific tools. Fotor also provides tutorial and guidebook for new users to help them edit images effectively.

Fig. 4.4 Fotojet free image editing software

Image2go.com-

This online image editing tool is popular in nature with both features of image and video editing. Basic features of graphic designs are available like logo design, Facebook covers, Magazine and brochure covers, infographic makers, photo collages based on occasions. Photo editing tools like radial and shift, overlays, colour splash and Vignet makes it an exciting tool. Fotojet is also equipped with tutorials and tips for image editing. Popular templates like YouTube Banner, Facebook cover templates are some interesting features of this software.

4.6   IMAGE EDITING FEATURES

The basic premise for any image editor or professional graphic designer is to play with the features of image editing tools. We will discuss these editing tools one by one.

- **Selection**- The selection tool is used to isolate a part of image. With the help of mouse/marker one can select a part of image. Once selection is made for an image, a square selection outlines appears which shows that a particular portion of any image is selected for further editing.

- **Working with layers**- This option is helpful in dealing with multiple elements within an image. Layers are basically a transparent part on which image effecting is likely to be done. Layers are basically a segment on which any object or image can be placed. It is like separation of elements in any image where a particular effect can be applied. Layers can also be merged after finishing all the image editing.

- **Image size alteration**- It deals with the image size or resizing of any existing or new image. The size of image is very crucial in various platforms like high resolution images or social media images. There are certain crop tools that deal with the cropping or resizing of existing images. Image size can also be worked out while working with new file. Image scaling is an important matter for posting the images on social media also.

- **Removal of unwanted elements in picture**- This feature of image editing helps in removing the unwanted element like wire, people or object at the back of the subject. The clone is an effective tool for the same. Background remover, blur effects are some utilities through which one can get the desired image instantly.

- **Dealing with colours**- This is the most interesting feature of photo editor. Playing with colours from black and white to a huge spectrum of colours. Replacing existing colour with a desired shade of colour, fill the colour in the entire selection, to colour the

background, particular fill, change the text colour, working with texts in different layers are some of the interesting features of any image editor.

- **Special effects**- There are many ways through which one can make an ordinary picture extraordinary. Use of special effects makes any shot appear more attractive. Day shots can be changed to night shots. Filters, sketch, painting and water colour are some popular after-effects to decorate images.

This is all about the image editing. How to reshape the image effectively by changing the colours, brightness, contrast, size or crop, and use of various filters and after effect are the things that we have learnt so far. Now, the next level is Infographic – a combination of information and graphics.

4.7   INFOGRAPHICS

 The term" infographics" has been in use from the last ten years yet it is an unfamiliar word in the day-to-day life for some. It is a combination of two words information and graphics.

Information + graphics = Infographics

In simple words, it is the representation of the information or data into graphics format. Since, image plays crucial role in the flow of information or data, the graphics speaks a lot. Hence, it is being used widely in professional environment, schools, colleges and now across the web.
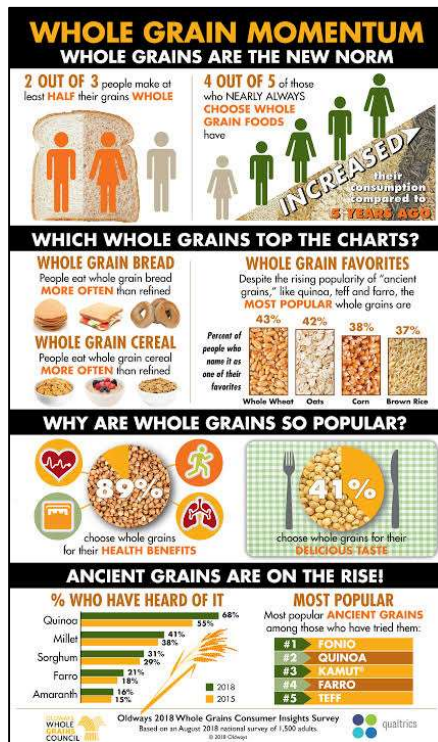
According to Oxford dictionary, infographics refers to the visual representation of information and data. For example, if we take an example of whole grain momentum as develop by whole grain council, this infographic speaks a lot. It talks about the whole grain intake on the day-to-day basis. It also tells us about the increase in demand.

The graphic shows that favorite whole grains are whole wheat, oats etc. Why the whole grains are so popular is also covered in this infographic chart and the rise of ancient whole grains is also the part of a single chart. The whole idea of depicting this infographic knowledge is that from a single chart, the survey of 1400 people is available to one and all.

Fig. 4.5 (Source: https://wholegrainscouncil.org /newsroom/infographics)

In brief, we can say that infographic is a tool for presenting important data or information on personal or professional platform with an ease of understanding of the subject. Sometimes, it is hard to make the presentation of complicated topics like rise of a particular share, functionality of a typical algorithm, knowledge of spirituality etc. Here, infographic comes handy in expressing the entire set of data in a particular chart.

Why use infographic in Marketing?

Some reasons to use Infographics in marketing are:

- **To display new or existing product effectively**- The XYZ company has come out with a new set of product range and they want to present the products to the audience. Here they can use infographics very effectively.

- **To make audience aware of an issue or a cause your company is working on**- There can be a buzzword like Namami Ganges project or awareness regarding the malnutrition or any health problem. One can explain it very easily with the help of infographics.

- **To quickly glance a topic or subject**- Suppose, students are learning computers in their certification program. One can come up with an infographic on the development of the technology or it can be an infographic journey of hardware, software, operating system, etc.

- **To summarize a complex study in short**- There are many subjects which are complex in nature like dealing with a particular operation or to solve a complex algorithm. This can be easily sort out by creating an infographic of this particular complex study. For example, infographic on the effect of demonetization in India or the failure of UK in Brexit summit.

- **Effectively display a qualitative research**- This can be another aspect where infographic can be of great help to us. After a long 5 -6 years of research, one is likely to summarize his/her entire efforts in brief here Infographics can be put in use.

Infographics will surely help students remember subjects for their examination. Governments can use infographics about the various schemes, consensus and other efforts they made for the welfare of the community. Project conception, deadline and the delivery can also be produced through Infographics. Story telling is also a good example where we can use infographics effectively. However, a question arises, i.e. who can use Infographics?
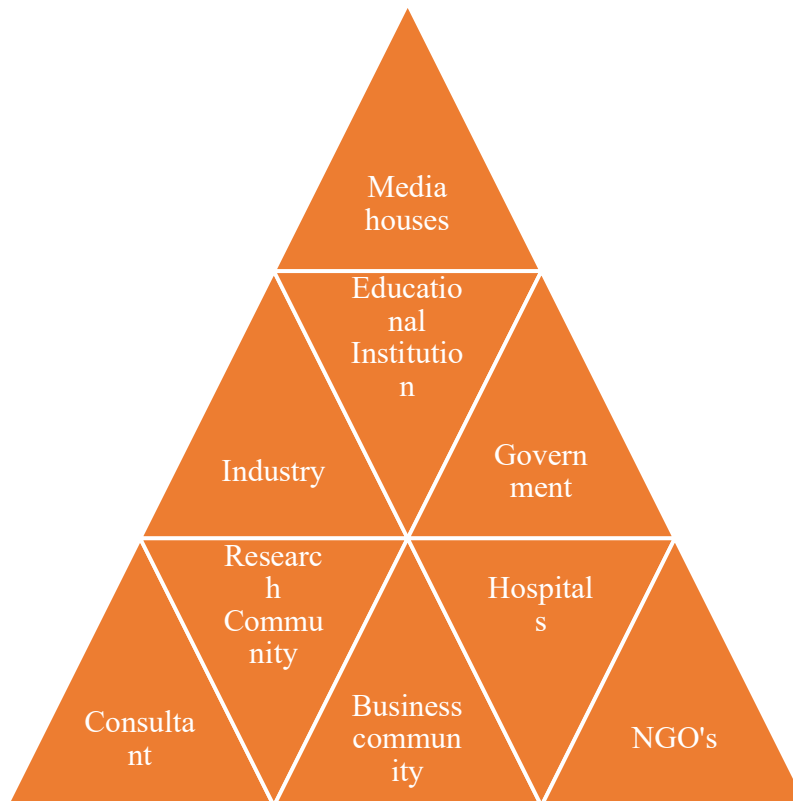
Fig. 4.6 Various members of society who can use infographics.

Types of Infographics-

Basically, we can categorize infographics on the basis of their uses:

- If we are dealing with statistical data, analysis and finding of some survey report, we can use statistical infographics. Example: the data of pulse polio cases in India can be easily summarized with this tool.

- When a student or an employee or a company is likely to come up with a new product or technology or an algorithm, then Informational infographics can be of best option. Example: A new product of Car or a Watch is likely to hit the market; the company can produce information about the car or watch through infographics.

- If some student is likely to talk about historical facts, or an employee likes to put the historical annual reports at a glance, then the best option of infographics is timeline infographics. Example: development of a particular make of computers on time frame. The technological development of communication technology can also be a part of this infographics.

- When someone is describing a process of any product or the end result then he or she can use process or product infographics. Example: The Heisenberg principle, the

development process of a washing machine is an example of the process or product infographics.

- If someone is comparing two to three products on a time frame, then Comparison infographics can be used. Example: comparison of various FMCG products, quality of news in TV channel, comparison of commodity products.

Infographics can be further classified as-

1. **Information channelizing infographics-**

   Infographics producing meaningful information for a client, or a company or a competitor can be placed under this category.

   Example: The star war or eating habits of the students, Brain drain in Uttarakhand, and jobs availability in a particular technology.

2. **Data representation infographics-**

   The scope of Big Data is enormous and we get data from various resources on second's basis. Various charts like pie chart, bar chart, set of tables, figures; percentages are the prominent elements of data representation infographics.

   Example: The sales figures in the various quarters may be boost for next year planning and business strategies and the data about the competitors can also help the company in designing and producing a product.

One can ask how about the various infographics style?

Basically, the infographics styles are: static infographic style, animated infographics and dynamic infographics. Static infographics are used as editorial infographics and statistical infographics whereas dynamic or animated gifs are used to represent the process infographics or product detailing aspects. In some places, one can also find an Interactive infographic where the audience can make selection to view the information graphically.

Best online tools for infographics-

Data storytelling is on from last one decade and the popular free software supporting infographics are as follows:

- www.venngage.com

- visme.co

- Mural

- hubspot.com

- Piktochart.com

All these websites provide bunch of templates through which one can pick the style, theme, colours and messages.

How do I can create my own infographic?

The basic idea behind developing any infographic can be:

- **The purpose, process or product**: what for this infographic is all about?

- **The use of pics, data and supportive data**: Relevant data storytelling with the help of figures, facts, compiled data or supportive comments, survey, etc.

- **Info about the uniqueness of the product**: The basic identity, keywords, conceptual elaborations, etc can be used over here.

- **Comparison with competitors**: The basic limitations of the competitors, their business strategies and your identity can play over here.

- **Choose between static, dynamic or interactive style options**: The nature of the infographics will be the key to prefer a particular type of infographics.

4.8   POINTS TO REMEMBER

The basic aim of this unit is making student aware of the various available image editing tool. With the help of some free online editing tools one can edit, crop, touch and resize the image effectively. The hand on experience on the image editing tool will be an advantage for the student to develop an infographic effectively. Many free online image editing tools are available on the cyberspace like Pixlr, Befunky, online image editor, Lunapic are available and one can use it effectively with ease. This unit also talked about the concept of infographics, utility and their better uses. The popular online free info graphics are Vennage, Visme, Mural, hubspot, etc.

4.9   GLOSSARY

- Digital story telling- A medium through which a user can narrate story digitally with the help of any digital media like images, videos, audios etc.

- HDR photography- High-definition range of photography. It is a set of images with dynamic set of luminosity for standard image editing.

- Webapp- A client server program that runs in a web browser with the help of URL. It is short form of a web application.

- Mobile app- The mobile app is an application designed for the wireless and small devices like mobile, tablets, smartphones etc.

4.10   CHECK YOUR PROGRESS

1. Explain the utility of image editing tool.

2. Explain the popular image editing tools available online.

3. What are the basic features of image editing tools?

4. Why we use infographics in marketing?

5. What is the basic classification of infographics?

6. Name few people/agencies who can use infographics for the promotion of their businesses.

7. What are the factors one can keep in mind while creating an infographic?

Descriptive type questions-

a)   Explain in brief about the use of image editing tools.
b)   What are the basic features of any image editing tools? Explain any two features in details.
c)   What do you understand by infographics?
d)   How are infographics effective in marketing?
e)   Write a descriptive note on the classification of infographics.
f)   What do you understand by special effect in Image editing?

4.11   BIBLIOGRAPHY/ REFERENCES

- https://www.techopedia.com/definition/7686/image-editing

- https://helpx.adobe.com/in/acrobat/using/edit-images-or-objects-pdf.html

- Justin Beegal, (2014), "Infographics for dummies", John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, New Jersey

- Leanne Schinkel et. Al.(2012),"Digital photo editing project",Canada, http://www.gov.pe.ca/photos/original/4h_photoed.pdf

- OraneVelarade (2018),"Follow 10 basic elements of designs for infographic mastery", https://visme.co/blog/design-for-infographics/

- Randy Krum, "Cool infographics, effective communication with data visualization and design", John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, New Jersey

- Steven Snell, (2018), "45 Photoshop editing tools", https://www.vandelaydesign.com/photo-editing-tutorials/

4.12   SUGGESTED READINGS

- Storytelling with Data: A Data Visualization Guide for Business Professionals, Cole NussbaumerKnaflic

- Infographic Guide to Literature (Infographic Guides), Joanna Eliot

- Cool infographics, https://coolinfographics.com/book

UNIT- 5

IMAGE EDITING TOOLS AND INFO GRAPHICS- II

5.1   INTRODUCTION

5.2   OBJECTIVES

5.3   DIGITAL TERMINOLOGIES

5.4   ESSENTIAL OPERATIONS ON PHOTO EDITING

5.5   INFOGRAPHICS AND ITS ROLE IN DIGITAL PROMOTION PROCESS

5.6   VISUAL ELEMENTS OF INFOGRAPHICS

5.7   TECHNIQUES FOR PHOTO EDITING

5.8   TOOLS USED FOR IMAGE EDITING

5.9   POINTS TO REMEMBER

5.10   GLOSSARY

5.11   CHECK YOUR PROGRESS

5.12   BIBLIOGRAPHY/ REFERENCES

5.13   SUGGESTED READINGS

5.1   INTRODUCTION

Whether you are beginner level learner, intermediate level learner or the expert level learner, the quote "a picture is worth thousand words" is always fit in all cases of learning. In the learning track when images are concerned the objective is achieved very timely. Also, in the area of digital promotions this phenomenon is also utilized by using images to promote the product and services where images are given more priority rather than merely depending on the words.

5.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

* Understand what are digital terminologies.
* Use photo edition operations.

- Understand the common image editing and manipulation operations.
- Understand the role of infographics in digital promotion process.
- Know various common tools used for photo editing purpose.

5.3   DIGITAL TERMINOLOGIES

Pixel: Small squares which collectively form a digital photograph are known as pixels. Pixels are the smallest unit of the image.

Resolution: Resolution is the amount of information in a digitally captured image measured in pixels. In this sense, the higher the number of pixels, the higher the resolution of the picture.

Compression: The process of shrinking the size of original image to its fraction of its original size is called compression. This is used for variety of purposes such as transferring images from one place to another, creating more vacant space in the storage devices etc.

Lossless Compression: It is a compression scheme in which no bits of information are permanently lost. This mechanism does not provide much compression and files remain very large.

Lossy Compression: It is a compression scheme in which some bits of information are permanently lost during compression and decompression of an image. Because lossless compression is not practical in many cases, all popular digital cameras offer a lossy compression.

File Format: It is the manner in which a file is constructed or in which a scanned picture is saved. A format is the pattern of ones and zeros in a file as created by a program using a specific set of rules to write that pattern.

Digital Zoom: The process of magnifying an image by spacing out pixels electronically is called digital zoom. It is very little different from blowing up an image to a larger size using a software program on a computer.

5.4   ESSENTIAL OPERATIONS ON PHOTO EDITING

Storing a photograph in digital form is not a full stop on operations on images. Editing or manipulating in the digital photograph with a photo-editing program is the main part of image operations. For non-professional image editors, such programs are the helping hands where they may apply a variety of operations on the given images. Depends on the quality of such program, it may provide limitless operation which are allowed while editing on the digital images. To achieve such image editing tasks various image editing software are available on both paid and unpaid licenses. Anyone who is interested in such operation can start learning and then applying some basic photo-editing techniques, which can improve the quality of your digital images.

The editing operations may give the various benefits such as adjusting color of image, adjusting the brightness and contrast of image etc. In other cases, you adjust an image for

other purposes, such as resizing the image to smaller size which is required for the purpose of uploading the image with the given size only such as 5kb to 50kb size while uploading the images to the online form filling. Converting the original image to another format is also a common operation in digital images.

In a nut shell, the following operations are listed which are used for common image editing or manipulations:

- Cropping the image
- Reducing the size of the image
- Implementing the color balance
- Adjusting the brightness
- Adjusting the contrast
- Color saturation operation
- Rotating the image
- Using filters for implanting the sharpening of the images for better look and feel
- Operating on the RGB factors to change the color to achieve the image processing
- Avoiding or hiding the unwanted spots or parts
- Adding or removing the backgrounds to the images
- Adding the text with the images etc.

You may have different software that you may use to apply the above operations. Irrespective of the user interface of these software, all the tools have basic techniques which are more or less similar among them as image editing is of prime focus in all this software.

5.5 INFOGRAPHICS AND ITS ROLE IN DIGITAL PROMOTION PROCESS

To increase the understanding of the topic, infographics plays a vital role. An infographic or information graphic is a visual representation of information that aims to make the data easily understandable. In this way of information representation, use of text is minimum and focusing. An infographic makes minimal use of text and can be a powerful tool for displaying data, explaining concepts, simplifying presentation, relationship representation, providing key understanding etc. Moreover, infographics come in different types and can be categorized based on purpose, types of objects used and the flow of information. The types are infographics are listed below:

Informational Infographic

The informational infographic is distinguished by its above average use of text when compared to other types of infographics. To enhance the graphics, use of icons, shapes, colors and other visual elements may be used. The main focus is to be given to the words.

Timeline Infographic

Chronological order of the events and actions is the main concern in this area. They are often used to demonstrate development of a product, a historical trend etc. where the chronology is of prime importance. Timeline infographic makes use of icons, images, and graphic elements to put the point across. Moreover, the format of the timeline may be vertical, horizontal or winding out of which vertical and winding timelines are relatively easier. On the other hand, a horizontal timeline infographic works best in posters, presentations, and environments where space is not a constraint.

Charts Infographic

Charts infographic has a chart as the centre piece of the information visualization. Colors, shapes, and icons may be added for emphasis and/or explanation.

Pie Charts Infographic

A pie chart infographic is one where the focus object is a pie chart. Whereas a pie charts infographic is technically a subset of a chart infographic, we assign it a distinct category given its widespread use. Pie charts are great for showing an item's different components or how one value compares to several other values.

5.6   VISUAL ELEMENTS OF INFOGRAPHICS

Whereas there are different types of infographics, certain elements are key to making a visual representation of data qualify as an infographic. The visual elements used while working with infographics are:

Infographic Colors: Colors are perhaps the most eye-catching aspect of an infographic. It is important to choose the color scheme as your color choice can either make or break your infographic.

Infographic Fonts: The number of fonts has increased dramatically in recent years. There are now far more infographic fonts options than the usual Times New Roman, Arial, Calibri and Comic Sans. Fonts can be classified in several ways but many experts place them in four broad groupings: Serif, Sans-Serif, Script, and Decorative.

Infographic Icons: Choosing the right infographic icons can make the difference between a verbose and winding visual, and an engaging and impactful one. Icons are sometimes taken for granted but can actually come in handy when packing plenty of information in small spaces. A single icon can replace a paragraph of explanations.

5.7   TECHNIQUES FOR PHOTO EDITING

When we talk about photo editing, it may be treated to change its color, contrast, resizing, spot removal etc. But in a broader perspective it must be clear to you that what is photo editing. To know this, you must know the following photo editing tools:

Noise reduction: Noise is the presence of unwanted pixels in the digital image. It is sometimes also used to make the images much smoother than the original raw picture.

White balance: This technique is all about managing the color of the light in the digital image.

Contrast: Based on the requirements you may change the contrast of the images. The higher the contrast the sharp the image, while the lower the contrast the flatter the color of image.

Lens correction: This technique is about camera lens-based effects and also resolving the issues related to camera lens from which the image was captured.

Color adjustments: It is about changing the color of an element in the digital photo.

Resizing and cropping: This feature is used mostly by most of the users for various purposes. One example where this technique is needed is when your need to reduce the image size of your signature or passport size photograph, captured from your mobile camera while you upload it with file size restrictions.

Background removal: This feature is also used in common for variety of purposes. To focus the particular part of the image, isolating some part of the image from the original image is known as background removal.

On the other hand, there are few advanced techniques which are actually complex for those who are not aware of the photo-based operations. Few of these advanced techniques are given below:

Clipping paths: This technique is used to extract some element from an image.

Portrait corrections: This technique is used to fix the required complexion of people in images for better look.

Drop and reflection shadow: This feature adds the effect of shadow on the existing images. Special effects: This technique is used to edit the digital images by supplying the special effects to the original images. Few such effect includes adding pattern to images, tilting the image, adding some animation to represent the special effect like raining or sunlight effects on the existing images.

Adjusting text and visuals: This feature is about adding overlays on the images. Overlays may include overlapping of images, joining the images, applying the cover to the images etc.

Photo stitching: It is a technique in which we join two differently captured images in a way that end user will be in an illusion if the stitched two images is actually one single image.

Photo masking: As the name depicts, masking is the process of hiding and revealing specified portions of an image.

Various other features are also used while editing the image such as segmentation, finding the HSV factors which stands for hue, saturation and value. This method is used to detect certain color in the image or to remove the unwanted light intensity. These methods are used for research data collection where images are captured under controlled circumstances and then their RGB values are calculated for further processing such as dimensionality reduction, feature extraction etc.

Things to Know Before Choosing the Image Editing Tool

Before starting the tools used for image editing, one need to know the things which are like prerequisite before starting the learning and trying the hands-on with these tools. Following are the things listed and the new image editing user must know it:

- Sketch is powerful and easy to learn. That's why Sketch is used by designers, developers, product managers, marketeers, and anyone looking for professional graphic design software for their Mac.
- There are over one million designers using Sketch to transform their ideas into incredible products, every day. Sketch is powerful and easy to learn.
- Sketch is used by designers, developers, product managers, marketeers, and anyone looking for professional graphic design software for their Mac.
- Sketch App Sources is the largest collection of free and premium design resources for Sketch discussed above.
- Thousands of Sketch files as well as plugins, tutorials, and articles created by Sketch users from around the world are curated by Sketch App Sources, which helps the intended users to get benefited from it.
- A content delivery network (CDN) refers to a geographically distributed group of servers which work together to provide fast delivery of Internet content.
- Further, for your knowledge you must know that Sketch App Sources is the largest collection of free and premium design resources for Sketch. The aim of Sketch App Sources is to help you design, collaborate, prototype, learn, and ideate faster with Sketch. Lunacy supports, not only the saved. sketch files but also supports the older templates which are found at SketchAppSources.

In the next section we will focus one tool which is used widely by many users for their personal and professional use. The insight on this image editing tool is discussed with few details.

Things to Think About Before You Begin Image Editing

In this section we will discuss the things which you need to think wisely before you begin the image editing job. These are given below:

Choosing photo editing programs: You need to choose the type of the image editing program before starting the image editing using any software. Consider whether you want cloud-based program for which you have to pay monthly or you want the standalone version which requires one time investment to purchase. The advantage of cloud-based programs is that you stay up to date as well as you may store photos in the cloud, sometimes on payment basis if size is exceeding the limit of storage in the cloud server. Online connectivity with the cloud is also a requirement. But on the other hand, buying a standalone version of an image editing program will usually become cheaper as it takes onetime payment. But overall, based on your requirement it is your choice which mode you choose.

Importing and Sorting Photos: A beautiful thing about digital photography is you can take multiple shots to increase the odds of getting some specific ones that suits your need. So, your first step after you transfers and organize your images on your computer is to review them to decide which ones to edit. The basic photo editing techniques should be available in even simple editing programs, and each can enhance your images to make them more powerful and shareworthy.

Crop and Clean-up Your Images: Cropping the image is common operation that may further be used for separating the cropped section or patching with some other section to create some sense in fulfilling the scenario. Sometimes, this task may yield the solution to clean the spots of the images. Sometimes, some cleaning-up operations may help you to achieve the objectives.

Adjust the White Balance: If your image has an overall color tone that you find displeasing or unnatural, you can adjust white balance to fix it. It is also point to be noted that RAW image files have bigger size than JPG files. It is because while converting the RAW file to JPG formats, the white color balance is adjusted and resultantly it saves the bits of your digital device. White balance adjustment is also an important point to note.

Adjusting contrast: In image displays, contrast is the display range from dark tones to light tones. Both extra high and extra low contrasts should be avoided. Typically, you want a middle contrast that avoids both extra high and extra low contrasts and gives better results.

Adjust Color Vibrancy and Saturation: After white balance, you need to make choice of improving colors in your photos with two controls known as saturation and vibrancy of colors. The more the vibrancy, the more the intensity of the colors. While increasing saturation will increase the intensity of the colors throughout the frame.

Adjust Sharpness: This operation is a must for all the image editors whether they are beginners, intermediate or expert level editors because it gives the image a catchy and clean look. This is the reasons that all the image editors have support of this tools

Finalize and Share Your Photos: This is the winding-up operation where you convert your RAW images into your preferred image formats such as JPG. At this stage, your edited images become lighter in size and are ready to use for any purpose viz. sending as attachment with your e-mails, sharing on social media platforms or use them for any business purpose.

5.8   TOOLS USED FOR IMAGE EDITING

Software used for the purpose of photo-editing are tools which can be used to create, edit and enhance images with other additional features such as red-eye removal, cropping, adding effects, creating collage, adjusting the contrast, adding colors etc. These tools help you to fulfil the variety of purposes such as creating and editing profile photos for your social profile used in websites such as Facebook and others. Such tools will also provide the facility to change one image file format to another image file format.

Further, it takes more than showy images and better choice on picking the colors to make an effective infographic object. Here, the designing is of prime concern and for which various tools are available for editing. Below are some of the popular tools used for infographic editing of the images which you can use for personal as well as professional purposes. Basic features of the below listed tools are also given:

a)   **Lunacy Editor:** It is free window platform-based tool which support vector graphics design-based software. Its full name is Icons8 Lunacy with versions starting from 1 till 6.7 as a latest version. It was developed as a sketch viewer for Windows operating system, because the problem of opening sketch files was always a troublesome for people who didn't own Mac machines. But it is quickly becoming a powerful tool on its own.

b)   **Adobe Photoshop:** Photoshop is the product of Adobe which is paid for image editing programs. Photoshop is Adobe's photo editing, image creation and graphic design software. The software provides many image editing features for raster (pixel-based) images as well as vector graphics. It uses a layer-based editing system that enables image creation and altering with multiple overlays that support transparency.

c)   **Piktochart:** Piktochart was also a free editing tool at initial levels. Later, better and remarkable support was also given but it was paid version. So, to work in professional manner, pictochart's paid version was also popular. Moreover, this tool bundled with hundreds of templates which helps the users to do the task from the scratch. Infographic objects supported include maps, charts, photos and icons. The facility of importing the

data from various tools such as Microsoft Excel, Google Spreadsheet etc. is provided. The best part is that the completed infographic can be embedded on a website or downloaded from website. The files edited and/or changed to any formats such as pdf, png, jpg/jpeg are also ready to share also.

d) **Canva:** This tool is also very popular online design tool for image editing. It has a large collection of templates which are ready to be used by new users. It is free to be used but if wish to use this tool for business purpose then it has affordable cost with plenty of features provided by it. Its user interface is user-friendly. A novice to this tool will feel comfortable while using this tool with any training or any pre-requisite background. Infographic elements such as icons, maps, and images, can be dragged and dropped into position. It also has various layouts to work with.

e) **Venngage:** Venngage is also one of the free tools which is used for image editing specifically for infographics. While most other infographic tools can be used on a wide range of design projects including reports and slideshows. It helps us to complete the task in a short time. It also provides icons, maps and charts that creates a remarkable design. Like Piktochart, the infographic created in Venngage can be shared on social media, embedded on the site, or downloaded as a PDF or image file.

f) **Visme:** Visme is another tool where interactive feature us provided for image processing. Also, it is suitable for implementing significant animation where you may design professional image editing. As a controller the web designer may provide password protected entry to the infographic content where there exists need to use it.

g) **Easelly:** The tool named 'Easelly', which is easy to use, is free to use which provides simple design layout and a range of infographic contents viz. shapes, charts, and backgrounds. One of the key reasons why this tool is used by many users as this tool provides thousands of templates and is higher than other peer infographic tools. Due to its features which are easy to use and loads of templates this tool is much suitable for beginners, students, educators and business executives who are working as a beginner, intermediate or expert in the infographics. It also supports for the download the results into pdf or other file formats. There are also some other tools which allows us to create and edit pictures easily. Some other tools which will help in image processing are listed below:

h) **PicMonkey:** PicMonkey is a tool which provides user-friendly interface for photo editing which easily runs in your browser. You can quickly and easily edit a single image or even create a collage which may be used wherever you want to use it.

i) **Social Image Resizer Tool:** The images used for social media profiles can be edited using this tool quickly. As the name depicts, it is focused for resizing the images. It also provides various handles for resizing the images, customizing the image etc. This tool

is very useful for image handling on social media websites like Facebook, LinkedIn, etc.

j) **Timeline Slicer:** Timeline Slicer is also among one of the best tools for designing and editing images used popularly for using in social websites discussed above.

k) **Photovisi:** To develop the collage of the images, this tool is suitable for you as it is simple and easy to use. Usually, with most of the image editor tools it is required to create the profile or subscribe it to use its facilities such as collage. But with this tool, without creating the account you can perform the operations and upload them at a faster rate too.

l) **BeFunky:** This tool comes with major collection of tools which you are expecting from a standard photo editor tool which is available as browser-based tool. It has features for which it is useful such as image cropping, red-eye and blemish fixes, filters, borders, text, collage etc.

Insights on 'Icons8 Lunacy' Image Editing Tool-

There are various image editing tools available today, out of them few are listed above. In this section we will discuss in little bit more detail about one image editing tool listed above which is one of the best tools used today. This tool is Icons8 Lunacy tool which has alpha and beta versions available. Its benefits are listed below:

- It is available to its users at free of cost.
- It has facility to read any sketch file irrespective of any version of the tools.
- Lunacy automatically searches and downloads the missing Google fonts which you need to prepare your digital image or info graphics.
- Any user of Lunacy can publish the assets designed by them on the CDN directly. CDN servers provide this facility to store the images at free of cost.
- This platform is for the designers by the designers.
- Moreover, if you have an account on icon8 then you may take more benefits too.

As discussed, Lunacy is free to use supported on Windows platform based tool which support vector graphics design-based software. Its full name is Icons8 Lunacy with versions starting from 1 till 6.7 as a latest version. It was developed as a sketch viewer for Windows operating system, because the problem of opening sketch files was always a troublesome for people who didn't own Mac machines. But it is quickly becoming a powerful tool on its own. Its user interface is given below:
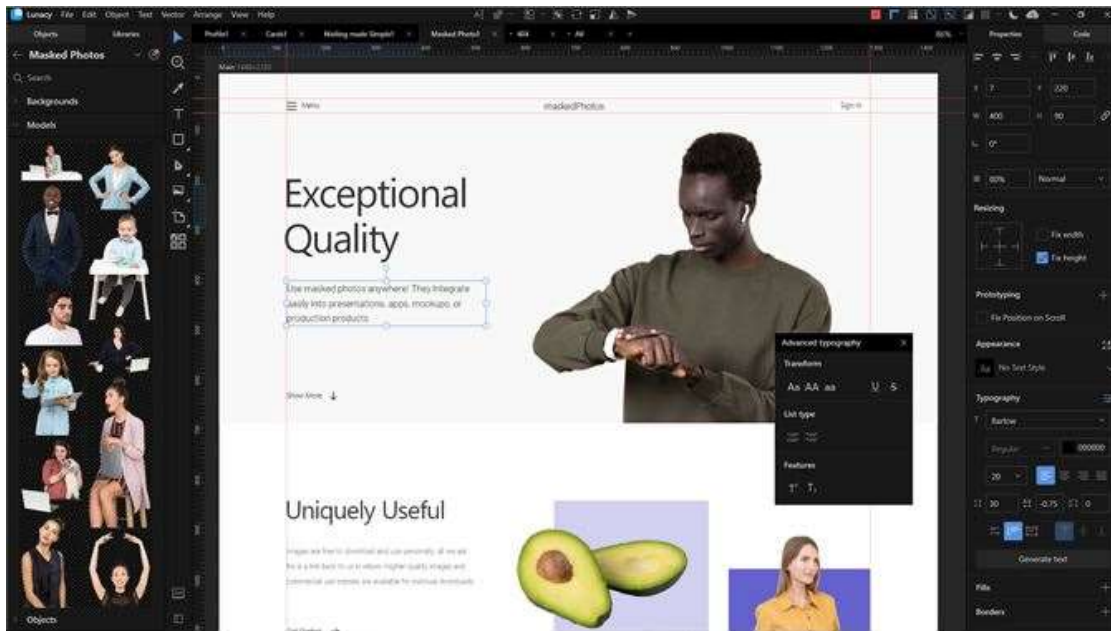
Figure 1: Lunacy user interface

In the figure 1 above, you may see that its user interface of the Lunacy looks simply to use even you are novice to the image editing tools. The UI (user interface) of this tool is quite focused to improve its UX (user experience) which increases the easiness in utilizing its interactive features in much better way. Also, its look-n-feel and layout is suitable for completing your targeted jobs-in-hand.
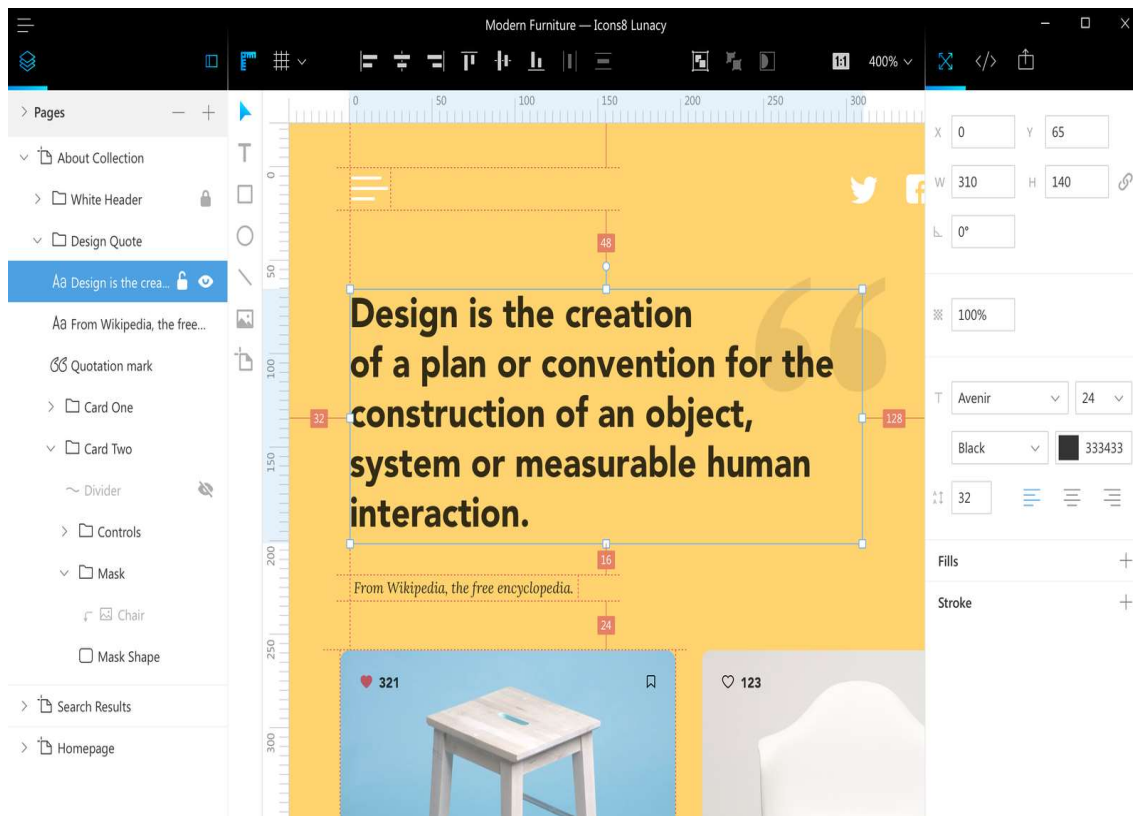
Figure 2: Object creation using Icons8 Lunacy 3.0

There are various reasons that made it the choice for users to work with Lunacy. Few good reasons for its popularity are its amazing features such as sketch editing support for Windows, regular software support, regular updates of software in the above figure 2 the user interface and user experience is easy to use and explore for creating the perfect image editing operations. Moreover, its versions were portable which make it choice for users to carry forward the contents from one machine to another. It is also used to provide support for designing and then also editing the profile page images and templates along with.
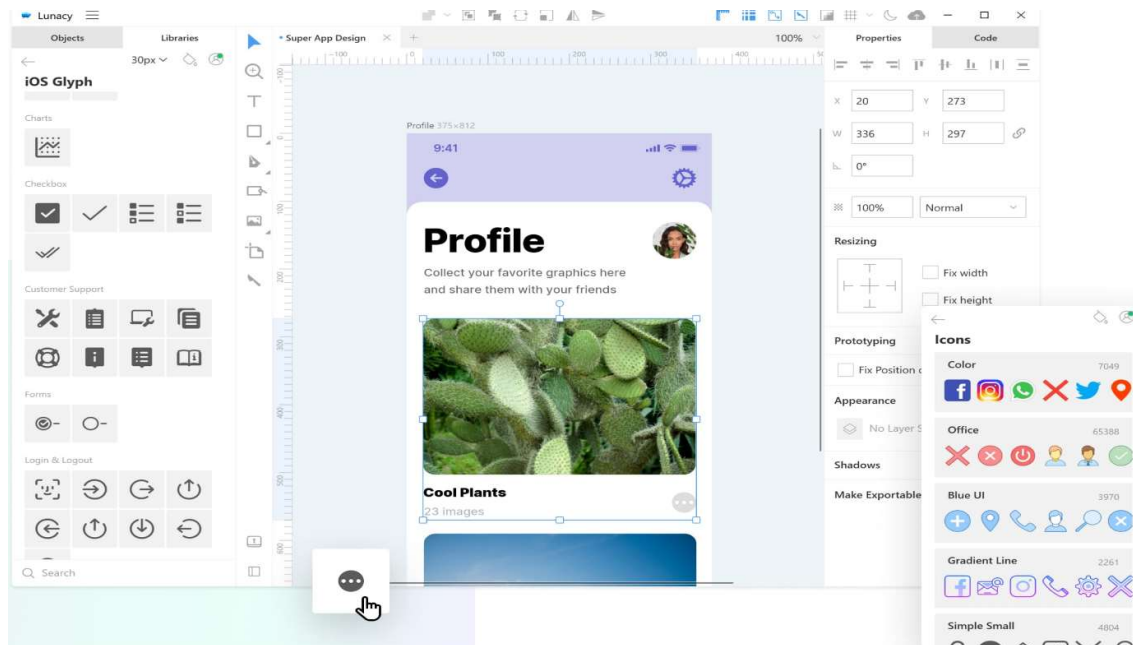
Figure 3: Profile picture editing on Lunacy tool

Here you may use the contents from its rich library such as icons shown above at the down-right side of the figure 3. You may also utilize this tool for digital promotion of the products, creating infographics etc.

In the summarized manner, we can say-

If you do not edit the images before upload or use it in raw format, it will definitely harm your business some way. Image editing tools are there to provide you facilities that will definitely help in good results from your business. It is strongly recommended to avoid any haste on using images without editing so that the image could present much better.

On the other hand, when using some image editors for photo editing or creating some info graphics for any need viz. product promotion, you must first get the list of available software or any other digital tools such as cloud-based tool on web browser. Also, based on your need, choose the best one which fulfil your requirements of image editing. You also have to make it a note that if you are using paid software or paid cloud services then tools are obviously better as compared with free tools. But, when your task is adequate enough to be completed using freebies, we recommend you for not buying any paid software.

5.9　POINTS TO REMEMBER

- "A picture is worth thousand words". This is the reason for mushrooming of the software which provides you image editing tools.
- The raw image is original image and its size is bigger. You need to convert a raw image file into some pleasing format such as jpg which are smoother to use and smaller in size as compared with raw image formats.

- Infographic or Information graphic is a visual representation of information that aims to make the data easily understandable.
- If you are beginner in the field of the image editing then you must know beforehand about Sketch, Sketch App Sources, content delivery network (CDN) etc.
- Finally, before using any image editing tool you must have the basic knowledge about what common operations you can perform with all the image editors so that you may not trapped with cheap image editors immaturely.

5.10 GLOSSARY

- **Image Cropping:** Image Cropping is the removal of unwanted outer areas from a photographic or illustrated image.
- **Image dimensions:** Image dimensions are the length and width of your image, measured in pixels.
- **Digital Photography:** Digital photography is the art and science of producing and manipulating digital photographs that are represented as bit maps.
- **Infographics:** An infographic or information graphic is a visual representation of information that aims to make the data easily understandable.
- **Photo stitching:** It is a technique in which we join two differently captured images in a way that end user will be in an illusion if the stitched two images is actually one single image.
- **Photo masking:** As the name depicts, masking is the process of hiding and revealing specified portions of an image.
- **Sketch:** Sketch is powerful and easy to learn. That's why Sketch is used by designers, developers, product managers, marketers, and anyone looking for professional graphic design software for their Mac.
- **Sketch App Sources:** Sketch App Sources is the largest collection of free and premium design resources for Sketch.

5.11 CHECK YOUR PROGRESS

Descriptive Type Questions-

a) What are common digital terminologies used in image editing?

b) What is difference between lossless compression and lossy compression?

c) What is difference between graphics and infographics?

d) Discuss the role and support of Sketch to image editors.

Objective Type Questions-

[1] Photo masking is the process of hiding and revealing specified portions of an image. [True/False]

[2] Photo stitching is a technique in which we join two differently captured images in a way that end user will be in an illusion if the stitched two images is actually one single image. [True/False]

[3] CDN stands for Content Directed Network. [True/False]

[4] When talking about adjusting the contrast of the image, the contrast should be either extra high or extra low. [True/False]

[5] ..... is used by designers, developers, product managers, marketeers, and anyone looking for professional graphic design software for their Mac machines.

[6] Which of the given tools are not an image editor, i.e., Lunacy, Canva, MS Access, Social Image Resizer Tool.

[7] UI stands for user interface, likewise UX stands for .....

Answer (Objective Type Question)-

[1] True   [2] True   [3] False   [4] False   [5] Sketch

[6] MS Access   [7] User Experience

5.12   BIBLIOGRAPHY/ REFERENCES

- Sketchappsources, https://www.sketchappsources.com/about.html, 2020.
- 10 best practices for picture editing, https://www.godaddy.com/garage/best-practices-for-picture-editing.
- Cloudflare, https://www.cloudflare.com/learning/cdn/what-is-a-cdn.
- Changing the world through digital experiences, https://www.adobe.com/in/about-adobe.html.
- All About Images for Infographics https://www.copypress.com/kb/infographics/all-about-images-for-infographics/#1.
- How to Enhance Your Infographics with Images, https://barnimages.com/enhance-infographics-with-images.
- 5 Image Editing Tools that Make You Look like a Pro, https://neilpatel.com/blog.
- Part 2: Digital Terminology and Essential Elements of Photo-Editing, https://extension.uga.edu/publications/series/detail.html?id=35&name=Digital+Photography+for+Horticulture+Professionals.

5.13   SUGGESTED READINGS

- 6 Great Image Editing Tools For Bloggers (Hint: Most Are Free), https://bloggingwizard.com/image-editing-tools-for-bloggers.

- Envira   Gallary,   https://enviragallery.com/best-photo-editing-software-for-photographers.
- Skylum Luminar Interface, https://enviragallery.com/refer/skylum-luminar.

UNIT- 6

VOICE AND VIDEO MARKETING- TOOLS AND ACTIVITIES- I

6.1   INTRODUCTION

In this particular unit, we are likely to learn about two important tools of Digital marketing – voice marketing and video marketing. Both are very effective, in terms of promotion of the business, product or a process is concerned.

An image speaks more than the textual contents and if we can use a video in place of an image then it will be a combination of both audio and visual. This will surely make the content more effective and easier to understand. This chapter will help the student to deal with Voice and Video and to use them as an effective tool for Digital marketing.

6.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Understand the effective use of voice and video in marketing.

- Understand Video marketing and its impact.

- Learn about the use of voice and video in business promotion.

- Know how to publish own videos on social media.

6.3   ROLE OF VOICE MARKETING

Digital assistant and podcast are now making into our houses, cars, offices and in all personal and professional areas one can think of. It helps user to make search based on his or her voice. By giving a particular command, the voice govern devices are likely to produce the result. It is also a way through which typing is being removed from the scene.

Note- By 2020, half of all searches will be voice-based, says @comScore. #technology (Rebeca, 2018)

We all are familiar with voice govern devices like asking a weather condition on Alexa or checking out the traffic conditions with Siri. Even the schedule of appointments, daily news, global activities, meetings can be easily managed by these voice govern devices. The voice search is as simple as making a command like: "Let me know the temperature Alexa" and the respond is so quick that "It is 13-degree temperature at Haldwani". From personal to professional questions, these digital assistants are ready to answer anytime and anywhere. The major reasons of using voice assistants are:

- Comparatively easier than using app or going to a particular URL.

- Ease of use while dealing with voice technology.

- No more typing for search on web or on mobile app.

- Time saving.

- Easily effective while driving a car.

- Doesn't affect the accuracy of the search.

6.4   OVERVIEW OF POPULAR VOICE ASSISTANTS
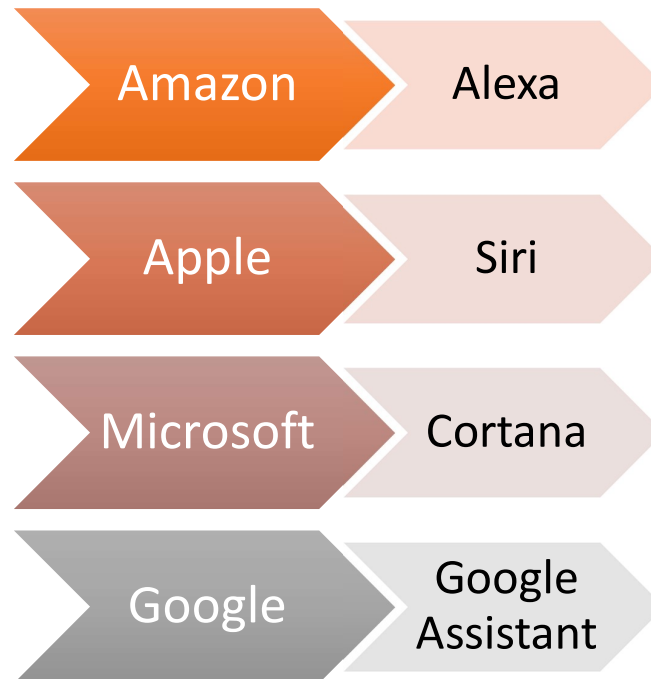
Fig. 6.1 Overview of Popular Voice Assistants

The popular voice assistant and digital devices are:

a. **Apple Siri**- It was launched a decade back in 2011 and the voice command is "Hey Siri". It supports iPads, iPhones, Mac Computers, etc.

b. **Amazon Alexa**- It was launched in 2014, "Hey Alexa" is the voice command and it supports Amazon Echo and Sono speakers effectively.

c. **Microsoft Crotona**- It was also launched in 2014 as a competitor of Siri and Alexa by Microsoft company and the popular command is "Hey Crotona" and it is integrated with Harmon Karmon Invoke.

d. **Google Assistant**- The big legend Google also jumped into this voice search world and launched its product in 2016, the popular voice command is "Hey Google" and its compatibility is with Google Home devices, Google smartphones, etc.

However, there are some more digital voice assistants like- Xiaomi's Xiao Ai, Alibaba's Tmall Genie, Samsung's Bixby and JD.com's LingLongDingDong.

6.5   TOOLS OF VOICE MARKETING

Podcast- In simple words, Podcast is a series of audio files that can be downloaded by the user. It is a combination of iPod and broadcast. It was designed for audio blogging and later it was used for delivering and synching with portable audio players. Mostly files distributed on Podcast are in audio format. Podcast work on subscription basis and the new episodes are automatically downloaded on the portable audio players and iPod. Series audiobooks,

Podcast audiobooks and Podcast novels are very popular among the youngsters. Political Podcast are also in use to promote party lines, strategies and outreach to the followers. The popular companies of India engaged in Podcasting are Awaj.com and talking stuff network. Popular Guardian and BBC from UK also use Podcast.

Digital assistant- We had discussed it in previous segment 1.4, about the popular digital assistants and their productivity in marketing. Digital assistants are making their presence in Smart watches, tablets, smart speakers, appliances, cars, IoT based devices, instant messaging programs, etc. The role of digital assistant is:

* To answer the basic questions
* Setting alarm, meeting schedule
* Tell jokes
* Communicate on various topics
* Search on internet about a particular topic
* Daily news

| Entertainment or Fun - like movie, songs, etc | Local information: weather, traffic, etc. | Personal assistant: meetings schedule, appointments, etc. | General information: News, current affairs, life style, etc. |
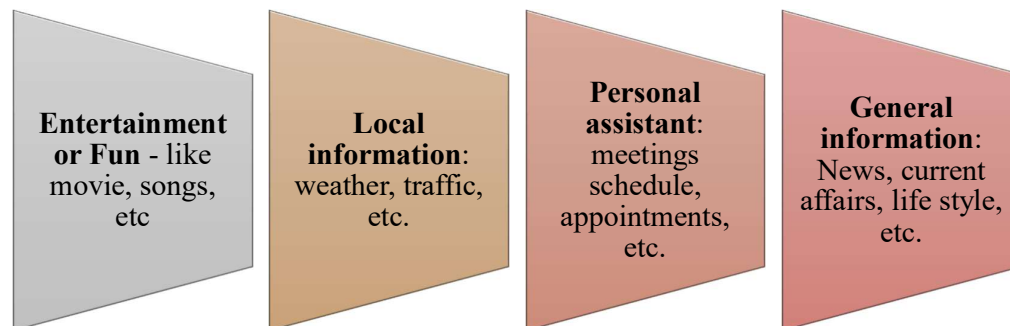
* Weather forecast, traffic details, etc.

Fig. 6.2Common usage of Voice assistant by users.

Smart speaker- A wireless smart device used as an audio player and played through connections like Wi-Fi and Bluetooth. Smart speakers also work as a digital assistant and now a part of house automation and office automation. Example- Google home max, Sonos beam, etc.

6.6   IMPACT OF VOICE MARKETING ON POPULAR BRANDS

With the emergence of voice assistant, voice marketing tools are more in demand. It is just like delivering the results for a customer on a simple command. The popular brands with voice marketing are as follows:

* **Burger king:** The campaign "Who is whopper?" is a Google Ad campaign which pushes the sale of burger king a lot.

- **UBER:** This car rental company is using the voice activated user request and can be used with the help of Google home, Alexa, Siri, etc.

- **PAYPAL**: Voice assistant authorized payment transaction is effective on PayPal. With the help of Siri, one can use this command i.e. "Send 300 dollar to my mother using PayPal". This command will make the Siri connect to PayPal and then transfer the amount to the saved mother account.

- **Whirlpool**: Voice activated home devices are effectively working for Whirlpool, right from laundry settings like washing time, types of clothes, all are now programmed. The automatic calling setting can also be controlled through Voice assistant.

- **LG**: AI based smart TV are nowadays in huge demand. Voice control channel change, connection with various social media like YouTube, Netflix, etc. are now on voice command on the remote itself.

- **OCADO**: This British grocery market is now on voice assistant. With the help of Amazon Alexa users can generate shopping list and purchase grocery. It also supports Android mobiles.

- **Domino**: This Pizza delivery company uses Voice Ordering System with the help of Siri. This helps customers order Pizza more effectively and precisely. It is just like a virtual presence of order taking assistant with you and it assists as per your taste and likings.

6.7   VIDEO MARKETING

Video Marketing involves the use of videos in forming marketing strategies. It deals with three major segments-

- To educate the audience
- To entertain the audience
- To increase the reach of company to the consumer

Marketing has changed a lot from the last two decades. Internet had made the target audience smarter. The audience or consumers are now aware and more knowledgeable. They enquire, check and explore before buying or ordering anything.

In professional world, every company thinks of reaching to as many consumers. The consumer-centric marketing is on high demand and this video marketing is no more exception. The basic idea of this video marketing is educating the audience like Byjus, smart classes, Vedantu, etc. The second segment is to entertain the audience through popular

platforms for real entertainment like YouTube and Facebook. Web series have also emerged as a source for regular entertainment for travellers.

Video marketing in brief is an effective tool to build rapport with the consumers, promoting and selling the product, delivering infotainment to the audiences and live streaming the events.

The importance of Video Marketing-

Video marketing is preferable due to the following reasons:

- **Videos are leading the world** – Videos have proved to be more attractive and impactful.   It is more effective tool in presenting data, knowledge, awareness, infotainment to the audience. YouTube itself amasses a billion of views every day.

- **To connect consumers on their ease-** Videos are creating more space for consumers as they are available both on online and offline modes. Consumers can plug and play things as and when required. Example: Internet series videos are both in online and offline mode. Shared videos are just like any other attachments and it can be played irrespective of the premises.

- **It is more realistic-** Real time shoots are very helpful in forming marketing strategies. Example- While dealing with real estate, one can easily show the buyers location, development and sample flats. Buyers can have real idea of how the product will look and feel. So, the authenticity of the product is on real high with video marketing.

- **To provide a look and feel for the user-** Videos come handy in channelizing product and features detailing. Example: While marketing for a particular car, videos can reach up to the target audience, how the care behaves, engine, performance, interior and other distinguished features more easily and without going to the car showroom.

- **To humanize the company, face to the audience-** Video marketing is the best way to connect with audiences. It ensures trustworthy relationship with the consumers on a regular basis.

- **To improvise conversion and sales of the product-** Video marketing in an important tool which helps in conversion of the user to the buyer. It also helps increase the sale of products effectively.

Now the question arises that for whom video marketing is useful? The answer is bit simple. The video marketing is useful for- Companies, industries, educational institutions, hospital and health sector, real estate, government agencies, NGO's, etc.

These marketing videos are also helpful for the consumers as it provides the right set of knowledge, awareness and value to them. Look, feel and product detailing can help consumers wisely choose the best product as per his/her capability and needs.

Types of Video marketing-

We are already aware of the broad scope of Video marketing. Right from entertainment to information, product detailing to the sales market, this tool is making enormous presence in the consumer world. Basic types of video marketing are as follows:
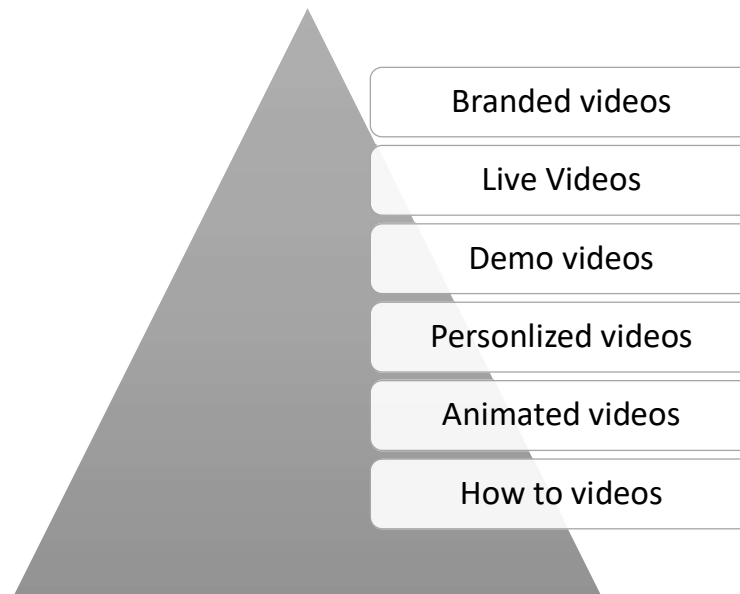
Fig. 6.3 Various types of Video marketing.

Branded video-

Brand value is important for any product and it comes only through promotion and circulation. Branded videos are videos used for image building exercise. The promotion of soft drinks like Coke, Pepsi use branded video in the promotion of their new launches as well as establishing a link with the audiences.

They are likely to create awareness and interest into the target consumers on regular basis. It is just like cementing relationship with dedicated consumers or target audiences. Popular branded videos are related with existing companies like FMCG products, Retail products, and house hold products. Examples: Pantaloons, Louis Philips, Armani, Peter England are popular brands and their video promotion strategy will be labelled as Branded Videos.

Live video-

It is the latest and most interesting type of video used for marketing strategies. This is essential in making digital presence and can be useful in presentations, demo of the product,

press conferences, talks or any conference or workshops. Some of the popular Live Video streaming sites are- Facebook live, Periscope, YouTube live, Dacast, funnyorDie, etc.

Demo video-

These videos are very useful for the company's demo or product detailing. It is also helpful in presenting the company demonstration irrespective of the place and time for marketing strategies and executions. Some popular demo videos available are- Survey monkey, Mailchimp, NoseFrida, Sphero and Airtable. The common features of all these marketing videos are to emphasize on audience demand and identifying the company's goal.

Personalized video-

Personalized video is crucial for marketing and companies can use it as a tool for customizing marketing videos. They can use company name and logo. Personalized videos are based on the consumer's history logs. For example: If a person is looking for air tickets on internet for a particular destination he/she will be happy to receive a personalized video on family tours or fun trips. This can be easily identified with the help of Artificial Intelligence technology.

Animated Video-

This imaginative type of video is very useful for marketing. Animated videos can be useful to present complicated topics very easily. Google Doodle is an interesting animation video where Google convey a story through it. These animated videos are helpful in moving in time and understanding complex subjects very easily.

Expert interviews

This is an interesting tool to have expert's opinion or to use the expert's advice for business promotion and product improvisation. These expert interviews are very helpful in planning marketing strategies for companies or designing a product based on the expert or future demands.

How to video?

This is a new version of presentation video, where one can address the target audience with his or her expertise. It is also very popular among small and medium enterprises for promotion of their products and expertise. In other words, it is a marketing video which makes the consumer to do it yourself (DIY). Basically, these how-to videos are divided into three segments.

a) **Explainer video:** These how-to videos address the option why and how it is effective. Example why and how can one can become effective writer? There are many software available for content writing and one can use these types of videos.

b)   **Instructional Video**: These how-to-videos can address the demand of tutorial video or training videos. Example: Byjus, YouTube and many other platforms are addressing these requirements through instructional video. All learning apps or training apps use instructional videos to support the user. One can learn yogic asanas, cooking a particular dish, etc through these instructional videos.

c)   **Software videos**: Product demo is crucial for those who deal with software or product sales and marketing. Perfect demo always converts into view and purchase of the product. Software videos are helpful in detailing the usage and utility of the software. Example: How to write thesis software will surely draw the attention of research community. How to build a perfect resume with a software will cater the job seeker demand, etc.

Fig. 6.4Video marketing (Source: ngdata.com)

How to record your own story?

One can easily go through the contents and record his or her story to promote company's marketing. Basic things required to record a video are:

a.   Firstly, a recording device- mobile or webcam or a regular recording camera.

b.   The concept on which you are likely to talk.

c.   A review of- Who is your target audience? What they are likely to hear? Platform on which this video will be, Time frame if any, Content matter.

d.   Be simple and brief.

e.   Don't try to control your surroundings.

Natural location, flow and language draw more audience's attention. So, it is preferable to be aware about the surroundings but not to hold all the inflow.

Careful about the time frame-

In any case, your video should not cross 60 second duration. Instagram prefers 26 second and Hub Spot prefers 30 seconds video, Facebook – 30 seconds, Twitter- 30 seconds is an ideal duration. However, the video length varies as per the purpose.

If the videos are explanatory video or software video's, then the length will be more enough as the company is trying to demonstrate all attractive and important features of a particular software whereas when dealing with awareness video, it should be brief enough to finish in few seconds. Ensure the marketing video should be catchy and to the point. It should cover all the points but in very brief. Marketing video is just like promo of a movie or a particular product.

6.8   HOW TO PUBLISH YOUR VIDEOS ON SOCIAL MEDIA?

Preparing a video is one thing but how to make it reach one and all is an important aspect. Here, social media plays an important role and Search engine optimization (SEO) comes into play. Customization, duration and quality of video and knowledge about the target audience are always crucial for the promotion of video on various platforms. Let's see the available resources through which one can share marketing videos-

- **On own website**- The website is very important for the SEO or Video marketing. In order to keep the audience focused and dedicated to your product a website is essential. All the recorded videos will be a part of the company website and it can also serve as an archive for all the marketing videos.

- **On Facebook**- Social media presence in everyone's life is enormous in nature. All events, activities, movements, agitations and product launches now use social media. Facebook live is an important tool as the video looks more authentic and real. In fact, big companies also use this tool to create brand awareness and authenticity of the product.

- **On YouTube**- From a survey, the second largest SEO is YouTube with a viewership of more than 2 billion people every month. This is a huge figure for the promotion of any company and the product. YouTube channels have now emerged as an important tool for improving marketing strategy. YouTube subscriptions and more number of likes are just like getting a reward for your work. Sometimes, even companies pay to you on rise in demand video. This business is bit simple. If you have 1 million views on YouTube channel, then you can have $ 3000 to $ 7000 in your accounts from YouTube.

- **On Instagram**- A story a day is the basic idea of Instagram, another popular social media. Now, to enhance the authenticity of an event one can share Live videos with his story through Instagram Live #liveonInstagram, #thisweekonInstagram, etc.

- **On Snapchat**- It is another social media option which the company can use to link with its consumer. The snapchat story is for 24 hours and more on the personal video. However, the #LastSelfie campaign was very popular and conveys social awareness towards wild animals.

Fig. 6.5 Snapchat (Source: Snapchat.com)

- **On Email**- The emails are as always in demand. A video in subject line surely draws the attention of the audience. Email is still an important tool to build rapport with the consumers on regular basis.

6.9 POINTS TO REMEMBER

The basic aim of this unit is to make the student aware of voice and video marketing. These two prominent and promising tools are making the marketing handy and with ease. The popular voice marketing is based on digital assistants like Microsoft's Crotona, Apple's Siri, Google Assistant, Amazon's Alexa, etc. The support of digital assistant is amazing and it is helping the human in day-to-day life very effectively. Video marketing is also effective in terms of creating the demand for the product, company liaison, marketing strategies, etc. Various social platforms like Facebook, Twitter, Instagram, YouTube, etc are helping the video marketing to attain phenomenal heights.

6.10 GLOSSARY

- **Social media:** An effective tool of social networking. Usually, a collection of website and application through which users can interact, share files and documents effectively.

- **Digital Presence**: It is the virtual presence of a company or its product. In simple words, it's profiling of the company, person or a product on the internet and if a person searches any keyword, they may get the desired results.

- **Drift video:** It is basically a digital conversational video platform where one can record a video and share it smartly.

- **Digital Assistant:** A virtual assistant is designed to assist users in question answer mode. It is an effective tool to collect information on voice technology. They are also labelled as voice assistant as they are commanded by the user's voice.

6.11   CHECK YOUR PROGRESS

1. What is the use of voice marketing?

2. Name few digital assistants available in the market.

3. What is the basic function of a digital assistant?

4. Why is Video marketing?

5. Who can use Video marketing?

6. What is Branded Video? How is it useful in marketing?

7. What do you mean by How to Video?

Descriptive type questions-

a)   Explain in brief about the use of voice marketing.

b)   What are the basic features of any voice marketing tools? Explain any two of the features in detail.

c)   What do you understand by video marketing?

d)   How is video marketing effective in marketing promotion?

e)   Write a descriptive note on types of marketing videos.

f)   How does one record story through video marketing tools?

g)   How does one publish his video on social media?

6.12   BIBLIOGRAPHY/ REFERENCES

- Angela String fellow, (2018), "YouTube Video marketing 50 tips", Gent, Belgium, https://www.ngdata.com/youtube-video-marketing-tips/

- Blue Corona (2019), "The ultimate video marketing guide 2010", Marryland, US, https://www.bluecorona.com/blog/video-marketing-strategy-guide

- Heidi Cohen, (2019), "Voice marketing definitions", AMG Newsletter, 31st July, 2019, https://heidicohen.com/voice-marketing-definition/

- Jody Harris, (2018), "How voice activated tech will change the content marketing", https://contentmarketinginstitute.com/2018/10/voice-activated-technology/

- Lisa Smith, (2018), "10 ways voice assistants are changing marketing", the world stream blog, Boston, US, https://www.wordstream.com/blog/ws/2018/03/01/voice-assistants

- Leanne Schinkel et. Al. (2012), "Digital photo editing project", Canada, http://www.gov.pe.ca/photos/original/4h_photoed.pdf

- Priit Kallas, (2018), "8 powerful reasons you need to use video marketing", Dream grow Digital company, https://www.dreamgrow.com/8-reasons-why-your-business-should-use-video-marketing/

- Rebecca Sentence, (2018), "why we need to stop repeating the 50% by 2020 voice search prediction", Econsultancy blog, London, August 23rd, 2018

6.13   SUGGESTED READINGS

- Voice search: the new search engine, Courtney Cox Wakefield

- Video marketing strategy: harness the power of video to drive brand growth, Jon Mowat

- The power of visual storytelling: how to use visuals, videos, and social media to market your brand, Ekaterina Walter and Jessika Giogilio

- Voice of a customer marketing, Ernan Roman

UNIT- 7

VOICE AND VIDEO MARKETING- TOOLS AND ACTIVITIES- II

7.1   INTRODUCTION

Voice and video contents are used heavily in business processing these days. Various programs for which voice is given as input are deployed in the machines such as Apple Siri, Amazon Alexa, Google Assistant etc. Selection of spoken language is important to execute any specific type of program for creating any interaction during voice processing better. The

voice tools are used for voice-oriented marketing which are typically based on long search queries to fetch the meaningful results. Such voice tools may be used to achieve all tasks such as making calls, send text, set alarms, timers, reminders, play music, play TV shows, solve mathematic equations for students, providing scores of the going match, searching real life queries such as ATM, restaurants, forecasting of weather etc. If you use voice for searching, luckily, your voice is free, if only there were a device that could listen to your oral order and do the work needed so that your food will be at your doorstep exactly when you finished your assignment. In fact, there is a solution to your general to specific queries based on voice as a data and this is known as voice recognition technology.

On the other hand, video marketing in the business is playing a vital role too. Whether you watch any video on YouTube you must get small sized video advertisement made for the product marketing purpose. This type of marketing is also used for product promotions especially when you watch videos for free. The other types of videos used in video marketing includes event videos, testimonials, how-to-videos, vlog (video logs), webinars, tutorials, reviews, presentations, live videos etc. These tools are fulfilling the business needs of today. Moreover, these marketing tools are controlled under the smart artificial intelligence technology that makes automatic and suitable selection of videos to its customized audience. Both audio and video-based marketing tools are in use at every segment of the market. The detailed insights on both the audio and the video technologies are given in the sections below.

7.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

- Know about voice technology.
- Using voice for managing business.
- Understanding voice marketing.
- Knowing the tools used for voice.
- Understanding video marketing.
- Knowing the tools used for video marketing.
- Understanding the insight on one voice marketing tool.
- Understanding the insight on one video marketing tool.

7.3   VOICE TECHNOLOGY- AN OVERVIEW

Voice recognition technology can be a program (software) or a standalone device (hardware). The core of voice technology is the ability to take a user's voice as input or a command to either produce a desirable output or perform some particular tasks.

Figure 1: Voice Technology

In other words, Voice Technology is a Technology that enable you to perform certain action only with the help of your voice. Some of you may never know life without "Siri". Other may feel like voice technology is something out of science fiction. But the truth is somewhere in between. While most people remember 2011 when IBM's Watson won Jeopardy, or when Apple launched Siri, actually voice technology dates back much further. In 1961, IBM introduced the IBM Shoebox, the first digital speech recognition tool. Since then, voice technology has improved and become more present in our everyday lives. Now-a-days various voice assistants are available to not only serve you personally but in promoting your business too.

Voice Technology Today-

The voice technology is growing every moment. This growth is shown with the facts taken from various sources. These facts depict that in 2019, Google research showed that 20% of all search queries on mobile were voice search, and more than 40% of adults used voice search daily. It is not surprisingly to say that this percentage is rising, as more people buy voice assistants for their homes and for businesses too. Another study of December 2018 shows that 118.5 million smart speakers were in US homes, a figure that had grown 78% just from the year before.

However, the NPR-Edison study found that of the people who already owned smart speakers, 69% had no intention of buying another speaker. But just because they aren't buying a speaker doesn't mean they won't use the ones they already own any less. By the year 2024, there will be a revolution in the field of voice marketing that is based on voice-based search.

Voice Search-

Voice search is speech recognition technology on smart devices, which enables users to perform online searches by speaking terms aloud instead of typing into a search field. Some devices that enable voice search are:

- Siri– Acquired by Apple in 2011, the former standalone iOS app
- Alexa– Amazon's Alexa was released in 2014, initially as part of the Amazon Echo smart speaker.

- • Google Assistant– Not to be outshone, Google started this technology in 2016.

Apple's Siri is now one of the top virtual assistants used by its customers. Whereas, by January 2019, Amazon had sold over 100 million Alexa-enabled devices which is also a big figure. Also, Google Assistant is arguably now the best voice-enabled virtual assistant. Whatever the voice assistance you choose for your business, you will get benefit from all as the competition always gives benefits to the customers. But here we may make a point that in future voice-based marketing will lead from the from especially when this technology is loaded using artificial intelligence.

Content to be Used for Voice Search-

Before we start learning what is voice search optimisation and its use for voice marketing, let us know what are contents used for better results. We have to make sure about few things that we will use in the understanding of searching with voice. These are:

Implement Schema mark-up on all relevant pages

Design of a database is called the schema. It shows the relationship between the tables used in the database. Here, implementing schema mark-up on all relevant pages on your website is still best practice whether you are optimising for voice search or traditional search. Schema mark-up helps to tell Google, Yahoo, Bing or any other search engine about the nature of the content on a specific webpage. Common types of schema mark-up include: Organisation, Website, Product, Local Business, Recipes, Articles, Person, Events, Video, etc.

Make sure you are using HTTPS protocols

Earlier, few browsers such as Chrome have been marking websites that do not use the HTTPS protocol as 'Not secure', displaying warning to visitors about the security of their data when using unsecure sites. With 70.4% of Google Home results pages secured with HTTPS, now more than ever is the time to shift to the HTTPS protocol and provide a secure environment for visitors and improve the ranking in voice search as well as traditional search.

Focus your efforts on page speed

Page speed is important factor while searching. People want results quickly when they conduct a voice search and also this process should also be convenient for the intended users. A study by Backlinko found that the average Time to First Byte of a voice search result was .54 seconds (vs. the worldwide average of 2.1 seconds). Speeding up your website should be a priority. Use tools like Google's Page Speed Insights, Web Page Test and GT Metrix to discover potential issues that are slowing down your site and specific pages and look to address these to improve your opportunities to rank for voice queries.

Keep short and simple words

When you are targeting a specific voice query with a piece of content, think about the way you structure your content and the language you use. In a study conducted by Backlinko, it was found that voice results tend to be short and concise. They found that the average voice search answer is just 29 words. Not only this, but the language used in voice search results should also be as simple as possible for faster results. It needs to be understood by people on the first pass as they don't want to have to ask for the answer to be repeated to understand it.

7.4   CHALLENGES IN VOICE SEARCH ANALYTICS

Whether the voice-based search is in the high use today, still there are various obstacles while using this search technology in practice. Following are not all but few commonly encountered barriers in voice search analytics:

- **Google yet not allow filtering of voice searches-** One of the substantial obstacles that becoming obstacle in voice search analytics is that tools of Google do not allow for filtering out the voice searches. According to coverage of the matter on Search Engine Roundtable, Google is focusing the possibility of allowing that at some point but hasn't given a timeframe for when it might roll out that feature.

- **Directory errors may stop people from searching content by voice-** Substantial errors are found in the directory content that could make it difficult for people to reach business sites through voice searches. For example, in almost a quarter of instances, there were errors in the business name. Then, in approximately half the directory listings, there were mistakes in the opening hours. If those errors remain, they could prevent people from reaching certain sites through voice searches. Then, the analytics for such searches may be abnormally low due to the mistakes.

- **Technology tweaks may cause changes in search behaviours-** In late January 2019, Google added a microphone icon to the Google search bar on Chrome for people using Android devices. As such, people may be more likely to depend on that voice search feature when doing things that make it difficult or impossible to type, such as driving or washing the dishes. If companies try to develop voice search analysis tools in the future, they must realize how the availability of voice search tools could influence popularity. The search processes must be retrieved on voice content when voice is used for searching by the user. The challenge is to develop algorithm that must comply with both text and voice-based search.

- **The potential for a steep learning curve when using new analytics tools-** Making the most of those resources once they exist may require people to go through a longer learning process than anticipated. The length of time required to learn one's way around an analytics tool used to dig into voice searches will likely go up depending on the depth of the data offered, too.

- **A Lack of Urgency from Marketers About Voice Search-** It will definitely change how people get information as well as how marketers prepare their content for their customers. But there are others who think voice search won't make such a big dent in the content landscape. Some companies that are considering making voice search analytics tools may ultimately decide that the demand is not high enough yet. This challenge is somewhere not motivating for the content voice-based application developers. Voice search may need to penetrate the market more. The technology may need to reach that point before many companies try to develop analytics tools.

- **Separating voice-search and text-search-** We also can't overlook how, at least for now, marketers can only rely on best practices as they look at search analytics data and try to decide whether particular queries happened via voice searches or typed searches. For example, marketers know that voice searches are usually more conversational than typed searches. But nothing is stopping a person from speaking a voice query and stating, "music shop near me" instead of typing "Where can I find the closest music instrument shop?" So, any worthwhile voice search analytics tools offered must offer some reliable way to tell marketers whether a person spoke the search query or typed it.

That'll be exceptionally difficult considering that some devices, like smartphones, allow either typed or spoken searches. As such, it's not enough for a voice search analytics tool to tell a marketer if the search traffic came from a mobile or desktop device. It must be even more precise and identify the method a person used to get results, such as a microphone or a phone keyboard.

7.5   VOICE-ORIENTED MARKETING

Voice oriented marketing is the collective strategies, tools, and processes a company uses to reach its target audience through voice-enabled devices, including Amazon Alexa, Apple Siri, and Google Assistant. The voice marketing is changing the scenario of the workplace with various facts. Text and voice languages are different while in use, where text may be formal by voice usually casual. Voice search usually involves longer queries as compared with text queries. Voice oriented search is focussed on local solutions and people changes the way how search is to be done. Following section focuses the contents of the above statements:

(i)   The Language of Voice Search is Different

Typically, people use questions more with voice search, as the voice assistants are programmed to respond to these rather than to an affirmation. For example:

- Text – "Weather in New Delhi"
- Voice – "What is the weather in New Delhi?"

People tend to speak in full sentences with voice search, and the artificial intelligence (AI) platform will respond in kind. As programs like Siri use the text of web pages to deliver answers, content needs to be optimized for conversational language.

(ii)   It Involves Longer Search Queries

With the dawn of voice search, people tend to use even longer, more specific queries.

- Text – "best restaurant in Delhi"
- Voice – "What is the best Italian restaurant in Delhi?"

(iii) It's Focused on Local Solutions

Voice searches are most performed whenever people are looking for quick answers and information about the local area. They pull out their device and ask Siri or Google for directions or information on the nearest restaurant, bar, or shop.

(iv) It Changes the Way People Get Their Search Results

Users no longer need to visit a website to get the answer they want. Instead, a quick voice search serves up the answer, which can be read back to you in mere seconds.

7.6   TOOLS USED FOR VOICE ASSISTANCE

Come to the practical part of the voice-based tools. There are various tools which are popular these days that help in voice-based assistance. Few voice-based tools are discussed below with their basic introduction too:

(i)   Amazon's Alexa

It is capable of voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts, playing audiobooks, and providing weather, traffic, sports, and other real-time information, such as news.

Figure 2: Amazon's Alexa

Alexa is also available on a lot of third-party devices like speakers or TVs as well as through the Alexa app on phones.

(ii)   Google Assistant

In the field of voice assistance technology, Google Assistant is an equivalent product which is equivalent to Amazon's Alexa, Apple's Siri and Microsoft's Cortana. Google Assistant has made incredible progress since its 2016 launch and is probably the most advanced and dynamic of the assistants out there.

Figure 3: Google Assistant

Google has spread Assistant far and wide, not only on its own hardware, but through partnerships with other companies that see Google Assistant in a huge range of devices, from fridges and headphones to speakers and cars.

(iii) Apple's Siri

Similar to other voice assistants, Apple's Siri is the voice assistant used popularly. Its interface is shown below:

Figure 4: Interface of Apple's Siri

Specifically, for this smart voice product various commands are well prepared. Below is a list of some of the commands and questions on which Apple's Siri is able to respond to or to take the actions in reply:

- Make calls
- Send/read texts
- Set alarms/timers/ reminders/check calendar etc.
- Play music (specific songs, artists, genres, playlists)

- Play TV shows and movies, answer questions about them
- Do translations and conversions
- Solve math equations
- Offer up sports scores
- Check movie times and ratings
- Search for nearby restaurants and businesses
- Check the weather
- and many more.

Surprisingly, this voice assistant will definitely help you in tuning your business as per your interest.

7.7 AMAZON ALEXA- HIGHLIGHTS AND COMMON COMMANDS

As discussed above, Amazon's Alexa can also control several smart devices using itself as a home automation system. The list of Alexa commands is expansive and grows with every new service or device it supports. Alexa isn't perfect, but it's pretty great at understanding natural language, so you don't always have to speak the commands exactly as you see them below. Many commands work when worded several different ways or even with words omitted. Out of various commands the basic commands followed by Alexa are listed below:

(i)   Basic commands

- Ask for help: "Alexa, help."
- Have a conversation: "Alexa, let's chat."
- Mute or unmute: "Alexa, mute" or, "Alexa, unmute."
- Stop or pause: "Alexa, stop" or, "Alexa, shut up."
- Change volume: "Alexa, set the volume to 5," "Alexa, louder" or "Alexa, turn up/down the volume."

Also, the Alexa is updated with the Coronavirus commands given below:

(ii)   Coronavirus commands

- Ask for coronavirus information: "Alexa, what is the coronavirus?"
- Ask for coronavirus news updates: "Alexa, what's the latest with the coronavirus?"
- Ask for help washing your hands: "Alexa, help me wash my hands."

To understand the concept deeper, various commands developed for Amazon's Alexa are bundled in the following categories:

- **Echo Show commands:** The Echo Show and Echo Spot are the only Echo speakers with touchscreen displays. This means you can tell them to show you things.

- **Fire TV and Fire TV Stick:** You can now use compatible Echo devices (Echo, Echo Dot, Echo Look, Echo Show and Amazon Tap) to control your Fire TV and Fire TV Sticks.
- **Media controls:** Helps in managing the media control options.
- **Time and date:** Able to respond the queries related to time and date.
- **Calls and messaging:** Help in interacting on calls and message related activities on your devices.
- **Purchasing:** Used to process commands related to purchasing using audio features of Alexa
- **Notifications:** Echo speakers will light up yellow when you have new notifications
- **News and weather:** Help in forecasting on weather and give you news alert also.
- **Entertainment:** Helps in providing and short listing the entertainment-based tools.
- **Food and businesses:** Whether you want to raise your query to get food or feed any business transaction, Alexa is there to help you.
- **Math:** Alexa also helps you to overcome the mathematical problems. Moreover, it will help your kids to solve the puzzles too.
- **Definitions and spelling:** Get the definition or spelling of a word using this device is easy.
- **Sports:** Check the results of a finished game, find out the results of your favorite teams, ask if a team won, ask when the next game is scheduled etc.
- **Smart home:** Alexa can integrate with loads of smart home platforms, such as SmartThings, Wink, Insteon, Lutron, Belkin WeMo, Philips Hue and many more.
- **Bluetooth:** Pair a Bluetooth device, Disconnect from a Bluetooth device
- **Profiles and user accounts:** Switch profiles, check which profile is active etc.
- **Skills:** Skills are like third-party applications for Alexa speakers. They allow you to connect third-party software and hardware to your speaker, as well as play games and add different news sources to your Flash Briefing.
- **Search:** Get Wikipedia information, Tell Alexa to continue reading a Wikipedia entry
- **Holidays:** Find out when a holiday is, Ask for holiday movies?

Conclusively, this is not the limit to use this smart device. Whatever you may think about this device it will either respond you immediately, and if not, then soon you will get updated version including the solution of the problem left in the earlier version.

7.8   AMAZON ALEXA IN BUSINESS

Voice marketing as discussed above is used to process the task of searching, sorting, deleting, filtering the content used by various devices. Few of the areas where Amazon Alexa is deployed for improving your business are discussed below:

- **Development of Voice ID for identifying voices:** Amazon's Alexa may become even smarter in the near future, as Amazon is currently working on developing voice identification software that will allow Alexa to identify who it is speaking with and differentiate speakers from one another. Voice ID would be able to match a person's voice to a pre-recorded voice print to accurately identify voices. With this function, primary account holders could get benefited with the security policies. No doubt, this new feature will become the building block for the new business model.

- **Introduction to a mobile app:** Amazon's Alexa is now available on its Amazon shopping app for iOS, causing it to become available to users on iPhones and iOS devices. Although, Alexa lives on the Amazon app, its functions are not limited to the app itself and can perform a variety of functions extending beyond shopping.

- **Introduction to competitor products:** Amazon has recently allowed Alexa to be adapted for competitor products, licensing its technology to other manufacturers attempting to create home assistant products similar to Amazon's Echo.

- **Introduction to motor vehicles:** Ford, Volkswagen, Hyundai, and Volvo all announced Alexa integrations this past year, bringing Alexa into the car voice assistant market. Most notably, the partnership between Ford and Alexa is taking voice assistance one step further, allowing you to feed destinations into your car navigation systems, control smart homes from the driving seat, and lock, unlock, start, and check info on your car from inside the house, all through Alexa.

- **Introduction to TV:** The features of commanding a Television set is not supported universally. Whether in the specific TV sets such as Amazon's Fire TV, Alexa is having full control on operations. This feature will suffer with the existing TVs but in the manufacturing of new TV set such smart features are being considered so that they may respond to the smart devices too.

- Therefore, the Dish Hopper 3 is one product that is looking to change this reality and push us towards a remote-less, button-less TV future. Specifically, Dish Hopper 3 is a product for controlling TV integration with Amazon Alexa and allows you to vocally prompt your TV to change channels and do more by providing the high-tech features by supplying the convergent media-based results.

- **Integration with smart home devices:** Alexa has the potential to be a universal smart home hub for all the devices in your home, regardless of which providers you employ for different products. Many smart home companies have native support for Alexa and allow for effortless integration, so that you may call upon Alexa to turn off your lights, update your home security settings, change your refrigerator settings, etc. Numerous companies have smart home hubs that are compatible with different brands of devices, but Alexa is universal and ubiquitous in the competition these days. Needless to say,

the its competitors are also updating their products at high end to increase the capture of the market.

7.9   VIDEO MARKETING- AN OVERVIEW

Video marketing is using videos to promote and market your product or service, increase engagement on your digital and social channels, educate your consumers and customers, and reach your audience with a new medium. According to the research by HubSpot, video on page is capable of increasing conversion rates by over2 80%. Moreover, most of the customers have a faith that video based search results help them to make buying decisions better as compared with text-based results. One of the main features of the video-based content for any purpose is that once it starts, it resumes automatically and you may repeat or jump to any part the video anytime. Also, if the video is interactive one then the understanding of the content may be witnessed by asking questions in between.

A single picture worth a thousand words, then how much more valuable is video? Video is a collection of many pictures and that is the basis of video marketing. It is all about a new marketing strategy that integrates engaging video into your marketing campaigns. If we use video for marketing then, it can be used for everything for your business such as from building customer report, to promoting your brand, services or products. In the education, interactive videos may track whether the students are watching and listening their videos attentively or not by raising small questions based on the content delivered moments before.

How Video Marketing Works?

Marketing your product and services is really a challenge for its intended employees as competition is cut-throat in the market place. Duplicate product practices are highly active that may defame your genuine product one way or the other. You may use the video contents to promote the products and services for achieving better marketing results. Your business brand creates videos that promote your company, drive sales, raise awareness of your products or services, or engage your customers. Various points are important to note here before you develop you video contents. To develop your video marketing strategy, you need to take a note on following:

- **Budget for creating videos:** As you develop the video for your business, before hand, you must consider to choose various things that may help you in reaching your target. You must think for suitable equipment, good editing software, and obviously a smart video marketing team

- **Time:** Time is also a factor before you create the video. Sometimes the time for videos may be short sometimes it may be long especially when you are giving the detailed demonstration of your premium products. Conclusively, it may be said that the more the cost of the product the more the time for demonstration of the product.

- **Engage:** It's not enough to simply tell your stories to your customers, but you must engage your audience while you do so. You have to know that how will you make your stories interesting? Create the stories that will pull audience to your business.

- **Keep it short and focussed:** Try to cover the things in time as much as less because customer must not get irritated with your video content. May be the customer will not return to you in future if you unnecessary engage them or comply them to subscribe into your business. The golden rule is keep it short.

- **Publish:** To get the better promotions for your business products use the social media platforms that will make your business to take leaps and grow exponentially. You may promote your videos on your websites, Facebook, Instagram, YouTube and other social media channels.

- **Analyse:** This feature is for keeping an eye for your business growth. You may also create a repository to maintain the statistics of your video data for improving the business by removing the weaknesses in future videos.

Benefits of Video Marketing-

Once you have prepared video content for your product and service promotions you will definitely going to get benefits from it. Few of the benefits of video contents for marketing are listed below:

Video make connecting with your audience easier: Yes, audiences are interested in knowing the products on videos. Even reviews are also given in video modes. Nowadays, many company's marketing efforts are designed to help build trust of the customer. This medium allows customers to get more eager to know your brand.

Videos boost information retention: If your customers hear something only, they are likely to retain less of that information. But if we provide them the same contents using audio-video medium then they will retain the content for longer run as well as more accurately. Your customers are comfortable in watching the video as compared with other contents such as text or audio advertisements. Also, if good video marketing is planned it can attract new visitors easily.

To make the marketing practices more robust, the firm must select this tool to reach heights in the business. Video can be a versatile tool for salespeople throughout the entire customer buying journey and it can do much more than increase engagement. Moreover, using video contents you may highlight the features of the products to your customers so that they may easily find the way how to use the latest features of the product or services. In case of online service marketing, screenshots of the process may be used and in case of more complex topic screen may be recorded while preparing the content.

7.10 TYPES OF VIDEOS USED IN MARKETING

In this section we will know what are various types of Content used in video marketing include-

- **Product Demo:** In this kind of video, there should be proper information about project which explains the customer or consumer about features, and benefits of the products. It should be design in such a way that it showcases the utility to the customers that they will get after buying the product.

- **Interviews:** Here interview does point that interview which we all have to gone through during selection process of any company, here interview is used for answering questions on a particular topic and posting its video online.

- **Event Videos:** These videos are basically containing the highlights of an event (the event can be professional or kind of social activity and it is usually a part of the event marketing.

- **Explainer Videos:** This kind of videos is specially designed to answer Frequently asked question related to the product that is selling buy a company or an individual.

- **Testimonials:** The term testimonials refer to customer who already bought that product from a company and happy or renowned company expressing their appreciation and good experience with the company. This helps in increasing the confidence of prospective buyers.

- **How-To Videos:** These kinds of videos are used to express that how to use a product of a company. Video contain step by step procedure on working of product.

- **Vlog:** Vlogs or video blogs are video versions of traditional blogs. Through vlogs, a business executes its marketing strategies using videos.

- **Webinars:** Webinars or web-based-seminars are live, web-based video conferences where the host uses an internet connection to connect with the audience of viewers and listeners worldwide and talk about a specific topic.

- **Presentations & Talks:** These include posting recorded videos of presentations and talks someone related to the business has organised, delivered, attended, or was a part of. Such talks (like TEDx) are much sought after video content on the internet.

- **Tutorials:** Tutorials are basically used to teach the customers the intricacies of the offering or other offering business are affiliated with.

- **Reviews:** These are the reviews of the product or services posted by influencers and thought leaders, which result in altering the decisions of the viewers.

- **Live Videos:** Live videos are videos related to the brand or offering that are streamed live either to showcase something important or to interact with the customers directly.

- **Brand Videos:** Brand videos are typically created as a part of a larger advertising campaign, showcasing the company's high-level vision, mission, or products and services. The goal of brand videos is to build awareness around your company and to intrigue and attract your target audience.

- **Animated Videos:** Animated videos can be a great format for hard-to-grasp concepts that need strong visuals or to explain an abstract service or product.

To make a business that suits your business perfectly you have to plan in advance, prepare and shoot video and mix it with audio and other visual effects by applying the mixing effects. If you are in need or interested in creating videos for you business growth then following ten steps used by the HubSpot to create business videos will help you in achieving your task. These steps are:

- Plan your video.
- Script your video.
- Understand and use your cameras.
- Set up your studio.
- Prepare your talent.
- Shoot for the edit.
- Organize your footage.
- Edit your video.
- Choose your music.
- Record your voice over.

If you are new in this technology then you may take these steps as guidelines for preparing videos for your business promotion activities. In the next section we will take insights on a specific organization that has used video content for their business and have got benefited too.

7.11 INSIGHTS ON VIDEO MARKETING

A case study of Revzilla.Com (A Motorcycle Gear Company)

The concept of video marketing seems very simple. Still, if you are new in this task then you must take a closer look on any model that is developing such models. In this section revzilla.com, a motorcycle gear company is focussed for your better understanding. Its user
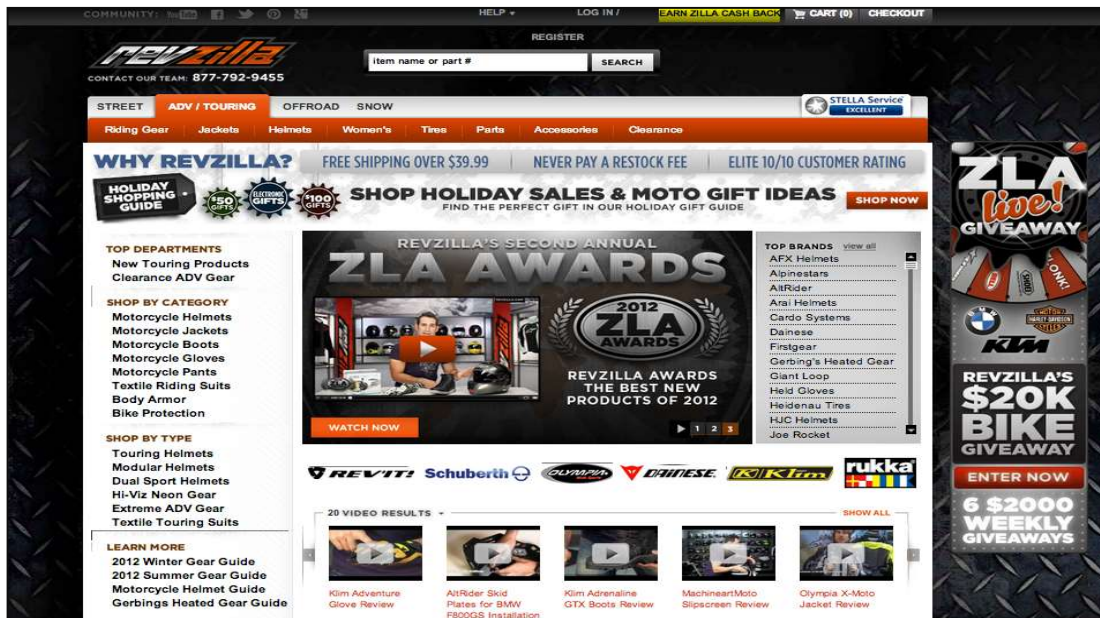
interface is shown in the figure below.

Figure 7: User interface of RevZila, A Motorcycle Gear company

The facts about this website are:

- RevZilla has produced over 1,800 videos that provide product reviews and instructions for more than 17,000 subscribers around the world.

- In just a few years, RevZilla has accumulated over 9,000,000 video views.

Here we may focus that how the strategy of using videos has generated leads for the company. Surprisingly, it is very high. There are various reasons for the popularity and obviously the high gain of this company due to use of videos-based content for its customers. Few of the features used by revzilla are shared below, which you may also note while creating videos:

- **Short and engaging:** If the videos are short and engaging the customers, there are lot of chances to get profit. Such valued videos provide information about products that RevZilla sells to its most valued customers. The purpose of the videos is to provide viewers with information to make smart choices about products and not to force them to buy specific product. No diversion for business purpose only is to be made unless opt by the customer itself.

- **Consistent:** The videos here follow a consistent, host-driven formula that is both informative and engaging, which helps to grow audiences and brand loyalty. One or

two online videos is simply not enough to create the kind of conversations that grow a brand. The concept of series is used by RevZilla's videos and it gives benefit for longer run too.

- **Specific focus:** RevZilla positions itself as an expert on motorcycle gear, and it has successfully built an online video audience by focusing exclusively on what it knows best. Sometimes companies have achieved viral success with more emotional, less content-oriented videos, but having a specific focus and area of expertise is more likely to build brand loyalty over time.

- **Conversation:** The RevZilla encourages conversation. One of the best things about online video marketing is that it gives users the opportunity to join in on the conversation. For example, this RevZilla video features the best products of the year, which were chosen in part based on user feedback.
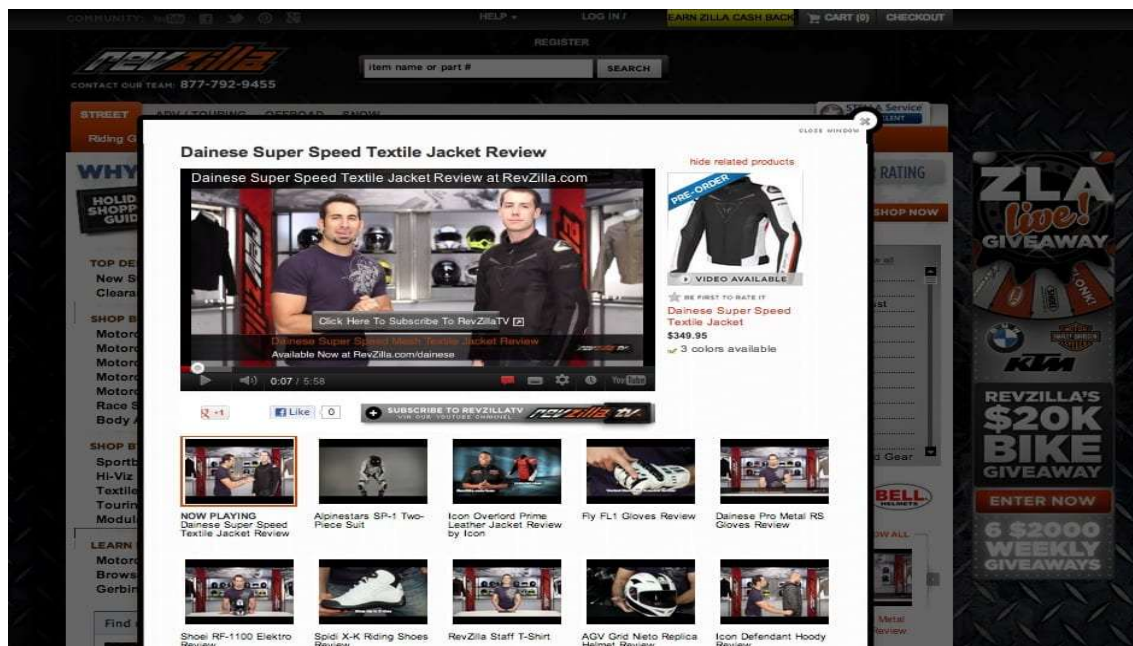
Figure 6: Revzilla video features the best product of the year

- **Responsiveness to comments by its representatives:** One of the main features of the video marketing strategy opt by this company is that the representatives from the RevZilla team respond to comments whether it is positive comment or the negative comment. Likewise, the response is quick, polite and open ended from the representative's end. This feature increases the confidence of the customers with the organization and resultantly business grows more.

- **Style of valuable feedback by viewers:** In this platform, viewers also provide valuable feedback on the difference in styles. As a case of promotion, the hosts from the RevZilla offers gifts such as free t-shirt to whichever commenter can respond to them

for particular case such as guess the team member who is dressed up as Batman in the currently running video. This is a clear example of a fun, personalized type of interaction through online video that is likely to build brand loyalty over time.

7.12   POINTS TO REMEMBER

- Voice based search is used frequently for casual search these days.
- Apple Siri, Amazon Alexa, Google Assistant are few examples of voice assistants that accepts the commands and responds accordingly.
- Marketing is fully affected by voice-based search and market stakeholders are using voice technology for ease of processing their tasks.
- Voice marketing-based process uses casual search strings such as 'ATM near me' in spite of 'May I know the location of all the ATMs near me.'.
- Video content for marketing is used heavily by all the brands.
- Product promotion content use on video mode gave better growth in the businesses.
- Types of videos used are event videos, testimonials, how-to-videos, vlog (video logs), webinars, tutorials, reviews, presentations, live-videos etc.
- In the online education, interactive videos are used to verify if the students are attending the video lectures attentively.
- The voice based smart systems such as Siri, Alexa, Google Assistant etc are making the change in the way how the business is growing these days. Moreover, voice id-based voice processing is in practice to do business more conveniently by giving the customized and verified service to the existing customers.
- Video marketing is growing exponentially specially in the social platform such as YouTube, Facebook, Instagram etc where maximum stakeholders meet. Various factors such as budget, time, engagement, publishing, analyzing must be considered before creating any product and service promotion using video marketing.
- YouTube, Instagram, Facebook etc are the social platforms where the video contents are used for marketing.
- Biteable, Video Marketing Blaster, Vidgeos, Animaker, Hippo Video, Filmora, Powtoon, Vidyard etc are used to create the videos for various purposes.

7.13   GLOSSARY

- **Voice marketing:** Voice marketing is a set of tactics and strategies designed for reaching audiences who are using voice devices
- **Video marketing:** Video marketing is the strategy designed by marketing teams to create, curate, and utilize videos as a means of marketing their products or services to their target audience.
- **Amazon Alexa:** It is a virtual assistance AI technology which is capable of voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts,

playing audiobooks, and providing weather, traffic, sports, and other real-time information, such as news.

- **Apple Siri:** It is similar technologies as Amazon Alexa.
- **Google Assistant:** It is similar technologies as Amazon Alexa.
- **Voice recognition:** Voice or speaker recognition is the ability of a machine or program to receive and interpret dictation or to understand and carry out spoken commands.
- **Voice search:** Speech to Text Searching Assistant makes it faster and easier than ever to search apps, web search, or image search for the content you want.
- **Video marketing:** Video marketing is using videos to promote and market your product or service, increase engagement on your digital and social channels, educate your consumers and customers, and reach your audience with a new medium.
- **Event video:** It is the art of capturing social and special events onto video by a videographer.
- **Product testimonial:** a positive report on a product written by a customer.
- **How-to-videos:** It is a video format used popularly to teach viewers about a product or a service for business purposes.
- **Vlog:** refers to a type of blog where most or all of the content is in a video format. Vlog posts consist of creating a video of yourself where you talk on a particular subject such as reporting or reviewing a product or an event.
- **Webinars:** A webinar is an event held on the internet which is attended exclusively by an online audience.
- **Live videos (Live streaming):** This type of video allows us to broadcast a current video feed to an online audience.

7.14   CHECK YOUR PROGRESS

Descriptive Type Questions-

a)   Define voice marketing and its use in searching.

b)   Define video marketing and its use in product and service promotion for business.

c)   How seminar is different from webinar?

d)   Write the purpose of creating how-to-videos.

e)   Discuss in detail how to increase the business using Social media.

Objective Type Question-

a)   Vlog is also called video log. (True/False)

b)   Amazon Alexa is a one of the popular video marketing tools used to promote business. (True/False)

c)   The basic mathematical problems are easily addressed by voice assistants such as Apple Siri. (True/False)

d) Voice assistant allows strict use of language syntax that follows the grammar rules. (True/False)

e) Keeping the video short, engage your audience throughout, and Budget plan are some of the important feature(s) that should be addressed while creating video for product or service promotions. (True/False)

f) Event videos, Testimonials, and How-to-videos are the ONLY types of videos used for businesses. (True/False)

g) The … …. … … term is used to recognize the voice of the customer or user for customizing the business.

h) … …. … … is/are the voice assistant(s).

Answer (Objective Type Question)

[a] True   [b] False   [c] True   [d] False   [e] True

[f] False   [g] Voice id   [h] Amazon Alexa

7.15   BIBLIOGRAPHY/ REFERENCES

- Voice Technology Trends in Marketing: Everything Digital Marketers Need to Know, Campaign Monitor, https://www.campaignmonitor.com/resources/guides

- 33 Voice Search Statistics to Prepare You for the Voice Search Revolution, WordStream, https://www.wordstream.com/blog/ws/2018/04/10/voice-search-statistics-2018

- How to Optimise Content for Voice Search – 4 Simple Tips for 2021, SiteProNews, https://www.sitepronews.com/2020/12/18

- synclarity, Voice Marketing Guide for 2020, https://blog.synclarity.in/marketing/voice-marketing-guide-for-2020

- Campaign Monitor, Voice Technology Trends in Marketing: Everything Digital Marketers Need to Know, https://www.campaignmonitor.com/resources/guides/voice-technology-everything-digital-marketers-need-to-know/

- By CJ Haughey, Engagebay, Voice Marketing: How to Leverage Voice Search Trends to Grow, https://www.engagebay.com/blog/voice-search-marketing/

- Martech wiz, 6 Brands that are successfully Strategizing for Voice Marketing, https://www.martechwiz.com/blog/6-brands-successfully-strategizing-for-voice-marketing/

- SEJ Search Engine Journal, 10 Awesome Video Marketing Tools, https://www.searchenginejournal.com/11-awesome-video-marketing-tools/137767/

- Shane Barker, 21 Video Marketing Tools Every Marketer Should Know in 2020 (Updated August 2020), https://shanebarker.com/blog/video-marketing-tools/

- Hubspot, The Ultimate Guide to Video Marketing, https://blog.hubspot.com/marketing/video-marketing

- 99 designs, the 10 types of video you can use to promote your brand, https://99designs.com/blog/video-animation/types-of-videos/

7.16   SUGGESTED READINGS

- How to Create Vlogs in 9 Easy Steps, August 24, 2015, https://newbluefx.com/blog/create-vlogs-9-easy-steps/
- Build Your First Voice Assistant, Sept 2019, https://www.kdnuggets.com/2019/09/build-your-first-voice-assistant.html
- Why You Should Use Video Marketing for Your Business, By Joel Whipple, September 30, 2020, https://www.digitalexaminer.com/use-video-marketing-business/

UNIT- 8

ONLINE CUSTOMER SERVICES- TOOLS AND ACTIVITIES

8.1   INTRODUCTION

A digital promotional strategy is ideal approach for designing and implementing marketing campaign. Content promotion strategy may be broadcasted in many forms such as- social

media, e-mail marketing, blogs, podcasts, conferences, etc. Here we will discuss about online customer services- tools and activities.

Fig. 8.1 Many forms of Content promotion strategy

Here we are going to understand about "customer" and "online customer services". As-

Customer- A person who buys goods or services is known as customer. It is important for generating revenues. Without customer business is nothing. Customer may be individual or a group. It can be purchase of goods or taking services by organizations.

Online Customer- As the world is growing with e-commerce. Everyone wants to purchase products online like mobile phone accessories, grooming items, home appliances, etc. Online Customer is web-based place where a number of customers come together to purchase goods, discuss their issues related to the products, and give new product ideas. Customers can come together with the help of social media techniques like mobile devices, personal computers, and web. These techniques provide better experience to the customer to communicate, and making interaction with expert of the company.

Services- An authority is responsible for a selected kind of activity, or presenting a specific aspect that people need or a service such as transport, hospitals, customer care service. Mobile customer care is very popular. So many times, we keep asking for help from mobile customer care that the network is not coming or tell me about the tariff.

8.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Understand customer services and support policies.
- Understand customer support tools and techniques.
- Know about Open-source survey tools.

8.3   ONLINE CUSTOMER SUPPORT POLICIES

Service of customer must be simple and effective to the customer. Online customer service must be effortless. For the enhancement of business, do the business online and provide simple customer care service to the customer. Customer satisfaction is an important aspect of developing a successful business. Customer care service delivers consumers demand, fast customer supports these days. The regular or commonly asked questions can be eliminated like warranty of the product, return or exchange policies of goods, installation testimonials, etc because all necessary information should be available on the products/services. For rapid response to the customers, the provision of automated message of contact within a short period of time should be there. Following points must be noted in designing policies-

- **Customer Satisfaction**- It means how much customer satisfies with company's product, brand and customer services. These satisfaction measures can be determined by rating and surveys. Customer satisfaction means how they feel about your product its quality and brand. Customer satisfaction is needful for businesses. If a customer is not satisfied with your online customer service then they will not purchase your goods.

- **Productivity**- A proportion of the effectiveness of an individual, machine, production line, framework, and so forth in changing over contribution is helpful in producing yields. Profitability is registered by separating normal yield per period by all-out expenses caused or assets expended in that period. Some factors that tend to increase the productivity are automation, completion, efficiency, environment, innovation, knowledge, quality, risk management, reuse, competition, prioritization and many more.

- **Feedback**- Taking ideas & feedbacks and their implementation is an important part of customer service. There are many ways to collect feedback for e.g. surveys, phone call, emails, suggestion boards, etc.

- **Customer loyalty**- Holding a client and selling them normally is known as customer loyalty. Client faithfulness can be estimated as the quantity of clients who shop routinely.

- **Improvement**- Improving client support procedures or client experience is generally a cycle of estimation, improvement and estimation. For instance, an aircraft may explore different avenues regarding new kinds of dinners, measure client experience and make changes dependent on criticism.

- **Brand**- Client service targets identified with brand picture and reputation. As a rule, predominant client service gradually fabricates brand worth and poor client assistance can rapidly pulverize brand an incentive through terrible attention. It is conceivable to quantify client care with brand mindfulness addresses, for example, "Can you name a friendly and reliable airline?" Recognition, Awareness, Visual Symbols, Concept, Reputation, Culture, Quality, Status, Trust, Relationship and more.

- **Sales-** This is a process that maintains relationships among buyer clients and sellers. The salesperson of a company demonstrates customers what they actually imagine about the goods in a polite and direct manner.

- **Product Knowledge**- The product knowledge means knowing everything about the product and demonstrates it in front of the customers. It is an important platform to deliver product information to customers. The following type of product knowledge are must- Customers, brand, customer experience, use, complementary products, configuration, troubleshooting, specification, customization, integration, etc.

- **Customer Experience**-The main motive of an organization to satisfy customers and this can be done by providing the better environment, better services, attractive location, reputed products and brand image.

- **Customer service Improvement**-It can be earned by changing organization's design and customer satisfaction. In this process, we try to gain trust of the customer by talking about the journey. Here are some common ways to improve customer service.

- **Ratings and Reviews**- This directly influences the selling power of products. High ratings indicate the product is very nice or product is made by a very repudiate company.

- **Customer Relationship**- Targets identified with building and keeping up client connections. For instance, a record official with an objective to call clients once a quarter to check whether they have any inquiries or concerns regarding their products and services.

- **Service Culture**-Service culture means a set of expectations, rules and regulations and principles that show to the customer service at a firm. Service culture is reflected by respecting customer's intelligence, common courtesies and diligence over roles.

8.4   CUSTOMER SUPPORT TOOLS AND TECHNIQUES

Today is the era of technology and people want everything online to buy and sold. A number of companies provide different tools and techniques to their customers for the easiness of the system. Companies try for better interaction between customers and their organization with the help of various online customer supporting tools like Alexa, social media, automatic call-back, live chat, etc. For better customer support some important components are as follows:

- Usability- How easy is it to install software? Are they easy to use? Will people be able to work with it easily and enjoy?

- Effectiveness- How well the tool solves the problem? It means how effectively it solves the problem.

- Value- How much valuable is the software used? How effectively it fulfils the need of customer's and team?

Tools for Providing Better Customer Service Support-

Nowadays, several organizations provide client support tools to urge shoppers for better connection with their brand. These customer assistance tools guarantee that customers made a decent buy. Organizations are always adopting various techniques to allure their customer by support department efforts. As the market in the whole world faces various types of volatile and sophisticated environment, in spite of this it is their job to give customers satisfactory product.

In order to keep customers returning and keep that competitive edge, companies use different online tools to attract customers. Here are some valuable customer support tools you can use to engage your clients and increase your market.

[1] Artificial Intelligence-

Despite continued growth, how do sudden businesses suddenly stop growing? This is a matter of thought. When you invest, you find that your customer support team does not take care of

your customers' request. Your customers have to wait for two or more days for their request and are displeased with social media. If you do not have enough money to hire and train your customer care staff, then you should do artificial intelligence (AI) and automation. AI and automation are the only solutions. 82% of customers leave the company due to poor customer service. These are customers who are not satisfied with customer service. Many businesses use AI tools well for their business to grow.

What is Artificial Intelligence?

AI is characterized as a computer system framework that copies a human's ability to comprehend and learn. Prior to AI, computer system should have been programmed with precisely what they should do. With advancements in AI, people can mention to computers what the objective is, and the AI will learn and advance an approach to arrive utilizing calculations and estimations that recreate the way a human think - yet a lot quicker.

What are chatbots?

Chatbots are a sort of messaging software that associates with clients and website visitors to gather information and provide help. The most basic chatbots in support use simple if/then statements and give assistance. This isn't AI, however it is computerization. Further developed chatbots can utilize AI to learn and improve their capacity to comprehend what's being asked of them.

Chatbots can be very useful for customer service teams, particularly in high volume circumstances where similar inquiries come up much of the time. Chatbots can likewise make customer service progressively effective by gathering information, checking account information and triaging before associating customer to help. For instance, PVR Cinemas offers internet booking platform for film tickets. They utilize a unique guideline-based bot to ask clients proper inquiries to gather information and find correct tickets for them. The inquiries continue as same dependent on the stream set by the organization;
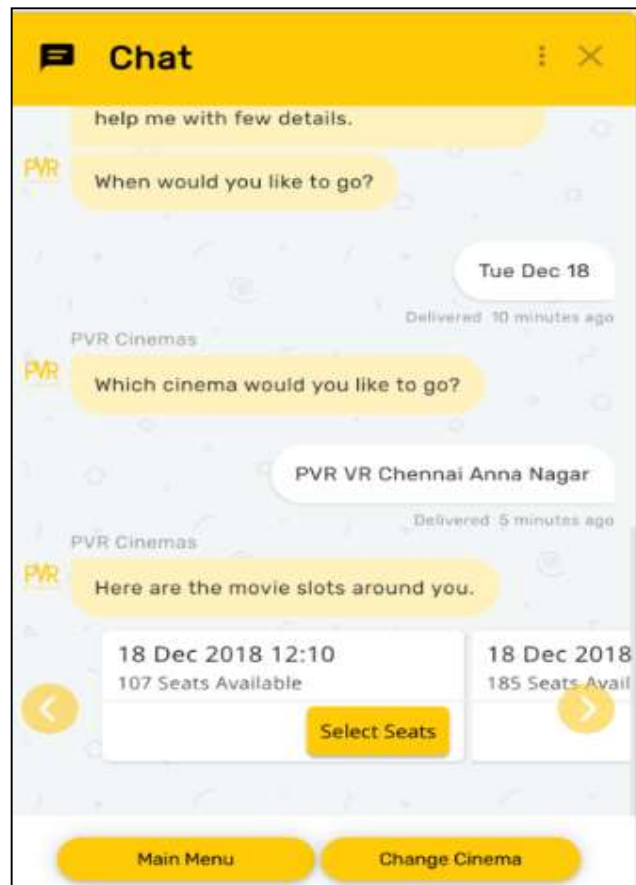
however, the information points change depending upon the day, area and what movies are available. People can book their tickets easily and PVR Cinemas does not have to set up the live person for something that can undoubtedly be cultivated with a bot.

Chatbots versus AI-Chatbots and AI are two themes that are regularly combined together. Although, in actual we take both as same but practically both are different. Not all chatbots use AI. Not all AI has a messaging interface. In any case, when you consolidate both of them together, you get an extremely supportive AI right hand, or "bot ". Chatbots are carefully client facing and they may utilize AI to more readily get clients or to surface better information. Majorly, chatbots are of two types- (i) Rule-based chatbots- Chatbot programming tools without AI functionality are classified as rule-based chatbots since they use only simple rules. (ii) AI based chatbots- programming that learns from client interactions can gather setting, refer to older conversations and offer assets to help answer questions. Since it utilizes a kind of AI called "machine learning" it really improves after some time.

Regardless of whether it's having the option to understand content, distinguish designs or perceive a picture. This can be extremely useful when working with chatbots, yet customer service can likewise profit by utilizing AI in different manners.

AI can give supportive information on the specialist side of a helpdesk or reveal experiences dependent on client discussions and ratings. Fundamentally, whenever you need a ton of information crunched or handled, AI will be a major assistance as-

- **Virtual Assistants for Automated Customer Service**- Virtual assistants are commonly used for providing services to their customers and the things are used for services like bots, chatbots and digital assistants.

- **Agent-Facing Bots for Faster Human Service**- Chatbots do not irritate customers, rather it be can used as a supportive agent for their customers to provide the services such as rapid-reply or auto-reply templates.

- **Chatbots for Conversational Commerce**- Virtual agents work in various fields like sales and marketing. A number of brands have planted like chat- or voice-based retail experiences on Facebook Messenger, Amazon Echo, or some additional interactive platforms.

- **Sentiment Analysis for Customer Insights**- How customers react after getting product and brands of your company? Sentiment analysis can be done with the help of textual data, like emails, social media posts, and chat and call logs.

- **Automate Routing for Streamlined Issue Handling**- How to direct a customer email? AI can provide catalogue of customer aim, like the customer trying to read more and more about the selected item, correcting the destination address, demanding the money back, etc.

- **Emotion AI for Increased Customer Satisfaction**- Emotion AI means, sentimental computing in which the machines are trained to find out, understand, and react to human emotion for further, voice or body language. For example, a customer is talking by chatbot to a customer representative who does not understand the problem, but with the help emotion AI can escalate to the customer.

- **Recommender System for Cross-Selling and Up-Selling**- The recommended system shows the familiarity with the customers by which it provides the better search results for every customer. Most of the times the recommended products have purchased by the customers.

[2] Live Support Chat-

Through live support chat, customer can memorize the information provided by the agent of
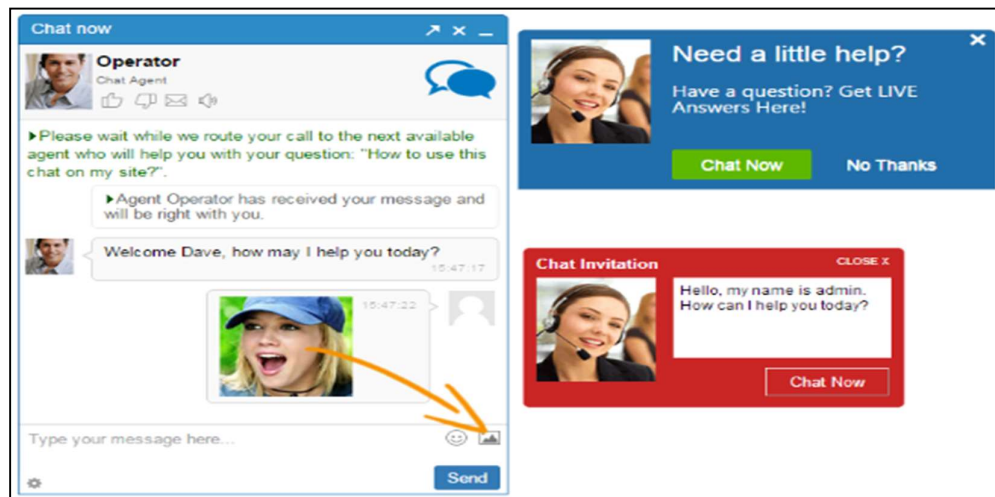
organization and can add virtue of handle to multiple customers at a particular time.

Except online supporting to a customer, they have a lot of multiple features. These can be tracked by senior designative and can also be monitored by their younger colleague. Chat support is the most straightforward and quickest approach to connect with website visitors and convert them into clients. Resolve client issues quickly by envisioning what a client is going to type straightaway and see what they are seeing on your site with our "live visit system". Administrators can answer boundless chats utilizing our numerous visit window features to give quicker resolution to approaching inquiries.

[3] Self-Service Helpdesk-

The world revolves around "Google". If a customer has a problem then he/she tries to find an online solution for that problem before directly contacting the concerned authority. We can stop such type of user problem by creating an online self-service

helpdesk for customers with no prior technical knowledge.

[4] Automatic Call-back Phone System-

Nowadays, most people use smart phones. In the automatic call-back phone system, a company makes sure that it provides a better feel to their customers 24*7. After a customer leaves his/her contact number, the customer care person places it in a queue and calls the customer automatically as soon as the first person is available to solve the problem.

[5] Dedicated Mobile App-

Mobile users are active users of variety of apps fulfilling their needs. Through dedicated mobile, you can implant your online shop in it, ticketing system, etc. According to a survey, 75% of customers use the Internet and their smart phones when they shop and 50% of them choose a mobile customer service app for their disposal.

[6] Email Marketing Tool-

Some customers prefer email communication rather than anything else. It can be more helpful than the traditional techniques. Email marketing has a several benefits like pricing, design, time saving, etc.

[7] Social Media Management Tool-

Nowadays, business is nurtured by the online audience. A company has to maintain a social media management tool as it's easier to gain followers through social media given its large usage and impact. These tools will attract you to surf social media, ensure easy communication and gives answers to everyone.

[8] SMS Text Support-

According to comScore, SMS (Short Messaging Service) is used by 75% of Americans. By taking this in consideration, you would like to add some more communication channel for supporting the customer support mix by providing SMS text support as an option.

[9] Customer Portal-

Customer portal is a dedicated place that allows customers to access their personal data. Here, customers can view ordered item history and also keep the selected items.

[10] Bold360-

This platform is designed using Artificial Intelligence for marketers to understand each customer effectively. Bold360 through AI chatbots and human support system provides consumers and employees what they want with faster pace and in effective manner.

8.5   OPEN-SOURCE SURVEY TOOLS

Practically all organizations, scientists, market enthusiasts, and different experts depend on surveys to discover answers to certain significant questions. Surveys give important experiences into different business parameters and permit business people to make informed educated choices for their ventures. Organizations depend vigorously on reviews for market analysis and customer follow up. It encourages them to comprehend their clients, their preferences, satisfaction level, and their decisions for their future relationship. New companies utilize them for powerful statistical surveying and business development openings. Marketers rely on surveys to enhance and polish their strategies. There are several free and open-source surveying tools to help businesses grow.

The fundamental objective of a surveyor is to discover a survey tool that gives at least these five highlights.

- Create a customized questionnaire
- Share the questionnaire via multiple channels
- Collect the respondent data
- Generate a report for further analysis
- Reach their audience and engage them efficiently.

You may require more than this if you are searching for broad outcomes dependent on surveys, yet at the same time, these five are must require highlights. Any online survey tool meeting the above five fundamental necessities without charging for these services can be categorized as free online survey tool. Some open source (free) survey tools are-

- **LimeSurvey**-It is an online survey tool that can be used for conducting questionnaires. It is also used for advanced evaluation management. It is an open source and will always be developed transparently.

- **Qualtrics Research Core-** Qualtrics is survey software that can be used for handling easy questionnaires for detailed research projects. It allows users to make a unique research survey by its drag and drop survey tool. Qualtrics supports only one active survey and further support is provided by the help centre. Number of questions to be asked can be endless though upto just 100 questions can be replied by the help centre.

- **SoGoSurvey-** This software is used as a comprehensive tool. It provides 24x7 supports via smartphones, chats, and emails. Such type of systems helps users improve customer's experience. With an unlimited number of active surveys, it is also supported by the help centre. As the number of questions is 100 here but only 200 replies are given per year from the help-centre side.

- **Survey Anyplace-** Survey Anyplace targets for creating fun, mobile, and interactive quizzes while the survey provides users to engage people with their listeners in a special way. It provides the number of surveys and can be supported through email.

The number of questionnaires may be endless but the number of replies is only 20 per month.

- **SurveyGizmo-** It is a free open-source survey option tool ideal for small businesses for basic surveying. There are several survey tools that run only for one time without sufficient response. However, Surveygizmo provides a better job by providing a complete report. It allows three surveys free of cost and support is provided by the help centre. The number of questions should not be more than 25 per page and it answers 100 per survey.

- **SurveyLegend-** Surveylegend is another effective tool for small businesses. It provides a rapid review of functions, so that users can review on their mobile screens. It confers three surveys but it is not an open-source tool. Support is provided via email mechanism and any of the users can ask endless questions with endless replies.

- **SurveyMonkey-** SurveyMonkey tool is used by large industries, academic institutions, and government agencies. It is one of the most reliable tools for survey-making worldwide. The reason behind this is its smoothness with GUI (Graphical User Interface) with unlimited surveys, and support from the help centre. Only ten surveys are allowed with 100 replies for every survey.

- **Typeform-** Typeform is used by large organizations, NGOs (Non-Governmental Organizations), and bloggers. It creates surveys by using the conversational data gathering methods. It feeds the survey taker's questions and replies. It has all the features like SurveyMonkey, a number of active surveys, support, questionnaires, and of responses. However, the best of all is that Typeform is an open-source software.

- **Zoho Survey-**This software tool is used by small industries, NGOs, and public sector units. Marketers normally use Zoho, which is a CRM (Customer Relationship Market) tool and the CRM tool boasts the capacity and user's affectionateness. It takes few trials to get the user's problems set up and after taking a little more time when you are getting ready for the survey. Zoho provides high functionality. It has an endless number of active surveys with a user manual. Only 10 questions are allowed per survey with 100 replies per month.

8.6 POINTS TO REMEMBER

- Computer- A computer is an electronic device that manipulates data or information. It can store, recover, and process information. You can utilize a computer to type documents, send an email, play games, and use web.

- Computer Network- A computer network is a digital telecommunications network for sharing resources between nodes, which are computing devices that use a common telecommunication technology.

- Computer hardware- Computer hardware refers to the physical components that make up a computer system. There are different kinds of hardware that can be installed inside, and connected to the outside, of a computer.

- Some of the hardware names are Motherboard, Central Processing Unit (CPU), Random Access, Memory (RAM), Power Supply, Video Card, Hard Drive (HDD), Solid-State Drive (SSD), Monitor, Keyboard, Mouse, Battery Backup (UPS), Flash Drive, Printer, Speakers, External Hard Drive, Pen Tablet and more.

- Email- The most common method of sending and receiving messages online.

- Internet- Internet is a global network of billions of computers and other electronic devices. With the Internet, it's possible to access almost any information, communicate with anyone else in the world, and do much more.

- Information Technology- Information technology definition is the use of innovation to take care of businesses or organizational issues. Regardless of the job, a member of an IT department works with others to take care of innovation issues, both of all shapes and sizes.

- Online Marketing- It is a set of methodologies and tools used for promoting products and services through internet. Online marketing comprises a wider range of marketing elements than traditional business marketing due to extra channels and marketing mechanisms available on the internet.

- Software- Software is a collection of data or computer instructions that tell the computer how to work. This is rather than physical equipment, from which the framework is manufactured and really plays out the work. Without software, computer is useless and will not work. C, C++, java, .net, operating system, and more are some examples of software.

- Technology- Technology is the set of knowledge, skills, experience and techniques through which humans change, transform and use our environment in order to create tools, machines, products and services that meet our needs and desires. Etymologically the word comes from the Greek tekne (technical, art, skill) and logos (knowledge).

- Web- Web is the common name for the World Wide Web, a subset of the Internet consisting of the pages that can be accessed by a Web browser.

- WiFi- It is a universal wireless networking technology that utilizes radio frequencies to transfer data. It allows high-speed Internet connections without the use of cables. The term WiFi is a contraction of "wireless fidelity" and commonly used to refer to wireless networking technology.

- WWW- It is a World Wide Web Consortium (W3C). The World Wide Web is a combination of all resources and users on the Internet that use the Hypertext Transfer Protocol (HTTP).

8.7   GLOSSARY

- AI- Artificial Intelligence is computers that act in a way analogous to intelligent human behaviour.

- Brand- Everything customers or the general public thinks or knows when they hear a company's name.

- Business Hours- The days and hours when your customers can directly reach your support team.

- Call Centre- Term used to include reservation centres, help desks, information lines or customer service centres.

- CRM- Customer Relationship Management.

- Channels- All the possible ways through which customers can reach the support team, for example phone, email, social media, live chat, etc.

- Churn- The loss of clients or customers over a certain period of time.

- Customer Retention- Customer retention is the act of keeping customers. There are many studies that show that keeping customers longer is much less expensive than acquiring new customers with some suggesting that it is up to ten times less expensive to keep a customer than acquire a new one. Customer retention is focused on ways to keep customers longer.

- Cross-Selling- The practice of selling an additional product or service to an already existing customer.

- Customer Service- The assistance, advice and information provided by a company to people, businesses etc that use their product or service.

- E-business- Business process that result when you rely on digital technology and the internet as the primary communication and interaction media.

- Feedback- A customer's opinion of their experience with your company and how you could improve.

- Feedback Loop- A process that entails gathering customer feedback, takes necessary action, and communicates the results back to the customer(s).

- Help Desk- A software (or platform) companies use to manage customer support.

- Service level agreement (SLA) - An agreement describing the services a provider furnishes with a customer within a given time period.

- Solutions/articles- Content that contains information on how to do something or how to solve an issue usually via a KB.

- Support channel- A support channel is a medium for customers to reach out to a company to get help. It could be email, phone, chat, web form, or even Facebook and Twitter.

8.8   CHECK YOUR PROGRESS

Descriptive type questions-

a)   What is the difference between customer and online customers?

b)   What is digital promotional strategy?

c)   What is the best free survey tool?

d)   Is SurveyMonkey an open source? If yes tell something about that.

e)   What is Artificial Intelligence?

Objective type questions-

1)   What are the two main purposes of a bar code?
   [a] Pricing and Inventory   [b] Pricing and Location
   [c] Receipt and Inventory   [d] Receipt and Location

2)   What is/are the tangibles? Surveys suggest that most customers evaluate or rate the service that you provide based on five factors. One of those factors is tangibles.
   [a] The degree of caring that you show customers.
   [b] Your ability to provide service that is dependable and accurate.
   [c] The physical representations of your company including the facility, equipment, and your appearance.
   [d] The respect, competence, and confidence you show to the customer.

3)   The study of how groups, individuals and firms buy goods and services to satisfy their needs is called
   [a] Membership behaviour   [b] Market behaviour
   [c] Database behaviour   [d] Consumer behaviour

4)   When the new developed product concept is tested, the next immediate step is to
   [a] Develop market strategy   [b] Develop a testing technique
   [c] Develop intermediaries   [d] Develop logistic network

5)   The comparison of brand equity from thousands of different brands with several categories is called
   [a] Brand preference valuator   [b] Brand asset valuator
   [c] Brand similarities valuator   [d] Brand differences valuator

6)   Which of these questions will identify customer needs?
   [a] Is there anything I can help you with today?
   [b] Are you happy with the service you have received today?
   [c] Would you be willing to recommend us to your friends?
   [d] Have I resolved this matter to your satisfaction?

7)   When the brand equity is based on customer differences then the competition, it is based on

[a] Price   [b] Cost   [c] Preferences   [d] Loyalty

Answer- [1] a   [2]b   [3]d   [4]a   [5]b   [6]b   [7]a

8.9   BIBLIOGRAPHY/ REFERENCES

* https://www.customerexperienceinsight.com/the-best-customer-service-policies/
* https://www.salesforce.com/
* https://customerthink.com/
* https://www.userlike.com/
* https://www.jeffbullas.com/content-promotion-strategies/
* https://expertsystem.com/chatbot/
* https://www.chaport.com/
* https://www.groovehq.com/
* https://blog.capterra.com/best-free-survey-tools-power-your-research/
* https://www.goodfirms.co

8.10   SUGGESTED READINGS

* https://blog.capterra.com/best-free-survey-tools-power-your-research/

UNIT- 9

INTRODUCTION TO SEARCH ENGINE OPTIMIZATION (SEO) - I

9.1   INTRODUCTION

We use different search engines like Google, Bing and Yahoo to search anything on web. One can search web pages, content/text, videos, images etc on these search engines. There are no payments or charges are involved with search, but in case of paid search ads payment has to be done in case user wants to optimize his or her web site, improve its visibility, and quality. Then, go for Search engine optimization. Search engine optimization means improving the visibility of a webpage, website or web portal. Your web site will be more visible to users on web search engine. It also increases the quality and quantity of your web site traffic. Search engine optimization may consider following kinds of searches:

- Text search

- Image search
- Video search
- Audio Search
- Academic Search
- News search
- Area-specific searches, etc.

There are a number of techniques used for optimizing a website. It may include-

- Editing the contents of website for specific search
- Adding the content on website as per specific search
- Modifying the HTML and HTML associated coding so that specific keywords could be improved
- To remove the hindrance caused by indexing activities of search engines like Bing, Google and Yahoo.
- For promoting a website one must increase the number of backlinks. These backlinks are also called inbound links.
- To focus on mobile search along with desktop search.

Search engine optimization is an important part of Internet marketing strategy. It tells us how search engines work. It records the people's search behaviour on search engines and search keywords they type during internet search. It also notices that the choice of particular search engines is preferred by the user. Search engine optimization increases the number of visitors on the website which can be easily converted into customers. It also helps increase website ranks and quickly displays the search engine results page (SERP).

Search engine optimization is different from the local search engine optimization. Local search engine optimization means local search on a particular web site. It is search of any tap or content inside the web page. User can enter products or services as local search. You can learn search engine optimization by some easy-to-understand video.

9.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Increase your online visibility.
- Help build your website as a brand.
- Optimized website towards more user traffic.
- Boost your credibility and authority.
- Improve user experience and stay ahead of your competitors.

9.3   SEARCH ENGINE OPTIMIZATION LIBRARY

Search engine optimization has a huge library where one can optimize many things during search engine optimization. You have to consider all aspects during search engine

optimization. Following are the aspects which could be taken care for search engine optimization-

- Feeds and Blogs
- Doorway Pages and Cloaking
- Content & Writing
- Robots and Crawling
- URLs and Domains
- Duplicate Content
- Flash
- General
- Image Search
- Local
- Mobile Search
- Redirects and Moving Sites
- Spamming
- Sitemaps and Submitting
- Tagging
- Titles and Descriptions
- Video Search

The search engine optimization can be done on following main search engines, e.g. Google search engine optimization, Bing search engine optimization and Yahoo search engine optimization.

9.4   SEARCH ENGINE OPTIMIZATION TECHNIQUE

Many companies prepare their website without considering search engine optimization and are not more successful. Following are some primary steps for search engine optimization, which should be considered while preparing a successful website:

- Figure out what companies' customers are searching?
- How to optimize companies web pages (for their target keywords)?
- How to confirm that your website is accessible by customers and search engines?
- How other websites are linked with companies' website?

Search engine optimization Case study-

(Source: https://ahrefs.com/blog/seo-basics/)

Suppose you run a hotel in Dublin, Ireland but the website developer of that hotel doesn't apply the Search engine optimization. Suppose the customers of the hotel are searching as:

'accommodation in Dublin'

'place to stay in Dublin'

'hotels in Dublin'

Notice that what your customers are searching you should record them. You can also ask them directly to your website. Some more idea should also be collected. We must consider following points:

a) You have to find out the most popular searching way of people.

b) You have to write down the way customer or people search your web site. You have to write down the exact words and exact phrases. Write down which word or phrase is asked by majority of people.

c) The noted words or phrases should be used for Google search. You should mention these phrases in your webpage.

Suppose any customers or tourist searching the hotel at Dublin, Ireland as:

Fig. 9.1Google Search Box (Source: https://ahrefs.com/blog/seo-basics/)

Following are some search results of above query:

Fig. 9.2The customers search result of the hotel Dublin, Ireland (Source: https://ahrefs.com/blog/seo-basics/)

After few seconds many results came and each search the common phrase "Dublin hotels" is displayed in the title. So, this is very important for optimizing the title tags for search engine optimization. Therefore it's ("Dublin hotels") is the one of the most popular style that people search for places to stay in Dublin.

Now, we will mention the above keyword search term in Ahrefs Keywords Explorer as following Fig. 9.2
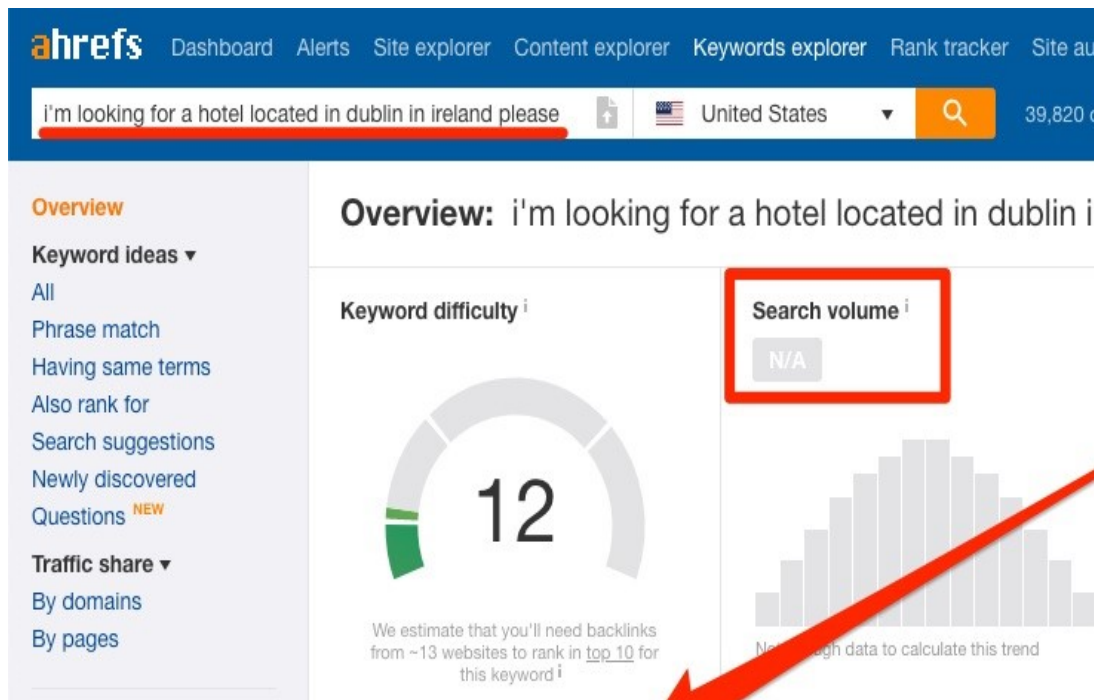
Fig. 9.3The keyword search term in Ahrefs Keywords Explorer(Source:
https://ahrefs.com/blog/seo-basics/)

When you search for the phrase "Dublin hotels" in Keywords Explorer it will display highest search volume around 9,000. It shows good traffic. This is the actual targeted keyword to search. Now, you can see at the Search engine results page(SERP) for "Dublin hotels" in Keywords Explorer. Following is the snapshot of it:

Fig. 9.4Search engine results page (SERP) for "Dublin hotels" in Keywords Explorer
(Source: https://ahrefs.com/blog/seo-basics/)

You can see the "Kw." column, which shows top 10 web pages ranking. It shows number of keywords searches. On average 150–200 keywords search is there. These web pages receive traffic ore then hundreds of other related keywords. People can search "Dublin hotels" by different ways. Now you can get a meaning of other keywords by more Google search methods.

Fig. 9.5Keywords by more Google search methods(Source: https://ahrefs.com/blog/seo-basics/)

In the above fig you can see more similar & related phrases display again and again. You can see the phrases like" "Dublin city hotels", "hotels in Dublin", and "cheap hotels in Dublin". These companies have already known above keywords and phrases; therefore, they have included them in their title tags. For more suggestions, try the Also rank for report in Keywords Explorer.
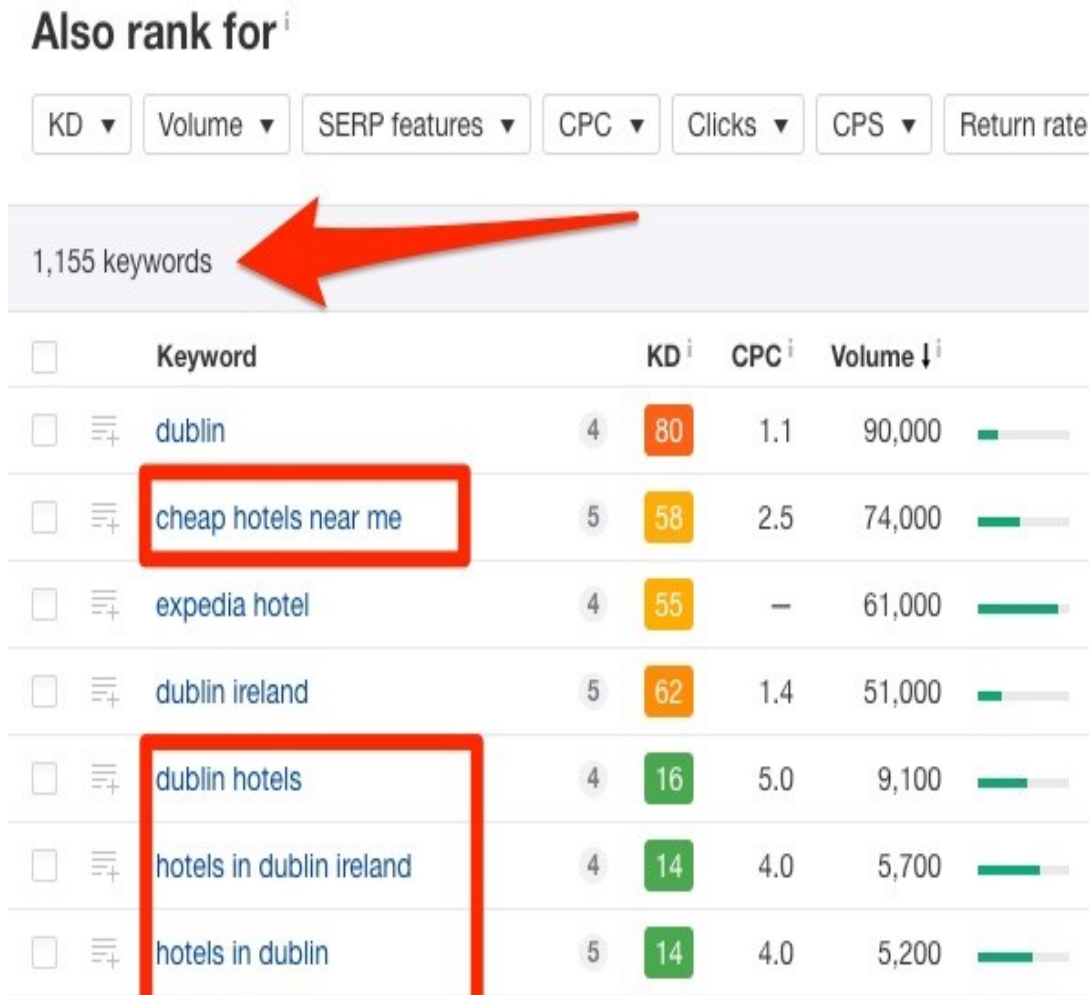
Fig. 9.6 Also rank for window (Source: https://ahrefs.com/blog/seo-basics/)

The above report shows the different keywords for which the top ten ranking pages rank. But above report surfaces many keywords. Now you have to select most relevant results. It may be 2–3 most relevant top-ranking pages. You can paste these most relevant results into Ahrefs Content Gap tool. You can find out the common keywords for that all of these pages rank.

Google has auto completed results feature. You can open Google and type any query in the search box but do not press Enter key as Fig9. Automatically the Google will display many search terms which can be used by user:

Fig. 9.7Google's autocomplete results(Source: https://ahrefs.com/blog/seo-basics/)

The above report effectively automates shows Google auto complete along with Search Engine Optimization.

9.5   SEARCH ENGINE OPTIMIZATION TOOLS

There are a number of tools for Search Engine Optimization to help improve your website's online visibility. These tools improve your website keyword research. This keyword research is the one of the primary steps for Search Engine Optimization. Keyword research is part of a good SEO strategy. There are several tools specifically prepared to identify the best possible keywords for your business as already discussed in previous topic. Following are some Search Engine Optimization tools- Ubersuggest, KeywordTool.io and Google Keyword. Planner

Ubersuggest-

Ubersuggest is an amazing free tool for search engine optimization. This tool can find more than hundreds of new long tail keywords in few seconds or minutes. This tool collects data from Google Suggest. Google Suggest display keyword ideas similar and related, of whatever you search on Google. If you look atthe top SEO pages report, you will find your competitor's pages. Following is the snap shot of Ubersuggest:

Fig. 9.8 Ubersuggest search engine optimization Tool (Source:

https://longtailpro.com/ubersuggest/)
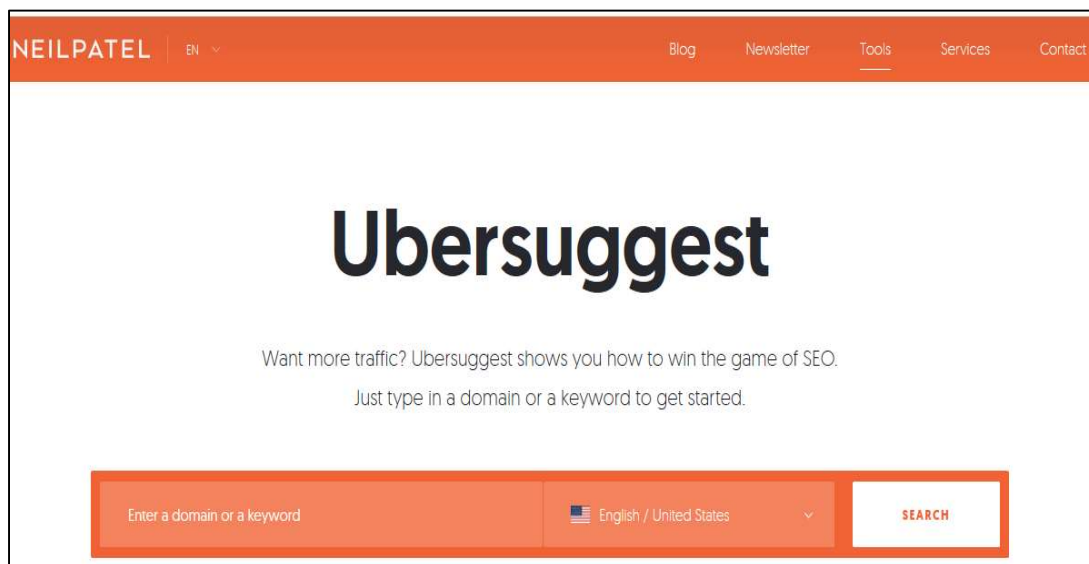
For example, you have a website. You want to find the "best running shoes" for different situations and for different people. After typing phrase "running shoes," you will get following results:

Now you can paste above idea in other tool like longtailpro.com (Long Tail Pro). You can critically analyze low competitiveness score, and a fair amount of search volume of each keyword. Within few minutes or seconds, you have number of excellent keywords.

KeywordTool.io

KeywordTool.io is another tool for search engine optimization. This tool can also find more than hundreds of new long tail keywords in few seconds or minutes. Again, if you want to see the phrase "best running shoes".. Following is the snap shot of KeywordTool.io:

Fig. 9.9 Search Result ideas (Source: https://longtailpro.com/ubersuggest/)
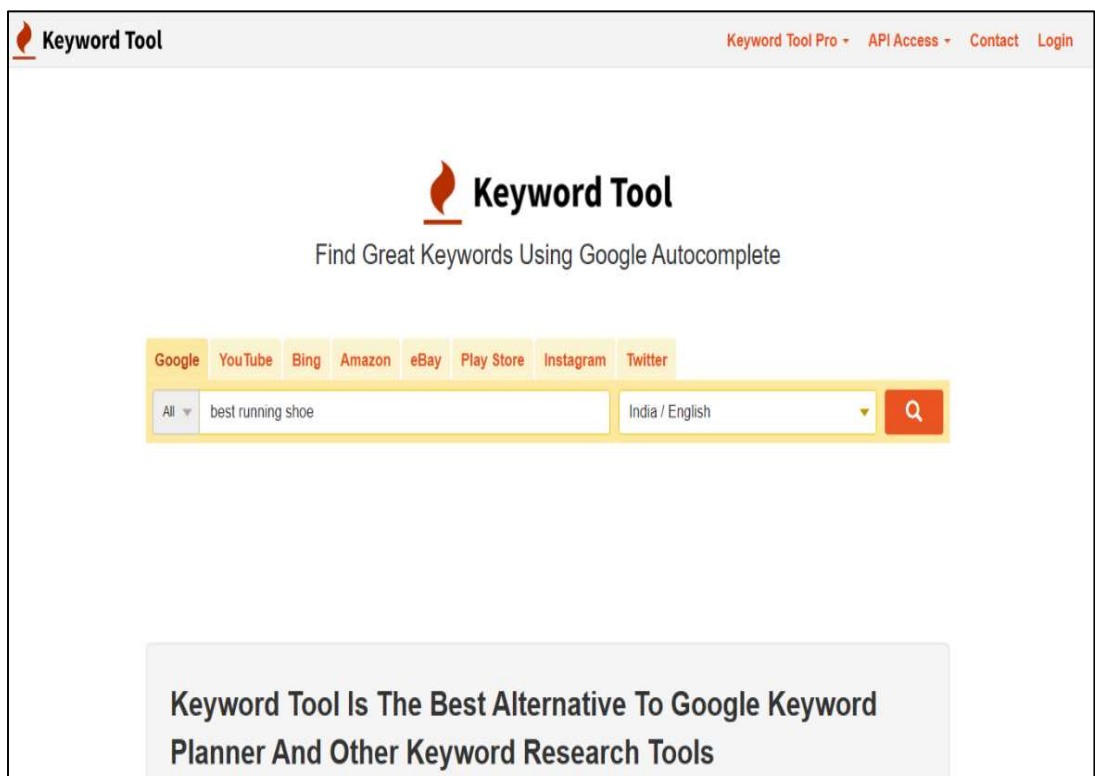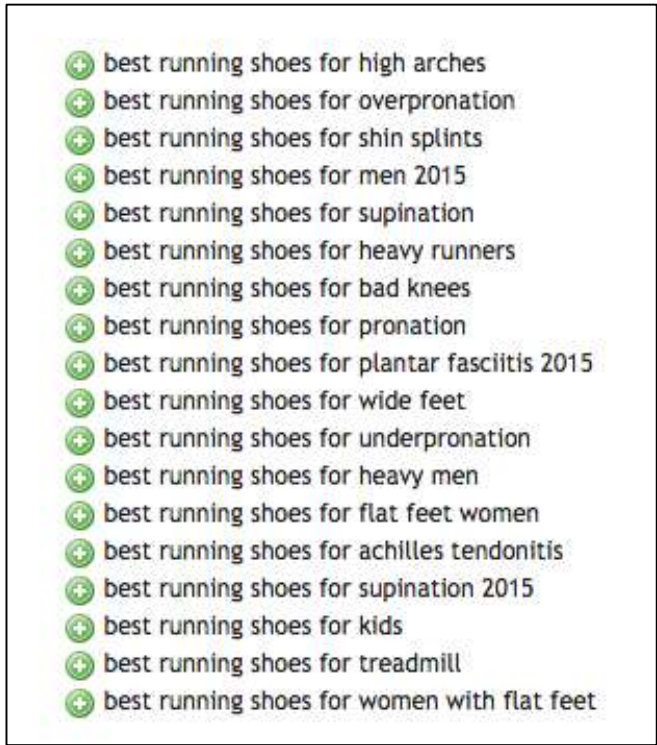
Fig. 9.10 KeywordTool.io search engine optimization Tool (Source: https://keywordtool.io/)

The above Keyword tool is one of the suitable substitutes of Google Keyword Planner. It is one of the best Keyword Research Tool. You can type keyword according to a particular company and language. Search volume data can be collected from Google, YouTube, Bing, Play Store, Instagram, and Twitter. Following is the result of the phrase "best running shoes
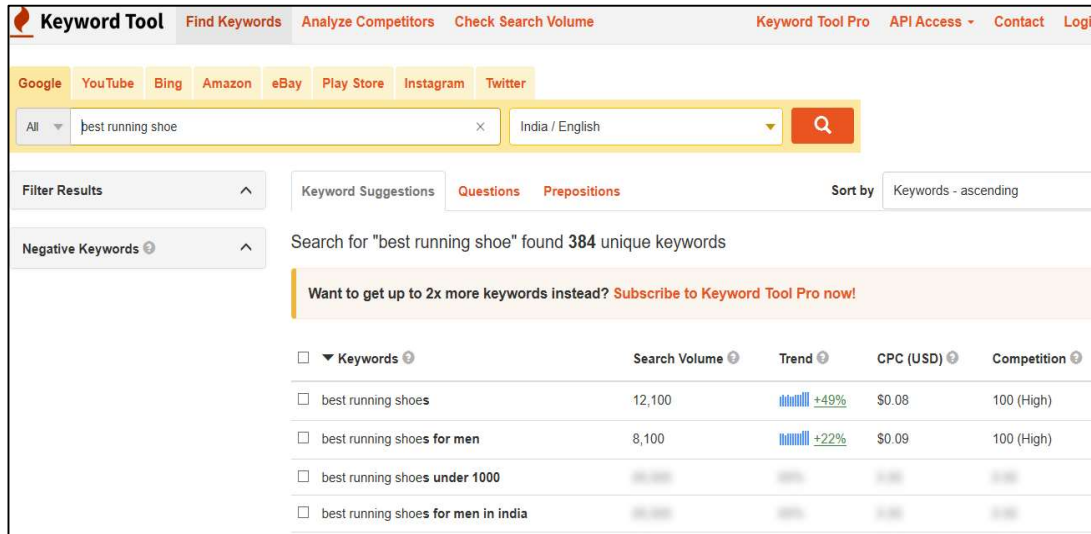
"on KeywordTool.io.

Fig. 9.11 KeywordTool.io Find Keywords (Source: https://keywordtool.io/)

You can see the search volume, trend, CPC (USD) and competition in ascending order. You can filter your result and also mention the negative keywords.

Google Keyword Planner

It is a free Google Ads tool. This is helpful for digital marketing and new or professional advertising personnel. It also helps you select competitive bids and budgets. Following are steps for using Google Keyword Planner:

- Step 1: Access the Google Keyword Planner.

- Step 2: Choose the Tool.

- Step 3: Filter and Sort the Results.

- Step 4: Analyse the Keyword Ideas Section.

- Step 5: Choose a Keyword

9.6   *TOOLS TO SIMPLIFY ON-PAGE AND OFF PAGE OPTIMIZATION*

Optimizing a page's on-page elements is an essential part of the search engine optimization process. Following are On-Page Optimization tools, e.g. Screaming Frog, SEMrush, Redirect Path, etc.

Screaming Frog-Screaming Frog helps you quickly identify issues from your website. This tool provides you an immense amount of data. SEO Spider is a small computer program. You can install this program on your PC, Spiders Web site links, CSS, images, script and apps. Screaming Frog search engine optimization permits you to quickly review or analyze a website from an onsite search engine optimization perspective. This tool comes handy in analyzing medium to large websites. Manually checking of each page these websites would be highly labour intensive. You can easily miss a redirect, meta refresh or duplicate page issue on this website. Spider tool permits you to export key onsite search engine optimization elements like meta descriptions, URL, page title, and headings to Excel.

Off page Optimization-

Another essential part of search engine optimization is off-page optimization, which basically involves earning backlinks. Two popular tools for identifying new opportunities for link building include Ahrefs and Open Site Explorer.

Ahrefs- This tool increases your search traffic. It also researches your competitors. Ahrefs tool monitor your niche. Ahrefs informs you how your competitor's rank is increased. It also suggests you how to outrank your competitor. Following page is shows Ahrefs Rank of teespring.com:
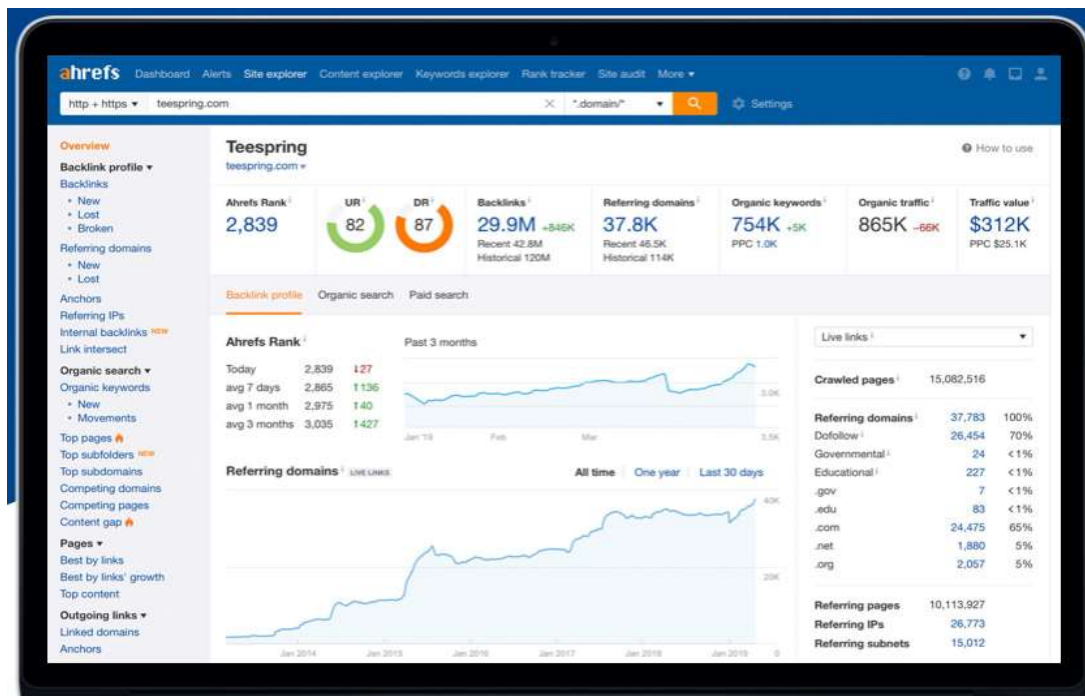
Fig. 9.12 Ahrefs tool for search traffic (Source: https://ahrefs.com/)

You can perform following operations on Ahref tool:

- Competitive Analysis
- Keyword Research

- Backlink Research
- Content Research
- Rank Tracking
- Web Monitoring

You can perform above operation through Ahrefs tool. However, you can add new tools and features regularly. Following are the tools offered by Ahrefs:
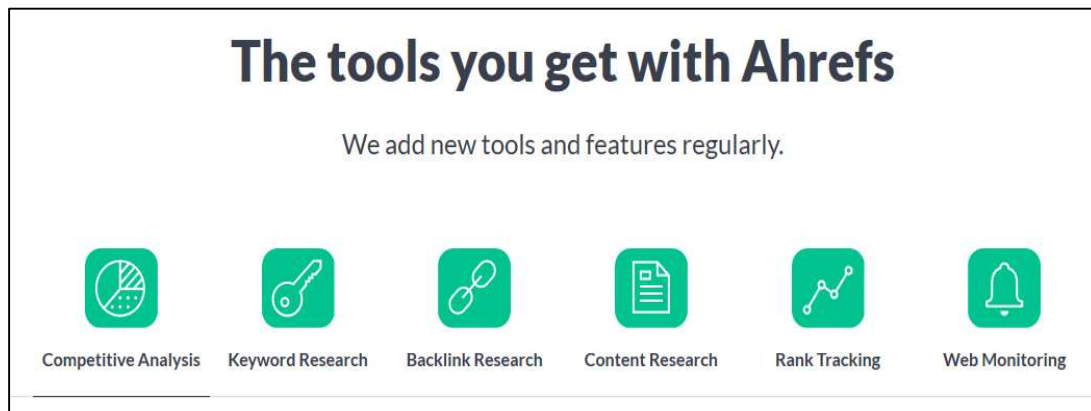
Fig. 9.13 Ahrefs tools (Source: https://ahrefs.com/)

9.7 RESULTS MONITORING TOOLS

Result monitoring tools measure the impact of changes made on your website, e.g. Google Analytics, Google Search Console.

Google Analytics- Google Analytics is a tool which gets deeper and closer understanding of your customers. It is a free tool by Google and helps you analyze data for your organization in one or single place. It is a web analytics service which reports and tracks website traffic. Google Analytics is also under Google Marketing Platform brand.

It is one of the most commonly used web analytics service on the web. It also permits gathering usage data of Androidapp, and iOS. This type of tool is known as Google Analytics for Mobile Apps. You can block Google Analytics by your browsers, or/and firewalls. (Source: https://en.wikipedia.org/wiki/Google_Analytics)

9.8 TOOLS TO IMPROVE YOUR CONVERSION RATE

The main goal of search engine optimization is not only to attract traffic but also to convert the traffic into customers and clients for your company and business. Your website is designed as per the need of customer and should be designed to encourage conversions. The following search engine optimization tools can help you measure the performance of your website. These tools identify opportunities for improvement in your website, e. g. GTMetrix, Crazy Egg, etc.

GTMetrix-

This tool makes your website fast for every user. GTMetrix tool test your web page in different countries, different browsers, and in different connection speeds. It also optimizes your website. Following is the snapshot of https://gtmetrix.com/ which is showing above all features:
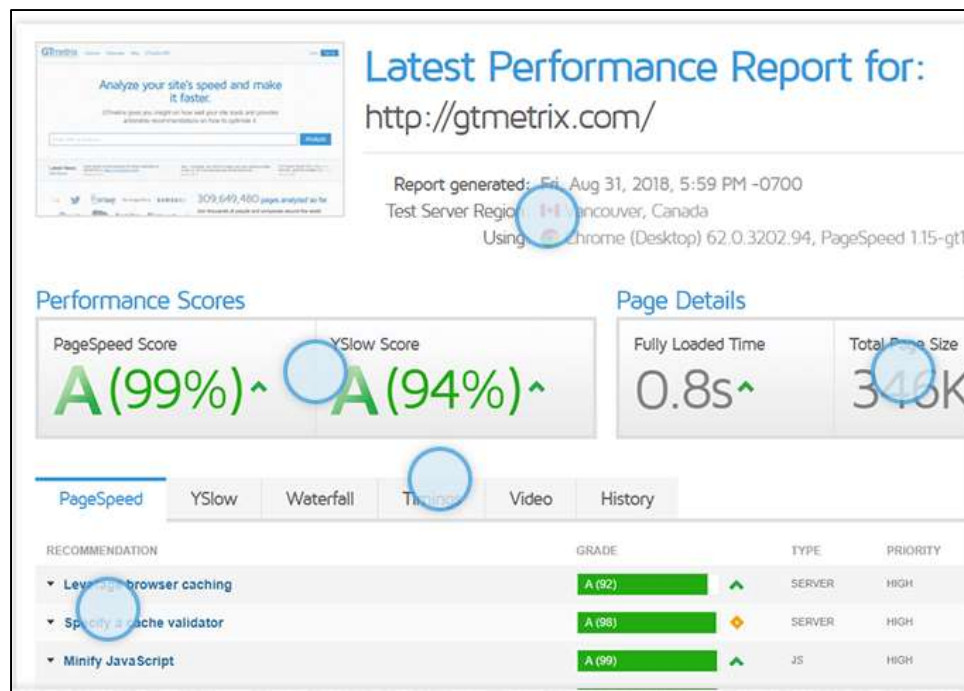
Fig. 9. 14 GTMetrix tool (Source: https://gtmetrix.com/)

The above GTMetrix tool displays the latest performance report. It displays region wise performance of your website. Middle part of the above fig shows the comparative page speed score and total page size and fully page loading time. The bottom apart shows the page speed and other feature of your web site.

Using GTMetrix tool you can keep track of your web page performance with scheduled monitoring. You can visualize this performance with interactive graphs. As given in following fig.15. You can find and get benefited by the following through graphs:

- Monitor pages
- Run a test daily, weekly or monthly
- To ensure optimal performance
- Visualize performance with graphs
- Graphs show: Page Load Time, Page Size & Request Counts and PageSpeed and YSlow scores
- To define a date interval to extract specific performance history

- Annotate areas of interest on your graph

- Give your data context

- Set alerts of Page Speed/YSlow scores

- Set alerts of Page load time

- Set alerts of Total Page size.
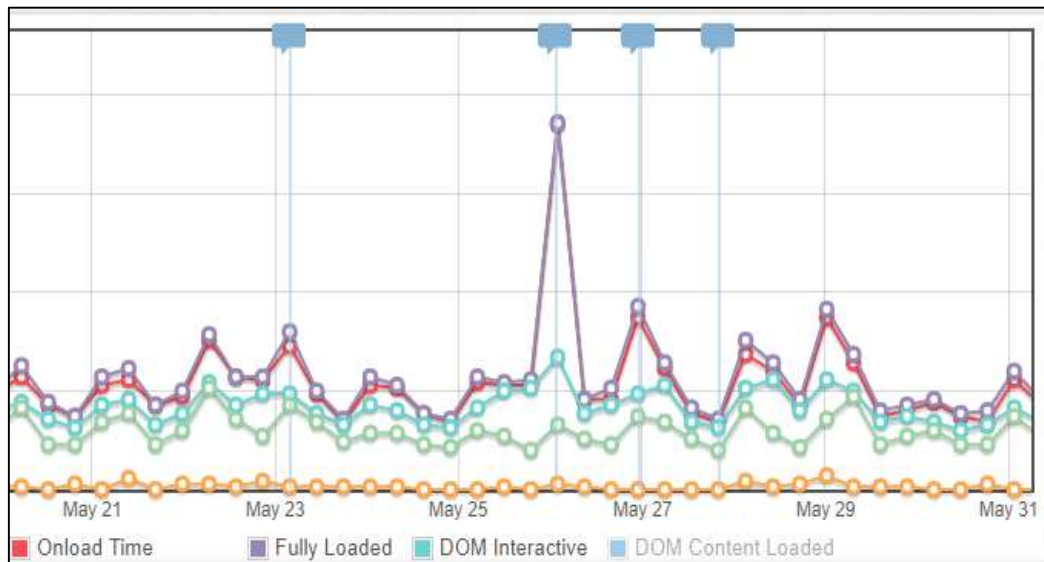
Fig. 9.15Page load time by GTMetrix tool (Source: https://gtmetrix.com/)

It provides the following detailed assessment:

- PageSpeed and YSlow scores and recommendations

- Page Load Details (time, size, number of requests)

- Various Analysis Options.

- Waterfall, Video and Report History

    (Source: https://gtmetrix.com/)

9.9   POINTS TO REMEMBER

- Search engine can search web pages, content/text, videos, images, etc. There are no payments or charges are involved with search, but in case of paid search ads payment will be involved.

- Search engine optimization means improving the visibility of a webpage, website or web portal.

- Search engine optimization is an important part of Internet marketing strategy

- Many companies prepare their website without considering search engine optimization, without search engine optimization these websites are not more successful.

- The search engine optimization has huge library.

- For search engine optimization, you have to write down the way customer or people search your web site. You have to write down the exact words and exact phrases. Write down which word or phrase is asked by the majority of people.

- Google has auto completed results feature. You can open Google and type any query in the search box but do not press Enter key and automatically Google will display many search terms which can be used by user.

- There are a number of tools for Search Engine Optimization. These tools help improve your website's online visibility.

- GTMetrix and Crazy Egg tools help you measure the performance of your website and these tools will identify opportunities for improvement in your website.

- Google Analytics and Google Search Console tools measure the impact of changes made on your website.

- To optimize any website is a very complex task. Sometimes, search engine optimization is very challenging process. Search engine optimization sometime takes time. It requires good planning, and patience optimizing. Search engine optimization can help you to boost your business, your credibility, popularise you, earn more traffic, and improve your online visibility. Search engine optimization is a very great way improves customer experience and improves the brand value of your product. It will create the website as per customer needs. By this you can develop a user-friendly site. Finally, if you do your web site optimization then you don't need to worry about digital marketing of your web site.

9.10 GLOSSARY

- **Search engine results page (SERP)**-It quickly displays the search engine results page.

- **Ubersuggest-** Is a free tool for search engine optimization. This tool can find more than hundreds of new long tail keywords in few seconds or minutes.

- **KeywordTool.io-** Is another tool for search engine optimization. This tool can also find more than hundreds of new long tail keywords in few seconds or minutes.

- **Google Keyword Planner-** It is a free Google Ads tool. This is helpful for digital marketing and for new or professional advertising personnel. It also helps you select competitive bids and budgets.

- **Ahrefs-** This tool increases your search traffic. It also researches your competitors. Ahrefs tool monitor your niche. Ahrefs informs you how your competitors rank increased. It can suggest you how to outrank your competitor.

- **GTMetrix-** This tool makes your website fast for every user. GTMetrix tool test your web page in different countries, different browsers, and in different connection speeds. It also optimizes your website.

9.11   CHECK YOUR PROGRESS

Descriptive type questions-

a)   What are the objectives of search engine optimization? Explain search engine optimization library? Explain each term of search engine optimization library?

b)   What do you understand by paid search ads? What are their benefits? Explain.

c)   What do you understand by Search engine results page (SERP)? Which tool is used to Search engine results page (SERP)? Explain.

d)   What is Ahrefs Keywords Explorer? What is the role of this tool? Explain.

e)   What do you understand by Google's auto complete results? What are its benefits? Explain with the help of example.

f)   What do you understand by Search Engine Optimization tools? What are the different Search Engine Optimization tools? Explain each of them.

g)   Which tools are used to improve off-page optimization? Also explain the tools which are the excellent choices to identify new opportunities for link building.

h)   Which tool makes your website fast for every user? Also explain how to optimize websites?

i)   How GTMetrix tool test your web page in different countries, browsers, and in different connection speeds? Explain.

j)   How GTMetrix tool helps you keep a track of your web page performance with scheduled monitoring? How can one visualize web page performance?

Objective type questions-

a)   SEO stands for...........

b)   SERP stands for...........

c)   SEO library is a...........

d)   Ahrefs stands for...........

e)   Ubersuggest, KeywordTool.ioare......................

f)   Google Keyword Planner is a free........................

g)   Ahrefs Open and .... tools are the excellent choices to identify new opportunities for link building.

h)   ....and.............tools help you measure the performance of your website and these tools will identify opportunities for improvement in your website

i)   Google Analytics and .... tools measure the impact of changes made onto your website.

j)   Competitive Analysis and Keyword Research operations can be performed by .... tool.

9.12   BIBLIOGRAPHY/ REFERENCES

*   https://ahrefs.com/blog/seo-basics/

*   https://www.crazyegg.com/blog/seo/why-search-engine-optimization/

*   https://www.crazyegg.com/blog/seo/why-search-engine-optimization/

*   https://fortunelords.com/ubersuggest/

*   https://keywordtool.io/

*   https://ahrefs.com/

*   https://gtmetrix.com/

9.13   SUGGESTED READINGS

*   Google's "Search Engine Optimization Starter Guide." This is a free PDF download that covers basic tips that Google provides to its own employees on how to get listed.

*   Moz's "Beginner's Guide To SEO," which present SEO Success Pyramid from Small Business Search Marketing.

UNIT- 10

INTRODUCTION TO SEARCH ENGINE OPTIMIZATION- II

10.1   INTRODUCTION

Search engines such as Google and Bing use bots to crawl pages on the web, going from site to site, collecting information about those pages and putting them in an index. Next, algorithms analyze pages in the index, taking into account hundreds of ranking factors or signals, to determine the order pages should appear in the search results for a given query.

Search ranking factors can be considered proxies for aspects of the user experience. Our Periodic Table of SEO Factors organizes the factors into six main categories and weights each based on its overall importance to SEO. For example, content quality and keyword research are key factors of content optimization, and crawlability and mobile-friendliness are important site architecture factors.

The search algorithms are designed to surface relevant, authoritative pages and provide users with an efficient search experience. Optimizing your site and content with these factors in mind can help your pages rank higher in the search results.

SEO is a fundamental part of digital marketing because people conduct trillions of searches every year, often with commercial intent to find information about products and services. Search is often the primary source of digital traffic for brands and complements other marketing channels. Greater visibility and ranking higher in search results than your competition can have a material impact on your bottom line.

However, the search results have been evolving over the past few years to give users more direct answers and information that is more likely to keep users on the results page instead of driving them to other websites.

Also note, features like rich results and Knowledge Panels in the search results can increase visibility and provide users more information about your company directly in the results.

This unit will also helpful to enhance the skills and knowledge in the following terms-

- **Increasing the Significant Traffic:** The optimization of the website can be done properly by creating the keyword targeted content. Good quality content on the website provides ultimate results in very less time. It drives direct traffic from the search engines to your website.

- **Generating E-commerce Sales:** Another objective of SEO is that helps you generate relevant traffic to your e-commerce website which often leads to the generation of sales. Once you have successfully implemented the SEO strategies on your e-commerce website then you can expect extremely high conversion rates.

- **Branding:** The branding is another powerful tool for the application of SEO. The branding is closely related to creating brand awareness and recognition. You must have noticed that the websites which remain at the top of the search engine ranks get more traffic and popularity. These websites use this exposure to bolster the brand recognition and authority of their brand.

- **Reputation Management:** The businesses who are willing to populate the search results with relevant and positive links. The use of SEO enables this process with the help of content creation and its promotion through link building. Reputation management is considered as one of the most challenging tasks of search engine optimization. This practice involves the optimization of pages on different domains. It uses various social media profiles, public relations, press releases, etc for this task.

- **Lead Generation:** Millions of search queries are made every day on the search engines and most of them have commercial intents. You just have to follow the right SEO strategies for maximizing the lead generation on your website. The more often people

would visit your website, the more likely they would trust you. This can only be achieved by improving the ranking of your website through SEO.

10.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

- Know the working of search engines.
- Understand Crawling, Ranking and indexing.
- Define search engine challenges.

10.3   HOW SEARCH ENGINE WORKS?

Search engines have three primary functions:

(i) Crawl: Scour the Internet for content, looking over the code/content for each URL they find.

(ii) Index: Store and organize the content found during the crawling process. Once a page is in the index, it's in the running to be displayed as a result to relevant queries.

(iii) Rank: Provide the pieces of content that will best answer a searcher's query, which means that results are ordered by most relevant to least relevant.

What is search engine crawling?

Crawling is the discovery process in which search engines send out a team of robots (known as crawlers or spiders) to find new and updated content. Content can vary it could be a webpage, an image, a video, a PDF, etc. but regardless of the format, content is discovered by links. Googlebot starts out by fetching a few web pages, and then follows the links on those webpages to find new URLs. By hopping along this path of links, the crawler is able to find new content and add it to their index called Caffeine a massive database of discovered URLs to later be retrieved when a searcher is seeking information that the content on that URL is a good match for.

What is a search engine index?

Search engines process and store information, they find in an index, a huge database of all the content they've discovered and deem good enough to serve up to searchers.

Search engine Ranking

When someone performs a search, search engines scour their index for highly relevant content and then orders that content in the hopes of solving the searcher's query. This ordering of search results by relevance is known as ranking. In general, you can assume that the higher a website is ranked, the more relevant the search engine believes that site is to the query. It's possible to block search engine crawlers from part or your entire site, or instruct search engines to avoid storing certain pages in their index. While there can be reasons for

doing this, if you want your content found by searchers, you have to first make sure it's accessible to crawlers and is indexable. Otherwise, it's as good as invisible.

Crawling

Can search engines find your pages?

As you've just learned, making sure your site gets crawled and indexed is a prerequisite to showing up in the SERPs. If you already have a website, it might be a good idea to start off by seeing how many of your pages are in the index. This will yield some great insights into whether Google is crawling and finding all the pages you want it to, and none that you don't.

One way to check your indexed pages is "site: yourdomain.com", an advanced search operator. Head to Google and type "site: yourdomain.com" into the search bar. This will return results Google has in its index for the site specified.

10.4   UNDERSTANDING CRAWLING

As you've just learned, making sure your site gets crawled and indexed is a prerequisite to showing up in the SERPs. If you already have a website, it might be a good idea to start off by seeing how many of your pages are in the index. This will yield some great insights into whether Google is crawling and finding all the pages you want it to, and none that you don't.

One way to check your indexed pages is "site: yourdomain.com", an advanced search operator. Head to Google and type "site: yourdomain.com" into the search bar. This will return results Google has in its index for the site specified:
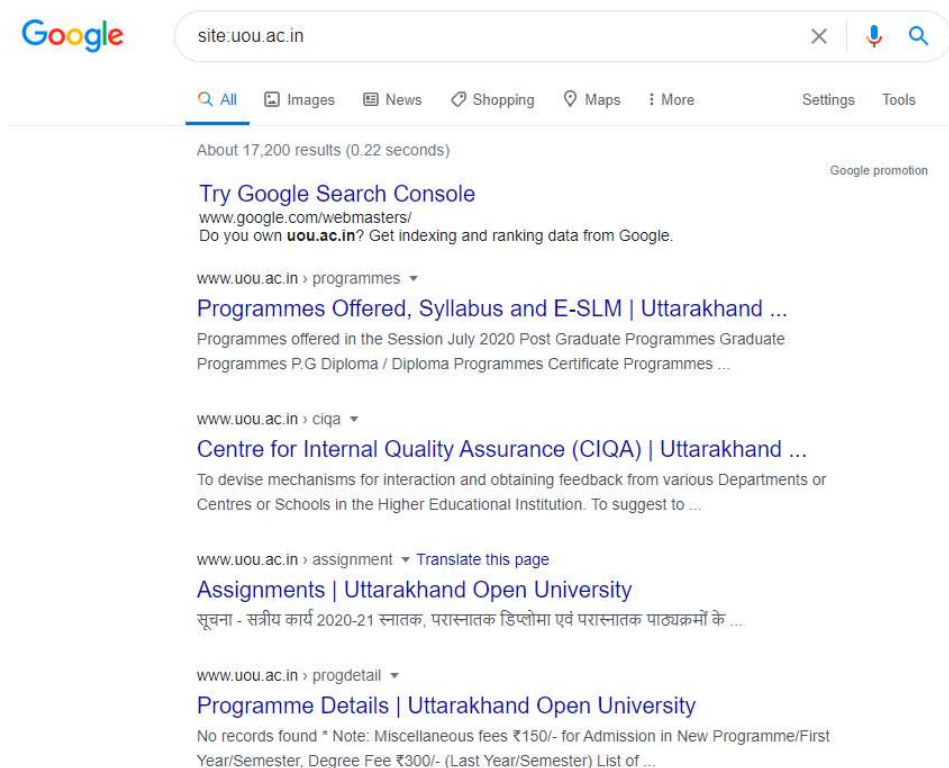
The number of results Google displays (see "About XX results" above) isn't exact, but it does give you a solid idea of which pages are indexed on your site and how they are currently showing up in search results. For more accurate results, monitor and use the Index Coverage report in Google Search Console. You can sign up for a free Google Search Console account if you don't currently have one. With this tool, you can submit sitemaps for your site and monitor how many submitted pages have actually been added to Google's index, among other things. If you're not showing up anywhere in the search results, there are a few possible reasons why:

- Your site is brand new and hasn't been crawled yet.
- Your site isn't linked to from any external websites.
- Your site's navigation makes it hard for a robot to crawl it effectively.
- Your site contains some basic code called crawler directives that is blocking search engines.
- Your site has been penalized by Google for spammy tactics.

Can crawlers find all your important content?

Now that you know some tactics for ensuring search engine crawlers stay away from your unimportant content, let's learn about the optimizations that can help Googlebot find your important pages. Sometimes a search engine will be able to find parts of your site by crawling, but other pages or sections might be obscured for one reason or another. It's important to make sure that search engines are able to discover all the content you want indexed, and not just your homepage.

10.5   UNDERSTANDING INDEXING

Once you've ensured your site has been crawled, the next order of business is to make sure it can be indexed. That is right just because your site can be discovered and crawled by a search engine doesn't necessarily mean that it will be stored in their index. In the previous section on crawling, we discussed how search engines discover your web pages. The index is where your discovered pages are stored. After a crawler finds a page, the search engine renders it just like a browser would. In the process of doing so, the search engine analyzes that page's contents. All of that information is stored in its index.

Google crawls and caches web pages at different frequencies. More established, well-known sites that post frequently like https://www.nytimes.com will be crawled more frequently than the much-less-famous website for Roger the Mozbot's side hustle, http://www.rogerlovescupcakes.com (if only it were real…)

You can view what your cached version of a page looks like by clicking the drop-down arrow next to the URL in the SERP and choosing "Cached":
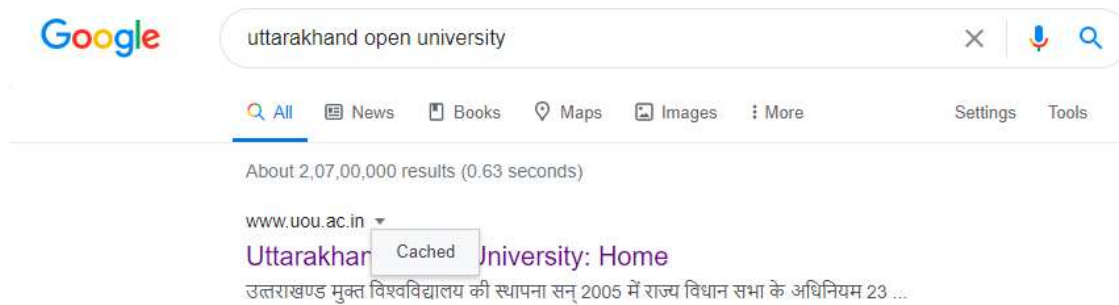
You can also view the text-only version of your site to determine if your important content is being crawled and cached effectively.

Are pages ever removed from the index?

Yes, pages can be removed from the index! Some of the main reasons why a URL might be removed include:

- The URL is returning a "not found" error (4XX) or server error (5XX) – This could be accidental (the page was moved and a 301 redirect was not set up) or intentional (the page was deleted and 404ed in order to get it removed from the index)
- The URL had a noindex meta tag added – This tag can be added by site owners to instruct the search engine to omit the page from its index.
- The URL has been manually penalized for violating the search engine's Webmaster Guidelines and, as a result, was removed from the index.
- The URL has been blocked from crawling with the addition of a password required before visitors can access the page.

If you believe that a page on your website that was previously in Google's index is no longer showing up, you can use the URL Inspection tool to learn the status of the page, or use Fetch as Google which has a "Request Indexing" feature to submit individual URLs to the index. (Bonus: GSC's "fetch" tool also has a "render" option that allows you to see if there are any issues with how Google is interpreting your page).

Tell search engines how to index your site

[1] Robots Meta directives

Meta directives (or "meta tags") are instructions you can give to search engines regarding how you want your web page to be treated.

You can tell search engine crawlers things like "do not index this page in search results" or "don't pass any link equity to any on-page links". These instructions are executed via Robots Meta Tags in the <head> of your HTML pages (most commonly used) or via the X-Robots-Tag in the HTTP header.

[2] Robots meta tag

The robots meta tag can be used within the <head> of the HTML of your webpage. It can exclude all or specific search engines. The following are the most common meta directives, along with what situations you might apply them in.

[3] index/noindex tells the engines whether the page should be crawled and kept in a search engines' index for retrieval. If you opt to use "noindex," you're communicating to crawlers that you want the page excluded from search results. By default, search engines assume they can index all pages, so using the "index" value is unnecessary.

When you might use: You might opt to mark a page as "noindex" if you're trying to trim thin pages from Google's index of your site (ex: user generated profile pages) but you still want them accessible to visitors.

[4] follow/nofollow tells search engines whether links on the page should be followed or nofollowed. "Follow" results in bots following the links on your page and passing link equity through to those URLs. Or, if you elect to employ "nofollow," the search engines will not follow or pass any link equity through to the links on the page. By default, all pages are assumed to have the "follow" attribute.

When you might use: nofollow is often used together with noindex when you're trying to prevent a page from being indexed as well as prevent the crawler from following links on the page.

[5] noarchive is used to restrict search engines from saving a cached copy of the page. By default, the engines will maintain visible copies of all pages they have indexed, accessible to searchers through the cached link in the search results.

When you might use: If you run an e-commerce site and your prices change regularly, you might consider the noarchive tag to prevent searchers from seeing outdated pricing.

Here's an example of a meta robots noindex, nofollow tag:

```
<!DOCTYPE html><html><head><meta name="robots" content="noindex,
nofollow" /></head><body>...</body></html>
```

This example excludes all search engines from indexing the page and from following any on-page links. If you want to exclude multiple crawlers, like googlebot and bing for example, it's okay to use multiple robot exclusion tags.

[6] X-Robots-Tag

The x-robots tag is used within the HTTP header of your URL, providing more flexibility and functionality than meta tags if you want to block search engines at scale because you can use regular expressions, block non-HTML files, and apply sitewide noindex tags.

For example, you could easily exclude entire folders or file.

```
<Files ~ "\/?no\-bake\/.*"> Header set X-Robots-Tag "noindex,
nofollow"</Files>
```

The derivatives used in a robots meta tag can also be used in an X-Robots-Tag. Or specific file types (like PDFs):

```
<Files   ~   "\.pdf$">   Header   set   X-Robots-Tag   "noindex,
nofollow"</Files>
```

10.6   UNDERSTANDING RANKING

How do search engines ensure that when someone types a query into the search bar, they get relevant results in return? That process is known as ranking, or the ordering of search results by most relevant to least relevant to a particular query.

To determine relevance, search engines use algorithms, a process or formula by which stored information is retrieved and ordered in meaningful ways. These algorithms have gone through many changes over the years in order to improve the quality of search results. Google, for example, makes algorithm adjustments every day — some of these updates are minor quality tweaks, whereas others are core/broad algorithm updates deployed to tackle a specific issue, like Penguin to tackle link spam. Check out our Google Algorithm Change History for a list of both confirmed and unconfirmed Google updates going back to the year 2000.

Why does the algorithm change so often? Is Google just trying to keep us on our toes? While Google doesn't always reveal specifics as to why they do what they do, we do know that Google's aim when making algorithm adjustments is to improve overall search quality. That's why, in response to algorithm update questions, Google will answer with something along the lines of: "We're making quality updates all the time." This indicates that, if your site suffered after an algorithm adjustment, compare it against Google's Quality Guidelines or Search Quality Rater Guidelines, both are very telling in terms of what search engines want.

What do search engines want?

Search engines have always wanted the same thing: to provide useful answers to searcher's questions in the most helpful formats. If that's true, then why does it appear that SEO is different now than in years past?

At first, their understanding of the language is very rudimentary - "See Spot Run." Over time, their understanding starts to deepen, and they learn semantics - the meaning behind language and the relationship between words and phrases. Eventually, with enough practice, the student knows the language well enough to even understand nuance, and is able to provide answers to even vague or incomplete questions.

When search engines were just beginning to learn our language, it was much easier to game the system by using tricks and tactics that actually go against quality guidelines. Take

keyword stuffing, for example. If you wanted to rank for a particular keyword like "funny jokes," you might add the words "funny jokes" a bunch of times onto your page, and make it bold, in hopes of boosting your ranking for that term:

Welcome to funny jokes! We tell the funniest jokes in the world. Funny jokes are fun and crazy. Your funny joke awaits. Sit back and read funny jokes because funny jokes can make you happy and funnier. Some funny favourite funny jokes.

This tactic made for terrible user experiences, and instead of laughing at funny jokes, people were bombarded by annoying, hard-to-read text. It may have worked in the past, but this is never what search engines wanted.

The role links play in SEO

When we talk about links, we could mean two things. Backlinks or "inbound links" are links from other websites that point to your website, while internal links are links on your own site that point to your other pages (on the same site). Links have historically played a big role in SEO. Very early on, search engines needed help figuring out which URLs were more trustworthy than others to help them determine how to rank search results. Calculating the number of links pointing to any given site helped them do this.

Backlinks work very similarly to real-life WoM (Word-of-Mouth) referrals. Let's take a hypothetical coffee shop, Jenny's Coffee, as an example:

- Referrals from others = good sign of authority

Example: Many different people have all told you that Jenny's Coffee is the best in town

- Referrals from yourself = biased, so not a good sign of authority

Example: Jenny claims that Jenny's Coffee is the best in town

- Referrals from irrelevant or low-quality sources = not a good sign of authority and could even get you flagged for spam

Example: Jenny paid to have people who have never visited her coffee shop tell others how good it is.

- No referrals = unclear authority

Example: Jenny's Coffee might be good, but you've been unable to find anyone who has an opinion so you can't be sure.

This is why PageRank was created. PageRank (part of Google's core algorithm) is a link analysis algorithm named after one of Google's founders, Larry Page. PageRank estimates the importance of a web page by measuring the quality and quantity of links pointing to it. The assumption is that the more relevant, important, and trustworthy a web page is, the more links it will have earned. The more natural backlinks you have from high-authority (trusted) websites, the better your odds are to rank higher within search results.

The role content plays in SEO

There would be no point to links if they didn't direct searchers to something. That something is content! Content is more than just words; it's anything meant to be consumed by searchers there's video content, image content, and of course, text. If search engines are answer machines, content is the means by which the engines deliver those answers.

Any time someone performs a search, there are thousands of possible results, so how do search engines decide which pages the searcher is going to find valuable? A big part of determining where your page will rank for a given query is how well the content on your page matches the query's intent. In other words, does this page match the words that were searched and help fulfill the task the searcher was trying to accomplish?

Because of this focus on user satisfaction and task accomplishment, there's no strict benchmarks on how long your content should be, how many times it should contain a keyword, or what you put in your header tags. All those can play a role in how well a page performs in search, but the focus should be on the users who will be reading the content.

Today, with hundreds or even thousands of ranking signals, the top three have stayed fairly consistent: links to your website (which serve as a third-party credibility signals), on-page content (quality content that fulfills a searcher's intent), and Rank Brain.

What is RankBrain?

RankBrain is the machine learning component of Google's core algorithm. Machine learning is a computer program that continues to improve its predictions over time through new observations and training data. In other words, it's always learning, and because it's always learning, search results should be constantly improving.

For example, if RankBrain notices a lower ranking URL providing a better result to users than the higher-ranking URLs, you can bet that RankBrain will adjust those results, moving the more relevant result higher and demoting the lesser relevant pages as a by-product.

10.7   SEO– TACTICS AND METHODS

SEO techniques are classified into two broad categories:

- **White Hat SEO** - Techniques that search engines recommend as part of a good design.

- **Black Hat SEO** - Techniques that search engines do not approve and attempt to minimize the effect of. These techniques are also known as spamdexing.

White Hat SEO

An SEO tactic is considered as White Hat if it has the following features:

- It conforms to the search engine's guidelines.
- It does not involve in any deception.
- It ensures that the content a search engine indexes, and subsequently ranks, is the same content a user will see.

- It ensures that a web page content should have been created for the users and not just for the search engines.
- It ensures good quality of the web pages.
- It ensures availability of useful content on the web pages.

Always follow a White Hat SEO tactic and do not try to fool your site visitors. Be honest and you will definitely get something more.

Black Hat or Spamdexing

An SEO tactic, is considered as Black Hat or Spamdexing if it has the following features:

- Attempting ranking improvements that are disapproved by the search engines and/or involve deception.
- Redirecting users from a page that is built for search engines to one that is more human friendly.
- Redirecting users to a page that was different from the page the search engine ranked.
- Serving one version of a page to search engine spiders/bots and another version to human visitors. This is called Cloaking SEO tactic.
- Using hidden or invisible text or with the page background color, using a tiny font size or hiding them within the HTML code such as "no frame" sections.
- Repeating keywords in the metatags, and using keywords that are unrelated to the website content. This is called metatag stuffing.
- Calculated placement of keywords within a page to raise the keyword count, variety, and density of the page. This is called keyword stuffing.
- Creating low-quality web pages that contain very little content but are instead stuffed with very similar keywords and phrases. These pages are called Doorway or Gateway Pages.
- Mirror websites by hosting multiple websites - all with conceptually similar content but using different URLs.
- Creating a rogue copy of a popular website which shows contents similar to the original to a web crawler, but redirects web surfers to unrelated or malicious websites. This is called page hijacking.

Always stay away from any of the above Black Hat tactics to improve the rank of your site. Search engines are smart enough to identify all the above properties of your site and ultimately you are not going to get anything. The website design and layout gives the first impression about your site. There are sites which are too fancy and regular net surfers just reach those sites and come out even without creating a single click.

10.8   DESIGN AND LAYOUT

Search engines are very smart but after all, they are software and not human being, who can read the content of their interest. If you make your site too complicated, then the search engine would not be able to parse the content of your site properly, and finally indexing would not be efficient, which results in a low rank. The actual page content should have a keyword density of about 10% and should weigh in at about 200 words - but there are as many opinions about this as there are SEO experts. Some say, keyword density should be 5% and some say it should be 20%. You can go with 10% which is good enough. Here are a few guidelines that you should keep in mind while designing a web page.

- You should have more text content than HTML elements.
- No frames. They are the enemies of search engines, and search engines are enemies of frames.
- No ads if possible. Because most of the ads use Java-Script which is not advised to be used.
- No JavaScript. If you need JavaScript, call it from an external file rather than dumping the code in the HTML file. JavaScript drop-down menus prevent spiders from crawling beyond your homepage. If you use them, be sure to include text links at the bottom of the page.
- Do not put anything in the page topic that does not fit perfectly.
- No unnecessary directories. Keep your files as close to the root as possible.

10.9   CHALLENGES OF SEARCH ENGINE OPTIMIZATION

- **Need genuine online reviews:** Even though there's a clear-cut difference between local SEO and online reputation management, the latter has a big impact on your local search rankings.
- **Optimize Google my business page**: Setting up your Google My Business page is rather easy but optimizing it? It needs careful work. Moreover, these details like your business address, phone number, and email address must be similar to what's being displayed on your website. For local businesses, it's crucial to have your website display all these contact details clearly.
- **Need a website re-design:** Over 50% small businesses don't even have a website, even when Google search is the new yellow pages and people use online search before purchasing anything. And then there are businesses which have unresponsive, slow and user repelling websites.
- **Need marketing analytics setup:** Many businesses argue that they never plan to use a certain marketing strategy, and hence, never get the analytics setup done for it. But a good business decision would be to set these analytics up so that you don't miss out on precious data. As a part of our local SEO services, we begin with setting up Google Analytics - with proper goal setting, and e-commerce settings (in case of an e-

commerce business) and search console setup. We also recommend our clients to opt for Google ads setup, Facebook ads setup, email marketing setup and basic CRM setup to ensure they're growth ready.

- **Need to use localized keywords naturally**: Using keywords with local intent is the biggest challenge faced by organic marketers. Incorporating such keywords on a page's copy for local SEO is the trickiest.
- **You need to optimize local landing pages**: A few years back, SEOs would make multiple landing pages targeting each location. That meant lots of location specific pages, good keyword density and lots of interlinking. However, Google termed such pages as 'doorway pages' calling it spam.

10.11 POINTS TO REMEMBER

- **Keyword Research:** Research the best keywords for your site. Look at what your competitors are using for keywords, and try a few keyword tools. Remember to target your audience and consider all the word that they will type into the Google and Bing search engines.
- **Put your keywords in Bold:** This is an old trick, but is still effective. All you have to do is highlight one or two of your keywords when they first appear on the page. You do not have to keep highlighting the same keyword; you need only do it for its first appearance. You can also use italic.
- **Make your URLs search engine friendly:** Do not name your pages (URLs) with numbers and symbols. Add in some words to make them easier for a human to read. In addition, you should try to make some of those words as descriptive as possible, and adding in a few keywords will help too.
- **Install SSL Certificate:** Websites that are secure using https:// instead of http:// now appear higher in the search results. If you cannot install your own SSL certificate, ask your host to do this for you. When it is installed, you have to make sure all your website pages are secure and not with mixed content. Also make sure that all your website version with http:// and with www. all forwarded to your new https:// URL.
- **Organize your website**: You need to make sure that your website and your menus are well organized so visitors can easily find what they are looking for. Add Call to Action and Forms to your pages to make it easy to contact you or shop.
- **Increase the quality:** Google and Bing/Yahoo are optimized to search out high quality content. Their methods for determining quality are fairly crude, but it will not help your case if your content is weak, fluffy, heavily SEOed and has multiple obvious spelling mistakes. Search engines measure how much time people spend on your website after using search. If you have a bad website people will leave it faster.
- **Add a keyword to each page title:** Your page title is a very important piece of text because it tells the reader what the page is about and it tells the search engine what the

page is all about. So, you should try to add a keyword or two into the title. Just make sure the title is still easy to read for humans.

- **Be wary of your loading and render times:** The render time is the time it takes for a web page to go from white, to starting to load. A long render time will increase your bounce rate. The loading time is the time it takes from the beginning of the render, to the point where everything is loaded. A long loading time will damage your websites SEO.

- **Optimize your internal linking:** Every page should have at least three internal links on it. Three is the bare minimum, and this includes checkout pages too. Internal links are the ones that link one page to another. External links are the ones where you link your page to one outside of your website.

- **Integrate social media:** There are hundreds of widgets that you can add to your website. They will help you to link social media and your website. Do not put the widgets everywhere, but the addition of a few here and there will help your SEO in the long term.

- **Optimize your Images:** Make sure they do not take too long to load, and make sure they have their ALT text filled out. If you are able to give them a title, then you should. You should also name your image files something SEO friendly before you upload them onto your website.

- **Create a Sitemap:** Create an XML sitemap. If you have a WordPress website, you can create a nice XML sitemap with the Yoast SEO tool which will create a dynamic XML sitemap for you. Then you have to add the URL of your sitemaps to your Google Search Console and Bing Webmaster Tools account.

- **Make Your Website Mobile Friendly:** This is very important because people now do more searches from mobile devices than from desktop or laptop computers. Make sure that your website can be used easily from a cell phone. Contact forms should be easy to fill and submit. All your phone numbers should be clickable.

- **Fill your Meta Description Tag:** This is what may appear on the search engine's results page, and is a nice opportunity to sell the content of your web page. Create this text that will make people to click on your website. You should make sure that it has keywords in it if you want to feel any positive SEO effect.

10.11 GLOSSARY

- **2xx status codes:** A class of status codes that indicate the request for a page has succeeded.

- **4xx status codes:** A class of status codes that indicate the request for a page resulted in error.

- **5xx status codes:** A class of status codes that indicate the server's inability to perform the request.

- **Advanced search operators:** Special characters and commands you can type into the search bar to further specify your query.
- **Algorithms:** A process or formula by which stored information is retrieved and ordered in meaningful ways.
- Backlinks**:** Or "inbound links" are links from other websites that point to your website.
- **Bots:** Also known as "crawlers" or "spiders," these are what scour the Internet to find content.
- **Caching:** A saved version of your web page.
- **Caffeine:** Google's web indexing system. Caffeine is the index, or collection of web content, whereas Googlebot is the crawler that goes out and finds the content.
- **Citations:** Also known as a "business listing," a citation is a web-based reference to a local business' name, address, and phone number (NAP).
- **Cloaking:** Showing different content to search engines than you show to human visitors.
- **Crawl budget:** The average number of pages a search engine bot will crawl on your site
- **Crawler directives:** Instructions to the crawler regarding what you want it to crawl and index on your site.
- **Distance:** In the context of the local pack, distance refers to proximity, or the location of the searcher and/or the location specified in the query.
- **Engagement:** Data that represents how searchers interact with your site from search results.
- **Google Quality Guidelines:** Published guidelines from Google detailing tactics that are forbidden because they are malicious and/or intended to manipulate search results.
- **Google Search Console:** A free program provided by Google that allows site owners to monitor how their site is doing in search.
- **HTML:** Hypertext markup language is the language used to create web pages.
- **Index Coverage report:** A report in Google Search Console that shows you the indexation status of your site's pages.
- **Index:** A huge database of all the content search engine crawlers have discovered and deem good enough to serve up to searchers.
- **Internal links:** Links on your own site that point to your other pages on the same site.
- **JavaScript:** A programming language that adds dynamic elements to static web pages.
- **Login forms:** Refers to pages that require login authentication before a visitor can access the content.
- **Manual penalty:** Refers to a Google "Manual Action" where a human reviewer has determined certain pages on your site violate Google's quality guidelines.

- **Meta robots tag:** Pieces of code that provide crawlers instructions for how to crawl or index web page content.
- **Navigation:** A list of links that help visitors navigate to other pages on your site. Often, these appear in a list at the top of your website ("top navigation"), on the side column of your website ("side navigation"), or at the bottom of your website ("footer navigation").
- **NoIndex tag:** A meta tag that instructions a search engine not to index the page it's on.
- **PageRank:** A component of Google's core algorithm. It is a link analysis program that estimates the importance of a web page by measuring the quality and quantity of links pointing to it.
- **Personalization:** Refers to the way a search engine will modify a person's results on factors unique to them, such as their location and search history.
- **Prominence:** In the context of the local pack, prominence refers to businesses that are well-known and well-liked in the real world.
- **RankBrain:** the machine learning component of Google's core algorithm that adjusts ranking by promoting the most relevant, helpful results.
- **Relevance:** In the context of the local pack, relevance is how well a local business matches what the searcher is looking for
- **Robots.txt:** Files that suggest which parts of your site search engines should and shouldn't crawl.
- **Search forms:** Refers to search functions or search bars on a website that help users find pages on that website.
- **Search Quality Rater Guidelines:** Guidelines for human raters that work for Google to determine the quality of real web pages.
- **Sitemap:** A list of URLs on your site that crawlers can use to discover and index your content.
- **Spammy tactics:** Like "black hat," spammy tactics are those that violate search engine quality guidelines.
- **URL folders:** Sections of a website occurring after the TLD (".com"), separated by slashes ("/"). For example, in "moz.com/blog" we could say "/blog" is a folder.
- **URL parameters:** Information following a question mark that is appended to a URL to change the page's content (active parameter) or track information (passive parameter).

10.12 CHECK YOUR PROGRESS

Descriptive type questions-

a) What are the major objectives of search engine optimization?

b) Explain the search engine index.

c) What do you mean by web crawling?

d)   What do you mean by indexing in SEO?

e)   What is the role of links in search engine optimization?

f)   Differentiate between white hat and black hat SEO.

g)   What are the major challenges of search engine optimization?

h)   List the crucial SEO ranking factors one need to know.

10.13 BIBLIOGRAPHY/ REFERENCES

- Exploring Search Engine Optimization Techninic for Dynemic Websites, By Wasfa Kanwal, School of Computing, Blekinge Institute of Technology, Swden.

- G. Rogan; "A study of Search Engine Optimization methods", National University of Ireland, Gateway.

- J. L. Ledford; "SEO: Search Engine Optimization Bible", John Wiley & Sons, Inc. Publishing USA, ISBN 0470452641, (2009).

- https://en.wikipedia.org/wiki/Search_engine_optimization

- "Google Search Engine Optimization Starter Guide", Google webmaster central Mittal Pardeep, Kaur Amandeep.

- Y. Ru & E. Horowitz; "Indexing the invisible web: a survey", Department of Computer Science, University of Southern California, Los Angeles, California

UNIT- 11

WEB SEARCHING TECHNIQUES AND INTERNET RESEARCH ATTITUDE

11.1   INTRODUCTION

Any software developed to find information on web is known as search engine. The results are returned in terms of pages which hold information containing various webpages, images, videos, pdf files and various other modes of information. In general, the returned pages are known as Search Engine Result Pages (SERP). Various search engines are popular these days including Google, Bing, Yahoo, Baidu, DuckDuckGo, ask.com, etc. Search engine includes various key operations which are grouped into three main components which are web crawling, database management and finally the interface on which search results based on the search query are displayed. Search Engine Optimization (SEO) is the process in which software get the traffic to interface. It is helps in collecting the volume and quality of traffic to the website using various sources.

SEO marketing is one of the heavily used and sound practices for business promotion. While going for search, the user gets various results in variety of forms such as text, images, videos,

etc. Sometimes search engines may result with no results. It may be due to any reasons such as no data found, internal device errors, service unavailable, etc. All such results are returned in terms of status code which refers to some category of error such as status code 404 stands for Not found, 503 for Service unavailable, etc. Various tools are used for SEO operations which help in achieving the search tasks such as ahrefs, kwfinder, semrush, spyfu, etc. If you are looking for a separate mobile friendly site various things needs to be checked such as type of content, structured data, metadata, xml sitemaps, media sitemap, etc. It helps in making the search engine results mobile friendly as there is difference between desktop interfaces and mobile interfaces. While doing search on search engines, operators are used for smart and specific search which are categorized into basic search operators, advance search operators and deprecated search operators.

On the other hand, internet research attitude must also be observed so that there exists fine tune between search engines and its users requirements from the search engines. Few of the attitudes which belongs to the search engine user includes relevance of paid and free search, search failure, usage, loyalty, etc. For search engine marketing the attitude of the customers must also be taken into consideration which may include technical plan, critical review, attitude of online consumers towards e-marketing and general attitude towards search engines. Finally, developers of the search engine have to care their customer based on his interest, taste and other emerging trends in searching process such as video content optimization, voice search, social media indexing, mobile based results, etc.

11.2   OBJECTIVES

After successful completion of this unit, you will be able to-

•   Understand web search and types of popular search engines.

•   Understand and use various search engine operators for smart search.

•   Understand Internet research attitude.

•   Understand search engine's user attitude.

•   Understands customer attitude towards search engine marketing.

•   Know and use the recent trends in search engine.

11.3   FUNDAMENTALS OF SEARCH ENGINE

Search engine is a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on World Wide Web. It is software tool which helps users track down information based on the search query given by the user on web. Some of the commonly used search engines include Google, Bing, Yahoo, Baidu, DuckDuckGo, ask.com, etc.

Types of search engines-

There are various search engines available these days. Their functionality and the process may differ in terms on how they process for retrieving data from various sources. Generally, these search engine processes may be categorized into the following four categories:

- Crawler Based Search Engines

- Directories Search Engines

- Hybrid Search Engines

- Meta Search Engines

Crawler based search engine and its components-

These types of search engines are most familiar to us while doing web search. Examples of crawler-based search engines are Google, Bing, etc. It is called as crawler as the software produces information to its user like spider progresses its works by crawling and automatically appending new pages to its search index as it progresses further. Web crawlers are also termed as spiders, web cutters, bots, automatic indexers, ants, etc. In general, the steps involved in web crawling include:

- Discovering URLs

- Exploring a List of Seeds

- Adding to the Index

- Updating the Index

- Crawling Frequency

- Blocking Web Crawlers

- Using Robots.txt Protocols

Web crawler-based search engine has three major components which are:

a) Web Crawlers- It is a kind of internet bot that gradually and technically browses the internet specifically the World Wide Web. It enters the websites and reads the information to create search engine index which is very helpful in producing the search result web pages to search engine users based on the query strings given by them in the search engine interface page. Googlebot is one of the popular web crawlers used for Google search engine. The process is known as spidering or web crawling.

b) Database- Database is a collection of data retrieved from various source into structured form. It is actually the result produced by the web crawlers. This result is based on the organic search for which the query is given by the search engine user.

c) Search Interfaces- It is an interface on which the results are shown to users. Various software are available to create interface of the data from databases arranged and collected by the web crawler.

Search Engine Optimization-

Search engine optimization is the process of maximizing the number of visitors to a particular website by ensuring that the site appears high on the list of results returned by a search engine. It includes operations that will hit your website possibly on the top of other peer websites. It includes various optimization algorithms that list your website on the top list. Many organizations develop algorithms for optimization and are actually gaining advantage for brands by making them available to search engine users. Charges are taken from brands for processing these tasks. Few of the advantages of using SEO are listed below:

- It provides better user experience.
- It is a primary source of leads for business.
- It results in higher conversion rate.
- It promotes better cost management.
- It builds brand credibility.
- It helps in creating brand awareness.
- It ensures mobile-friendliness of your website.
- It is considered as a long-term marketing strategy.
- It helps in gain market share in business.
- Social media followers are increased using SEO.

Moreover, SEO process helps you create a win-win situation in competition.

Status codes-

Hyper Text Transfer Protocol (HTTP) is one of the protocols governing the World Wide Web. It helps in information flow from one system to another, one place to another and from one platform to another platform. Whenever we browse a web page this protocol helps us in creating interface for results retrieved from various sources. Whatever the server sends to browser it is associated with some code specific to it. These responses have five categories listed below:

- Codes between 100 to 199: Informational Responses
- Codes between 200-299: Successful Responses
- Codes between 400-499: Client Error Responses
- Codes between 500-599: Server Error Responses

To become a smart search engine user, you may explore these response codes which may be encountered to you for various situations while browsing World Wide Web. Below are the common specific status codes which may return on your search engine while searching for any information:

- 200 OK: This response code informs that the request you made has been succeeded.

- 400 BAD REQUESTS: This response code means that the syntax is malformed and in not understood by the server.

- 404 NOT FOUND: This response code says that the server found nothing that matches the request sent to the server.

- 413 REQUEST ENTITY TOO LARGE: This code means that the request entity is too large to be processed by the server.

- 429 TOO MANY REQUESTS: This code reflects that within a given time, server got too many requests.

- 500 INTERNAL SERVER ERROR: It tells that server has met an unexpected error which put a stop in fulfilling it.

There are hundreds of such more requests. Most of them are not for your use but few of them will surely help you to become a smart search engine user. Moreover, web browsers use two methods to send you requests to server: GET and POST. GET is simple method with data length restrictions while POST is secure and has no restrictions on data length to be sent to the server for searching results.

Quick Revision- Tools used for SEO

SEO is all about using algorithms that ranks your web page on the top. For this process it uses various tools. These tools are used to improve SEO score that helps you list on the top. If budget is your problem, then free SEO tools or controlled budget SEO tools are also available on the web. Few of them are listed below:

[1] Google Keyword Planner-

This tool suggests the keywords for faster search. It is helpful in building the network campaign to estimate the data traffic. You may search using any keyword along with ad group ideas related to your product or its services or any related thing.

[2] Google Analytics-

This popular tool is developed and supported by Google. It uses JavaScript program for information retrieval from various web sources. It records user's visit to a webpage along with Google analytics code that helps in refined search.

[3] Google Search Console-

Google search console (GSC) is a powerful tool developed for webmasters. It helps them to monitor and control websites with the help of an official web portal. It is full of statistical tool that helps in refining search queries.

[4] Backlink Checker-

Backlink Checker is a tool powered by Ahrefs. Its strategy is to go for backlinks pointing to specific domain. It filters the more quality search links which helps in outranking the peer competitors.

[5] Answer the Public-

This tool is very powerful specifically for novice users who are weaker in writing proper queries. Whatever you write on its textbox provided at the user interface of *Answer the Public*, provides numerous related queries which must be helpful for you to go in right direction for your query. The figure 1 below is a sample query in which only one word 'God' is provided and this tool returned numerous queries in circular fashion. All queries are hyperlinked to be explored for specific search. You may try the same in the web site of answer the public to find formed queries by this tool.

[6] Beam Us Up-

Beam Us Up is also of one of the great crawling software. Its advantage is that it is quite faster when compared with others SEO software. There's no need to export or to analyse the SEO crawling using any program or software. This is compatible for Windows, Mac OS and Linux. It supports free crawling from websites to websites.

[7] Yoast SEO-

It is actually WordPress plugins which is very popular among the web developers. Due to WordPress simplicity, this tool is also easy to master. You may easily control the meta descriptions, titles, setting target keywords, etc. You can easily manage sitemaps here. If you are familiar with WordPress, you must add this tool to your favourite SEO tools list.

[8] Keyworddit-

Keyworddit is a SEO tool that supports in searching keyword. It is a free tool which is supported by subreddits available on Reddit system. It provides robust context and other detail about where these keywords have been used. It provides the search volume for the provided keywords on monthly basis. It is a popular SEO tool in US.

[9] SERProbot-

SERProbot is one very powerful analytical tool that returns its results in terms of graphical manner. It supports this individually for each keyword provided to it.

[10] Keywords Everywhere-

This is one of the search engine optimization tools in the hit list of SEO experts. It saves your time by eliminating the task of copy paste from one source to another and even finding the keywords from given volume. They support long-tail search phrases with search volume accuracy.

[11] Wondersear.ch-

Wondersear.ch helps SEO users in finding keywords with no semantic-relation with root keyword provided to it. It returns back the words that you see in the screen shots, if you enter any existing word on your current screen.

[12] SEO Hero-

SEO Hero is an efficient SEO tool that helps in exploring topics to generate smart content tactic. SEO Heor also provides websites which are highly related to the keywords.

[13] HEADMasterSEO-

HEADMasterSEO PRO is used to validate the uniform resource locator's addresses in volume. It is supported by Windows and Mac operating systems. This tool is adequate enough to check status codes provided by the servers after any request is made to them. Moreover, this SEO tool helps on getting details such as response headers, HTTP header fields, number of URLs, redirection details, response time, etc.

[14] Merge Words-

This tool is helpful in searching keywords which are concentrated in some sense. It suggests the best usable words which may be then used for platforms such as Google AdWords campaign. This tool is on the top list among the SEO plug-ins tool available in millions.

11.4   MOBILE AND SEARCH ENGINES

Searching information helps people, organizations, firms and many more to get acquainted with the pace in which the world is progressing. In the past, web search was all about browsing web pages on desktop or laptop or other computing devices. But in today's scenario as e-governance (electronic governance) is transforming into m-governance (mobile-governance) we as a developer of search engine, service provider for search engines and user of search engine need to possess skill relevant to this new era of search. We have to use mobile devices to perform the search. If we only focus on desktop service deliveries then sooner, we will be out of the race. So, the knowledge of mobile interface and other related services must be possessed by the all the stakeholders of the search engine system. Following list summarizes the key things related to mobile search which need to be carefully understood by learners:

- **Content-** Creation of consistent content across all platforms whether mobile or desktop is crucial because searches made these days are both on desktop and mobiles. Mobile-first indexing is used for this reason which predominately uses the mobile version of the content for indexing and ranking. It turns out that the content is not suitable for desktop, but it proves to be most suitable for mobile devices. The philosophy for such mechanism is shown in the diagram. Moreover, in whatever form the content is, its quality must be of both high level and value.
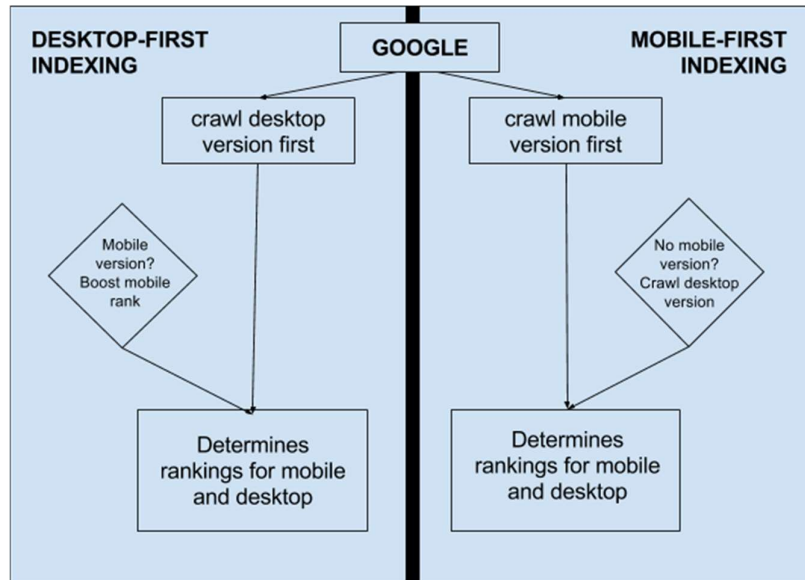
Fig. 11.2Desktop-first and Mobile-first indexing (Source: Moz.com)

- **Structured Data-** It is a way to mark-up on both mobile version as well as desktop version. This structuring will help in providing data accordingly as well as in user friendly mode.

- **Meta Data-** You must ensure that title and meta description are of equal character length whether it is mobile version or desktop version.

- **Social Metadata-** If you made any social metadata such as Twitter cards, make sure that you add them to both the version i.e. mobile as well as desktop.

- **XML and Media Sitemaps-** Whatever the links you provide to sitemaps, make sure that they are also accessible using mobile.

DevTool's Device Mode of Chrome is one such tool to create mobile friendly sitemaps. It is used to test the performance of website on portable devices. Similarly, TestMySite developed by Google is another tool that tests the speed of your web site on mobile devices.

11.5   *MAKING SEARCHING MORE EFFECTIVE & SMARTER*

There several ways to find data on search engines. It depends on the user what query string or keywords are used at interface provided by search engine software. Few things may improve

your way to search on the search engines and make the user a smart web searcher. The following are the suggestions for making your web search more effective and smarter:

- Change Your Search Engine

- Use Specific Keywords while searching

- Use simple terms while searching

- Quotation Marks must be used for specific searches

- Avoid Irrelevant search words in query

- Use operators for quick and more relevant results

Further, there may be other points to be considered carefully for refining your search. Also, as stated above HTTP provides you response codes for your errors if encountered. Keeping in knowledge about these response codes will help you to resolve the errors more efficiently and smartly.

Operators for Searching- Specific to Google Search Engine-

Various operators are used by search engines for better search results. These operators help search algorithms to take decisions at extremely fast rate as well as helps in providing accurate information. This section will focus on the operators used by Google search engine. These operators are also known as organic search operators and can be broadly categorized into three groups:

- **Basic search operators-**

    Quotes Operator (" "), Logical OR Operator, Pipe Operator (|), Minus operator (-), Range of Numbers (#..#), Prices ($) and in operator.

- **Advanced search operators-**

    intitle operator, allintitle operator, inurl operator, allinurl operator, intext operator, allintext operator, filetype operator,etc.

- **Unreliable and deprecated search operators-**

    The following operators have been deprecated by Google or are unreliable operators declared by Google:

    a)   Includes synonyms operator (~): For example, ~schools, ~trees, ~cities etc.

    b)   Force exact match operator (+): For example, +schools, +trees, +cities etc.

    c)   Date range operator: Returns results in the specific range.

    d)   Link operator: This operator is used to find those web pages having target links to given domain such as link:abc.com.

e) Inanchor operator: Find page that is linked with specific anchor text or anchor phrase for example inanchor:" given text"

f) Allinanchor operator: Find page that is linked with all individual anchor text or anchor phrase for example inanchor: given text

Use of operators makes algorithms to perform much faster than those queries which do not use them. Operators must be utilized for fast as well as more relevant results from servers with the algorithms developed by search engines.

11.6 INTERNET RESEARCH ATTITUDE

The term internet research is the exercise of using information available on the Internet, freely available on the World Wide Web. We use search engines on daily basis for our web search tasks. User's attitude for using search engine is important as developers of the search engines are working to provide the user-friendly services to their users. When talking about SEO marketing, it relates to millions of businesses to get affected by this tool. Attitude of customers on the search engines is also of prime importance towards search engine marketing. Various factors of customer's attitude make a difference on search engine marketing successful. Few of these factors are listed below:

- Technical plan of the system is to be understood and framed before working on search engines
- It is suggested to take a critical review of the system
- Online consumer's behaviour towards e-marketing is to be observed
- Attitudes of online consumers towards e-marketing is to be observed
- Attitudes towards search engines usage
- Knowledge of Paid versus free search engines services.

Habitually using any search engine is not a smart approach to use search engines. Vary from one search engine to another is important to know the difference. At least for few appreciable things, all popular search engines are still live. Being a smart user, we should keep on observing and analyzing the things in continuous way.

11.7 POINTS TO REMEMBER

- The results are returned in terms of pages which hold information containing various webpages, images, videos, pdf files and various other modes of information.

- Google, Yahoo, AOL, Bing, Baidu, DuckDuckGo, ask.com are few popular search engines.

- GET and POST are methods of sending user requests from web browsers to web servers.

- W3C stands for World Wide Web consortium.

- Web crawler is a kind of internet bot that gradually and technically browses the internet specifically the World Wide Web.

- Web crawler is also known as spiders, web cutters, bots, automatic indexers, ants, etc.

- For business marketing, SEO results in higher conversation rate.

- SEO provides benefits such as brand credibility, brand awareness, mobile friendliness, long-term marketing strategy, etc.

- HTTP is one of the protocols governing the web.

- HTTP status codes or response codes are helpful for smart search engine operations.

- There are various free or low-budget SEO tools available to rank you web site on the top such as Google Keyword Planner, Google Analytics, Backlink Checker, Answer the Public, Yoast SEO, Wondersear.ch, SEO Hero, etc.

- Search content is indexed in two forms: Desktop-first indexing and Mobile-first indexing.

- Tools are available to check how your website performs on mobile devices. Such tools are TestMySite, DevTool's Devide Mode, etc.

- Various operators are also available for smart and efficient search such as quotes operator, OR operator, pipe operator, minus operator, range of numbers operator, inurl operator, intext operator, all in text operator, filetype operator, etc.

- Few operators are depreciated by Google such as synonyms operator (~), force exact match operator (+), link operator, inanchor and allinanchor operator, etc.

- Recent trends of SEO need to be updated as per technology updates. Few latest trends include BERT & User-Focused Optimization, high quality optimized content, Mobile SEO, structured data, focus on visibility, programming, link building & brand building, etc.

11.8   GLOSSARY

- Algorithm- A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

- Analytics- Analytics lets you measure your advertising ROI as well as track your Flash, video, and social networking sites and applications.

- Anchor Text- Anchor Text is the visible clickable text in a hyperlink.

- B2B- B2B is shorthand for "business to business." It refers to sales you make to other businesses rather than to individual consumers. Sales to consumers are referred to as "business-to-consumer" sales or B2C.

- B2C- The term business-to-consumer (B2C) refers to the process of selling products and services directly between consumers who are the end-users of its products or services.

- Blog- It is an online journal or informational website displaying information in the reverse chronological order, with latest posts appearing first.

- Broken Link- A broken link or dead link is a link on a web page that no longer works.

- Cache- A cache is hardware or software used to store something, usually data, temporarily in a computing environment.

- Crawler- A crawler is a program that visits websites and reads their pages and other information in order to create entries for a search engine index.

- Directory- A directory is defined as an organizational unit, or container, used to organize folders and files in a hierarchical structure.

- Domain- Domain names are used to identify one or more IP addresses. For example, the domain name microsoft.com represents about a dozen IP addresses.

- E-commerce- E-commerce (electronic commerce) is the activity of electronically buying or selling of products on online services or over the Internet.

- Homepage- A home page or a start page is the initial or main web page of a website or a browser.

- HTML- It stands for Hypertext mark-up language used to develop web pages.

- Inbound Link- An inbound link is a hyperlink back to your site from another Web site.

- Index- Indexing is the process by which search engines organise information before a search to enable super-fast responses to queries.

- IP Address- An IP address is written in "dotted decimal" notation, which is 4 sets of numbers separated by period each set representing 8-bit number ranging from (0-255).

- Keyword- Keywords are ideas and topics that define what your content is about. In terms of SEO, they're the words and phrases that searchers enter into search engines, also called "search queries".

- Link- Links were the first major "Off-the-page" ranking factor used by search engines.

- Meta Tags- A meta tag is an HTML tag containing information for search engines about a specific website. Meta tags contain keywords or phrases alerting search engines of a website's content to be included in search results for users requesting related information.

- Niche- A niche in the market is a specific area of marketing which has its own particular requirements, customers, and products

- Organic Search- Organic search is a method for entering one or several search terms as a single string of text into a search engine.

- Redirect- A redirect is a way to send both users and search engines to a different URL from the one they originally requested.

- Search Engine Marketing (SEM)- Search engine marketing (SEM) is a form of Internet marketing that involves the promotion of websites by increasing their visibility in search engine results pages (SERPs) primarily through paid advertising.

- Search Engine Results Page (SERP) - Search Engine Results Pages (SERP) are the pages displayed by search engines in response to a query by a searcher.

- Sitemap- A sitemap is a file placed on your website in which you list the individual pages of your website.

- Status Codes- When a search engine or website visitor makes a request to a web server, a three-digit HTTP Response Status Code is returned. This code indicates what is about to happen.

11.9   CHECK YOUR PROGRESS

Objective type questions- (True / False type)

a)   WWW stands for World Wide Web. (True / False)

b)   Duckduckgo is a SEO tool. (True / False)

c)   Web crawler is a kind of internet bot that browses the websites. (True / False)

d)   SEO is not helpful in rand credibility. (True / False)

e)   HTTP responses between 200 to 299 are used to represent client error responses. (True / False)

f)   HTTP response code 404 is used for successful submission to server. (True / False)

g)   HTTP response code 429 represents the TOO MANY REQUESTS. (True / False)

Objective type questions- (Fill in the blanks type)

a)   Crawler crawls the both for desktop as well as mobile and then the indexing is called …… and …… indexing.

b)   Web crawler is also termed as …… and …….

c)   Web crawler-based search engines has three components which are ……, …… and …….

d)   SEO stands for …….

e)   Basic operators used while search at search engine are ….. and …….

f)   …… operator is deprecated from Google search engine.

g)   …… is one of the latest trends in SEO marketing.

Answer- (True / False type)

[a] False [b] True [c] True [d] False [e] False [f] False [g] True

Answer- (Fill in the blanks type)

[a] desktop-first, mobile-first [b] spider, internet bots etc. [c] web crawler, database, search interface [d] search engine optimization [e] quotes, pipe etc. [f] link (~) [g] Mobile SEO/Structured Data etc.

11.10 BIBLIOGRAPHY/ REFERENCES

- MindTools,   Personal   Learning   Skills, https://www.mindtools.com/pages/article/internet-searching.htm,

- Tech Republic, Efficient Internet searching, https://www.techrepublic.com/blog/10-things/10-tips-for-smarter-more-efficient-internet-searching/, 2011

- MOZ, Search Tips and Tricks, https://moz.com/learn/seo/search-operators

- REST API Tutorials, https://www.restapitutorial.com/httpstatuscodes.html#

- SEJ-Search   Engine   Journal,   https://www.searchenginejournal.com/2020-seo-trends/338697/

11.11 SUGGESTED READINGS

- REST API Tutorials, https://www.restapitutorial.com/httpstatuscodes.html#

- SEJ-Search   Engine   Journal,   https://www.searchenginejournal.com/2020-seo-trends/338697/

UNIT- 12

INTRODUCTION TO WEB AND DIGITAL MARKETING

12.1 INTRODUCTION

The World Wide Web or www or W3 is an information space where documents and other web resources are identified by Uniform Resource Identifiers (URIs). Such documents are created using hypertext and can be interlinked by hyperlinks, and also can be accessed via the Internet. The resources on the Web are transferred via the Hypertext Transfer Protocol (HTTP), which may be accessed by users through the web browser. Hypertext documents are commonly called webpages, which are created and formatted using Hypertext Markup Language (HTML). Webpages may contain links to images, videos, text, etc. that are rendered to users of a web browser application, running on the user's computer. Tim Berners-Lee invented the World Wide Web in 1989. Multiple webpages with a common theme make up a website. Websites are stored in Web servers, which is a program that responds to requests made over the Internet from web browsers (called client side) running on a user's

computer. Websites are provided for a myriad of informative, entertainment, commercial, and governmental reasons. Some basic components of World Wide Web are-

- Web Servers: The computers that hold information (web resources) for distribution over the Internet based on client's call.
- Web clients: The machines which can retrieve information from the Web servers.
- HTTP: Hyper Text Transfer Protocol, is used to transmit files between web servers and clients. When you click on a hyperlink or fill out a form in a Web document, at that time the information is transferred by the HTTP. There are several other protocols used in the journey of Internet for various purposes, i. e. FTP, TCP/IP, UDP, SMTP, etc.
- Browser software: It is needed by a Web client for displaying text, images, video clips, etc on the client's machine. some popular browser software names are-Internet Explorer, Google Chrome, Mozilla Fire Fox, Netscape Navigator, etc.

12.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

- Understand the key developments of WEB 1.0, WEB 2.0 AND WEB 3.0.
- Know Internet evolution.
- Define the role of Internet in marketing.
- Know the several types of digital transactions.

12.3   INTRODUCTION TO WEB 1.0, WEB 2.0 AND WEB 3.0

The World Wide Web is not synonymous with the internet but is the most prominent part of the internet that can be defined as a techno-social system to interact humans based on technological networks. The immense progress had been made about web and related technologies.

Web 1.0-

Web 1.0 was defined as web of information connection. The Web 1.0 was referred as the first generation of World Wide Web. The first generation of web was the era of static webpages and such webpages are only used for content delivery purposes. In the year 1993 came a turning point for the world wide web with the introduction of the Mosaic web browser, which could display graphics as well as text to the clients' machine, from that date, usage of the web grew rapidly. This early phase of web development, called Web 1.0, where mostly web pages were static documents (read from a server and displayed on a clients' machine) with no options for users to contribute content, or to interact with it. Web 1.0 is a content delivery network (CDN) which enables to showcase the piece of information on the websites. Characteristics of web 1.0 are-

- Static web pages.
- Web 1.0 technologies includes core web protocols, as- HTML, HTTP, and URI.

- Web 1.0 have read only content.
- It establishes an online presence and make their information available to anyone at any time.
- Content is served from the server's file-system.
- Pages built using Server side includes or Common Gateway Interface (CGI).
- Frames and Tables used to position and align the elements on a page.

Web 2.0-

Web 2.0 is the revolution period of computer industry which establishes Internet as a new business platform. It is also referred as participative web or people-centric web or interactive web or read-write web. Several technological advancements were noted, i. e. uses of client-side and server-side scripting languages, uses of Javascript and AJAX framework, etc. In the age of web 2.0, AJAX (Asynchronous JavaScript and XML) and JavaScript frameworks have become a popular means of developing interactive website with rich features, as-interoperable, high usability, ability to create user-generated content, interaction and collaboration with other applications, etc. Characteristics of web 2.0 are-

- Easy information classification and retrieval.
- Dynamic content which is user responsive.
- Information flows bidirectional (as- between website owner and website users by means of feedback and commenting).
- Developed APIs to allow self-usage, such as by a software application.
- Era of social web started, which open the doors of online tools and platforms where people can share their perspectives, opinions, thoughts and experiences.
- Web 2.0 applications tend to interact much more with the end user.
- The following applications/tools were started in trending, as- Podcasting, Blogging, Tagging, Curating with RSS, Social bookmarking, social networking, social media, etc.
- Web 2.0 were facilitated with Flexible web design, creative reuse, updates, collaborative content creation and modification.

Web 3.0-

The basic idea of web 3.0 is to define structure data and link them in order to more effective discovery, automation, integration, and reuse across various applications. Web 3.0 tries to link, integrate, and analyze data from various data sets to obtain new information stream. Web 3.0 is also known as semantic web. Semantic web was thought up by Tim Berners-Lee (inventor of the World Wide Web). The Semantic Web is a vision about an extension of the existing World Wide Web, which provides software programs with machine-interpretable metadata of the published information where computers are able to make meaningful interpretations similar to the way humans process information to achieve their goals. Web 3.0 is able to improve data management, support accessibility of mobile internet, simulate

creativity and innovation, encourage factor of globalization phenomena, enhance customers' satisfaction and help to organize collaboration in social web. It includes transforming the network into a database, a move aimed at making content accessible by multiple applications that are not just the browser, the push of artificial intelligence technologies, the geospatial web, 3D Web, etc. It enables the upgradation of back-end of the web where many evolutions of web usage and interaction among several paths happened. Characteristics of web 3.0 are-

- Towards semantic web.
- Uses of artificial intelligence.
- 3D Graphics.
- Content is accessible by multiple applications
- Several advance web technologies, tools and frameworks were designed and developed.

12.4   HISTORY OF INTERNET

In todays' information age the Internet is a world-wide broadcasting system, which is capable to information dissemination, and a medium for collaboration and interaction between individuals. The original ARPANET (Advanced Research Projects Agency Network) grew into the Internet. Internet was based on the idea that there would be multiple independent networks of rather arbitrary design, beginning with the ARPANET as the pioneering packet switching network. In an open-architecture network, the individual networks may be separately designed and developed and each may have its own unique interface which it may offer to users and/or other providers. including other Internet providers. Each network can be designed in accordance with the specific environment and user requirements of that network. There are generally no constraints on the types of networks that can be included or on their geographic scope, although certain pragmatic considerations will dictate what makes sense to offer.

The idea of open-architecture networking was first introduced by Kahn shortly after having arrived at DARPA (Defense Advanced Research Projects Agency) in 1972. This work was originally part of the packet radio program, but subsequently became a separate program in its own right. At the time, the program was called "Internetting". Key to making the packet radio system work was a reliable end-end protocol that could maintain effective communication in the face of jamming and other radio interference, or withstand intermittent blackout such as caused by being in a tunnel or blocked by the local terrain. Kahn first contemplated developing a protocol local only to the packet radio network, since that would avoid having to deal with the multitude of different operating systems, and continuing to use NCP (Network Control Program).

Vint Cerf and Bob Kahn designed a protocol that would improve the efficiency of the network, allow different networks to connect together into one big network (hence Internet: global group of interconnected networks), and would include error detection, packaging, and

routing. The new protocol was called Transmission Control Protocol and was later split into a separate Internet Protocol. Together, the suite of protocols were called TCP/IP. TCP/IP is particularly valuable as it ensures that messages are reliably sent over the Internet over multiple routes in individual packets. Those packets are then reassembled at the receiving system. If there is an error in a packet, a request for a new one is sent to the originating computer.

With the advent of TCP/IP, the 'global network' became a reality. Universities and government offices and agencies increasingly used the network for communication. Up to this time, the Internet was, by law, for strictly official use. However, personal email addresses became commonplace and games began to be played over the network. Unofficial use of the Internet gained impetus in the 1980's when personal computers by Apple and IBM became common in both offices and in homes.

In the year 1984, the Domain Name System (DNS) was introduced. DNS is a global network of servers that translate intuitive host names (Uniform Resource Locators) into numerical IP (Internet Protocol) addresses, which computers on the Internet use to communicate with each other. In the year 1990s, 'the World Wide Web' was introduced by the Tim Berners-Lee at CERN in Switzerland for distributing information across a network of different computers and operating systems.

The 'Hypertext Transfer Protocol' (http) is the communications protocol that enables the transfer of web pages. Http runs on top of TCP/IP and defines how different types of hyperlinked data (text and multimedia) are transmitted and accessed over the Internet. It supports a 'client/server' mode of communications between remote computers where a 'client' is a computer that requests data from a 'server' computer.

The first graphical browser, named Mosaic was came into existence in the year 1992. Further versions of Mosaic became Netscape. It is estimated that the Web has greatly surpassed one billion pages and that individuals, companies, educational institutions, and all other types of organisations are putting Web pages online. The Web is supported by backbone networks that are comprised of major, high capacity, long-distance computer networks with very high data transfer capacity.

12.5   GROWTH OF INTERNET

The Internet refers to the global information system that is logically linked together by a globally unique address space based on the Internet Protocol (IP). As we discussed in previous topic the history of the Internet began to take root out of a network developed by the Advanced Research Projects Agency (ARPA) to aid in the sharing of information and resources among researchers. The ARPANET, the network that became the basis for the Internet and made operational in the year 1969, became an essential tool for remote login, file transfer, electronic mail and the sharing of information by interest groups.

In the year 1973, the U.S. Defense Advanced Research Projects Agency (DARPA) started a research program called the Internetting project to develop communication protocols which would allow networked computers to communicate transparently across multiple, linked packet networks. The system of networks which emerged from the research is what is we know as the Internet. The system of protocols which was developed during this project is the TCP/IP Protocol Suite, after the two initial protocols developed: Transmission Control Protocol (TCP) and Internet Protocol (IP).

Since its creation, the Internet has grown exponentially in terms of numbers of networks connected to it. Over the years, there has been wave of commercialization of the Internet. The Internet has now become almost a "commodity" service, and much of the latest attention has been on the use of this global information infrastructure for support of other commercial services. This has been tremendously accelerated by the widespread and rapid adoption of browsers and the World Wide Web technology, allowing users easy access to information linked throughout the globe.

> **NOTE**- The Cisco Annual Internet Report is a global forecast/analysis that assesses digital transformation across various business segments. The report covers fixed broadband, Wi-Fi, and mobile (3G, 4G, 5G) networking. Quantitative projections are provided on the growth of Internet users, devices and connections. As-
>
> Internet users- Nearly two-thirds of the global population will have Internet access by the year 2023. There will be 5.3 billion total Internet users (66 percent of global population) by the year 2023, up from 3.9 billion (51 percent of global population) in the year 2018.
>
> Devices and connections- The number of devices connected to IP networks will be more than three times the global population by the year 2023. There will be 3.6 networked devices per person by the year 2023, up from 2.4 networked devices per person in the year 2018. There will be 29.3 billion networked devices by the year 2023, up from 18.4 billion in the year 2018.
>
> M2M connections will be half of the global connected devices and connections by the year 2023. The share of Machine-To-Machine (M2M) connections will grow from 33 percent in the year 2018 to 50 percent by the year 2023. There will be 14.7 billion M2M connections by the year 2023.
>
> The consumer segment will have nearly three-fourths share of total devices and connections by the year 2023. Globally, consumer segment's share of total devices and connections will be 74 percent, with the business segment claiming the remaining 26 percent.

Mobility growth- Over 70 percent of the global population will have mobile connectivity by the year 2023. The total number of global mobile subscribers will grow from 5.1 billion (66 percent of population) in the year 2018 to 5.7 billion (71 percent of population) by the year 2023.

5G devices and connections will be over 10 percent of global mobile devices and connections by the year 2023. By the year 2023, global mobile devices will grow from 8.8 billion in the year 2018 to 13.1 billion by the year 2023– 1.4 billion of those will be 5G capable.

[Source: https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html]

12.6   INTERNET AND DIGITAL MARKETING

Internet marketing performs a major role in present marketing strategy. Internet marketing is a vital part of the success of any business organization. It is beneficial to nearly every aspect of the business. Internet marketing sometimes also called online marketing or digital marketing or web marketing or e-marketing is defined as the process of promoting brands, products, or services, over the Internet. It includes several promotional activities, such as- e-mail marketing, blogging, SEO, website, and social media.

The advent of Internet started a new era of Internet marketing. The worldwide reach of the Internet has made it possible for businesses to easily reach to their customers accross the globe. Through the Internet, business organizations of all sizes are now able to share brands, products, and services on a global scale at any time.

Internet uses are in trending irrespective of gender, age, place and time where vast majority of people spend a significant amount of time online, whether they are at work or home or waiting at the airport on a smartphone or digital device. The selection and execution of right Internet marketing strategies is the key factor to achieve the goal. Internet marketing also helps organizations in achieving better global branding and in building greater awareness of the products or services that they offer. The Internet has enabled the rise of the smart consumer. Today's consumer first takes the complete enquiry of the products or services before to proceed to buy or opt services.

12.7   IMPROTANCE OF INTERNET IN MARKETING

In todays' digital age Internet is a place where anybody can sale or purchase products/services, but for that you must have the art of utilizing Internet in your life. Now, developing online marketing strategy is the central idea for any successful business brand. The role of Internet in marketing is unavoidable. The following point states the importance of Internet in marketing-

- Product awareness and branding- Product awareness and online branding is one of the top reasons for using Internet in marketing.

- Meeting the new Demand- Consumers are gravitating to Internet media outlets such as social media platforms and mobile apps.

- Cost Efficiency- Internet marketing is significantly less expensive than traditional marketing.

- Better Visibility- Online marketing tactics like search engine optimization (SEO) enable your business to be more easily found on the channels your customers are using most.

- Increased Authority- Online marketing is important not just because it helps you to get found online, but also because it can change the way your business is perceived by potential customers.

- Long-Lasting Relationships

- Marketing boosts sales, which keeps your small business afloat. However, online marketing also does something more, which has a greater long-term impact. It enables you to build relationships. Building relationships with customers earns you repeat business.

- Increases Website Traffic- Internet marketing attracts consumers to visit the website.

- Increase Sales- Online marketing has proven to enhance sales. Most consumers research prices, sales and promotions online before proceeding to their online or in store purchase.

- Improve Credibility- Maintaining a consistent online presence via Internet marketing is one of the best ways to maintain credibility.

12.8   E-COMMERCE AND DIGITAL TRANSACTIONS

Digital transactions (in terms of payments) are defined as transactions in where the customer transfers money through electronic means, and the funds (payment) directly flows from one bank account to another bank account. The bank accounts could be held in banks, or with any other entities (such as payment bank). Such digital transfers could be done through means of cards (debit/credit), mobile wallets, mobile apps, net banking, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), pre-paid instruments or other similar means. Following are the types of digital payments usually followed in India, are-

[1] Banking Cards (Debit / Credit / Cash / Travel / Others)-

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available– including credit, debit and prepaid cards which offers enormous flexibilities. These cards provide two factor authentications for secure payments, e.g, secure PIN and OTP (One Time password). RuPay, Visa, MasterCard

are some of the example of banking cards used for payment systems. Such banking cards give people the power to purchase items in stores, on the Internet (online shopping), etc.

[2] Unstructured Supplementary Service Data (USSD)-

The innovative payment service *99# works on Unstructured Supplementary Service Data (USSD) channel. This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking. It is envisioned to provide financial deepening and inclusion of underbanked society in the mainstream banking services. *99# service has been launched to take the banking services to every common man across the country. Banking customers can avail this service by dialling *99#, a "Common number across all Telecom Service Providers (TSPs)" on their mobile phone and transact through an interactive menu displayed on the mobile screen. Key services offered under *99# service include, interbank account to account fund transfer, balance enquiry, mini statement besides host of other services. *99# service is currently offered by 51 leading banks and all GSM (Global System for Mobile Communications) service providers and can be accessed in 12 different languages including Hindi and English.

[3] Aadhaar Enabled Payment System (AEPS)-

AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

[4] Unified Payments Interface (UPI)-

UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing and merchant payments into one place. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and iOS mobile platform(s).

[5] Mobile Wallets-

A mobile wallet is a way to carry cash in digital format. You can link your credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet. Instead of using your physical plastic card to make purchases, you can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it. Most banks have their e-wallets and some private companies. e.g. Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, SpeedPay etc.

[5] Point of Sale (PoS)-

A PoS is the place where sales are made. On a macro level, a PoS may be a mall, a market or a city. On a micro level, retailers consider a PoS to be the area where a customer completes a transaction, such as a checkout counter. It is also known as a point of purchase.

[6] Internet Banking-

Internet banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. Different types of Internet/online financial transactions are:

- **National Electronic Fund Transfer (NEFT)-** NEFT is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme. Individuals, firms or corporates maintaining accounts with a bank branch can transfer funds using NEFT. Even such individuals who do not have a bank account (walk-in customers) can also deposit cash at the NEFT-enabled branches with instructions to transfer funds using NEFT. However, such cash remittances will be restricted to a maximum of Rs.50,000/- per transaction. NEFT, thus, facilitates originators or remitters to initiate funds transfer transactions even without having a bank account. Presently, NEFT operates in hourly batches- there are twelve settlements from 8 am to 7 pm on week days (Monday through Friday) and six settlements from 8 am to 1 pm on Saturdays.

- **Real Time Gross Settlement (RTGS)**- RTGS is defined as the continuous (real-time) settlement of funds transfers individually on an order-by-order basis (without netting). 'Real Time' means the processing of instructions at the time they are received rather than at some later time; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction-by-instruction basis). Considering that the funds settlement takes place in the books of the Reserve Bank of India (RBI), the payments are final and irrevocable. The RTGS system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakh. There is no upper ceiling for RTGS transactions. The RTGS service for customer's transactions is available to banks from 9.00 hours to 16.30 hours on week days and from 9.00 hours to 14:00 hours on Saturdays for settlement at the RBI end. However, the timings that the banks follow may vary depending on the customer timings of the bank branches.

- **Electronic Clearing System (ECS)**- ECS is an alternative method for effecting payment transactions in respect of the utility-bill-payments such as telephone bills, electricity bills, insurance premia, card payments and loan repayments, etc., which

would obviate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks / companies / corporations / government departments, etc., collecting / receiving the payments.

- **Immediate Payment Service (IMPS)**- IMPS offers an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives.

[7] Mobile Banking-

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a smart phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s).

[8] Micro ATMs-

Micro ATM meant to be a device that is used by a million Business Correspondents (BC) to deliver basic banking services. The platform will enable Business Correspondents (who could be a local kirana shop owner and will act as 'micro-ATM') to conduct instant transactions. The micro platform will enable function through low-cost devices (micro-ATMs) that will be connected to banks across the country. This would enable a person to instantly deposit or withdraw funds regardless of the bank associated with a particular BC.

12.9   POINTS TO REMEMBER

- The World Wide Web or www or W3 is an information space where documents and other web resources are identified by Uniform Resource Identifiers (URIs).
- Hypertext documents are called webpages, which are created and formatted using Hypertext Markup Language (HTML). Webpages may contain links to images, videos, text, etc. that are rendered to users of a web browser application, running on the user's computer.
- The Web 1.0 was referred as the first generation of World Wide Web. The first generation of web was the era of static webpages and such webpages are only used for content delivery purposes.
- Web 2.0 is the revolution period of computer industry which establishes Internet as a new business platform. It is also referred as participative web or people-centric web or interactive web or read-write web.
- Web 3.0 is also known as semantic web. Semantic web was thought up by Tim Berners-Lee (inventor of the World Wide Web).

- The first graphical browser, named Mosaic was came into existence in the year 1992. Further versions of Mosaic became Netscape.

- Internet marketing sometimes also called online marketing or digital marketing or web marketing or e-marketing is defined as the process of promoting brands, products, or services, over the Internet. It includes several promotional activities, such as- e-mail marketing, blogging, SEO, website, and social media.

- Digital transfers could be done through means of cards (debit/credit), mobile wallets, mobile apps, net banking, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), pre-paid instruments or other similar means.

12.10 GLOSSARY

- Packet: The fundamental unit of data transmitted over the Internet. When a device intends to send a message to another device, it breaks the message down into smaller pieces, called packets. Each packet has the sender's address, the destination address, a sequence number, and a piece of the overall message to be sent.

- Hub: A simple network device that connects other devices to the network and sends packets to all the devices connected to it.

- Bridge: A network device that connects two networks together and only allows packets through that are needed.

- Switch: A network device that connects multiple devices together and filters packets based on their destination within the connected devices.

- Router: A device that receives and analyzes packets and then routes them towards their destination. In some cases, a router will send a packet to another router; in other cases, it will send it directly to its destination.

- IP Address: Every device that communicates on the Internet, whether it be a personal computer, a tablet, a smartphone, or anything else, is assigned a unique identifying number called an IP (Internet Protocol) address. Historically, the IP-address standard used has been IPv4 (version 4), which has the format of four numbers between 0 and 255 separated by a period. For example, the domain Saylor.org has the IP address of 107.23.196.166. The IPv4 standard has a limit of 4,294,967,296 possible unique addresses. As the use of the Internet has proliferated, the number of IP addresses needed has grown to the point where the use of IPv4 addresses will be exhausted. This has led to the new IPv6 (version 6) standard, which is currently being phased in. The IPv6 standard is formatted as eight groups of four hexadecimal digits. The IPv6 standard has a limit of 3.4×1038 possible addresses.

- Domain name: If you had to try to remember the IP address of every web server you wanted to access; the Internet would not be nearly as easy to use. A domain name is a

human-friendly name for a device on the Internet. These names generally consist of a descriptive text followed by the top-level domain (TLD). For example, the Uttarakhan Open University's domain name is uou.ac.in; UOU describes the organization and .ac.in is the top-level domain. Other well-known TLDs include .com, .net, .org, .gov, etc.

- DNS: DNS stands for "domain name system," which acts as the directory on the Internet. When a request to access a device with a domain name is given, a DNS server is queried. It returns the IP address of the device requested, allowing for proper routing.

- Packet-switching: When a packet is sent from one device out over the Internet, it does not follow a straight path to its destination. Instead, it is passed from one router to another across the Internet until it is reaching its destination. In fact, sometimes two packets from the same message will take different routes! Sometimes, packets will arrive at their destination out of order. When this happens, the receiving device restores them to their proper order.

- Protocol: In computer networking, a protocol is the set of rules that allow two (or more) devices to exchange information back and forth across the network.

12.11 CHECK YOUR PROGRESS

Descriptive type questions-

a) Explain the key features of Web 1.0 and Web 2.0.

b) Briefly define the history of Internet.

c) Explain the role of Internet in digital marketing.

d) What do you understand by various types of digital transactions? Define Banking Cards and Unified Payments Interface (UPI).

e) What do you mean by Internet banking? Define NEFT, RTGS, IMPS, and ECS.

Objective type questions-

a) In computer networking, a protocol is the set of rules that allow two (or more) devices to exchange information back and forth across the network (True/False).

b) Every device that communicates on the Internet not necessarily needs a unique identifying number called an IP (Internet Protocol) address (True/False).

c) Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device (True/False).

d) The RTGS system is primarily meant for large value transactions (True/False).

e) It is not possible to transfer money using NEFT to someone's bank account without having own bank account (True/False).

f) USSD stands for Unstructured Supplied Service Data (True/False).

g) DARPA stands for Defense Advanced Research Projects Agency (True/False).

h)   DNS is a global network of servers that translate intuitive host names (Uniform Resource Locators) into numerical IP (Internet Protocol) addresses (True/False).

i)   The Semantic Web is a way to extending software programs with machine-interpretable metadata of the published information where computers are able to make meaningful interpretations (True/False).

Answer (objective type question)-

[a] True   [b] False   [c] True   [d] True   [e] False

[f] False   [g] True   [h] True   [i] True

12.12 BIBLIOGRAPHY/ REFERENCES

- https://coursers.lumenlearning.com/zeliite115/chapter/reading-the-world-wide-web/.
- https://www.w3.org/People/Raggett/book4/ch01.html.
- Khanzode, C. A. and Sarode, R. D. (2016). Evolution Of The World Wide Web: From Web 1.0 To 6.0. International Journal of Digital Library Services. Vol. 6(2), ISSN (Online):2250-1142, ISSN (Print) 2349-302X.
- https://en.wikipedia.org/wiki/World_Wide_Web
- https://www.internetsociety.org/internet/history-internet/brief-history-internet/.
- https://courses.lumenlearning.com/santaana-informationsystems/chapter/a-brief-history-of-the-internet.
- http://cashlessindia.gov.in/digital_payment_methods.html
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3232505.
- https://psu.pb.unizin.org/ist110/chapter/1-4-history-of-the-internet.
- https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html.

12.13 SUGGESTED READINGS

- https://courses.lumenlearning.com/santaana-informationsystems/chapter/a-brief-history-of-the-internet.
- http://cashlessindia.gov.in/digital_payment_methods.html.
- Khanzode, C. A. and Sarode, R. D. (2016). Evolution Of The World Wide Web: From Web 1.0 To 6.0. International Journal of Digital Library Services. Vol. 6(2), ISSN (Online):2250-1142, ISSN (Print) 2349-302X.

UNIT- 13

FREELANCE DIGITAL MARKETING

13.1   INTRODUCTION

Digital Marketing can be defined as "The application of the Internet and similar digital technologies in conjunction with traditional communications to achieve marketing objectives". The main objective of digital marketing is attracting consumers and allowing them to interact with the brand through digital media. Digital marketing is the promotion of products and services through different forms of electronic medium. Keeping the benefits in view, government of India has initiated many policies and programs for digitalization process, so that with the use of the latest technology, living standards can be improved. Digital India has been started with the aim to make India totally digital, so the focus of companies should be on digital modes for marketing of their product and services.

In broader sense, digital marketing is the targeted, measurable, and interactive marketing of products or services using digital technologies to reach and convert leads into customers. The key objective is to promote brand image of the company, build more & more prospective

customers and increase the sale of goods & services by adopting various digital marketing techniques available. Digital Marketing is the use of digital channels to promote or market products and services for consumers and businesses.

In practice, there are different terminologies to explain the practice of utilizing digital marketing, internet marketing, online marketing and social media marketing. Digital Marketing is the utilization of Internet in order to reach the desired target market, via some of the following channels:

- Social media (Facebook, Twitter, LinkedIn, etc.)
- Websites/Blogs (WordPress.com).
- Multimedia Advertising (YouTube.com).
- Online/Search Engine Adverting (GoogleAdWords, SEO)
- Email Marketing.
- Interactive Marketing/Apps (Online Competitions, Polls, & Gaming)

13.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Analyze the confluence of marketing, operations, and human resources in real-time.
- Demonstrate cognitive knowledge of the skills required in conducting online research and research on online markets, as well as in identifying, assessing and selecting digital market opportunities.
- Explain emerging trends in digital marketing and critically assess the use of digital marketing tools by applying relevant marketing theories and frameworks.
- Investigate and evaluate issues in adapting to globalised markets that are constantly changing and increasingly networked.
- Interpret the traditional marketing within the context of a changing and extended range of digital strategies and tactics.
- Comprehend the importance of conversion and working with digital relationship marketing.
- Analyse cross-cultural and ethical issues in globalised digital markets.

13.3   WHAT IS FREELANCING?

Freelancing is a contract-based profession where instead of being recruited in an organization, the person uses his skills and experience to provide services to a number of clients. In simple terms, freelancing is when you use your skills, education, and experience to work with multiple clients and take on various assignments without committing to a single employer. The number of assignments or tasks that you can take just boils down to your ability to deliver on them as asked from them.

Freelancing usually involves jobs (called gigs) that allow you to work-from-home situations. But one shouldn't associate freelancing as the same as having a work-from-home job. Freelancing doesn't always mean that you'll work from home. You might have to work at your client's office too depending upon the type of work and client's requirements. A work from home job involves a contract between you and a single employer who gives you a salary while freelancing doesn't. It is just that many of the jobs that freelancers perform can be delivered over the Internet without their presence at the company or clients place.

Who is a freelancer?

A freelancer or freelance worker is a self-employed person who earns money by providing services to multiple clients. These services relate to the person's skills and are not necessarily provided to just businesses. Freelancers either use third-party platforms like Fiverr, 99designs, etc to get business or use their network to get more business and provide services to their clients directly.

But is it a good choice for a career? Can you sustain a lavish life while freelancing? How do you start with freelancing jobs? Well, when 11 percent of the working adult population in the United States is working primarily as full-time freelancers, there must be something good about this industry.

Freelancing as a career-

The rise of freelancers has resulted in the development of a new concept – the gig economy. In the gig economy, a person instead of working for a single employer full-time and getting a fixed salary in return, works for multiple clients at his own terms and at a price he thinks his work deserves. Freelancing is an enticing profession. It takes care of almost all the problems of a usual service-class human. According to Upwork, Americans work an average of 47 hours per week. Freelancers work an average of 11 hours less per week than full-time employed workers. That adds up to about 550 hours per year or 23 whole days. Full-time traditional workers spend nearly an additional full month each year behind the keyboard (or wherever they work).

Freelancer is an online job marketplace that provides a means for employers and freelancers around the globe to collaborate for mutual benefit. Individuals or businesses in need of skilled help for short or long-term projects can post those projects and allow freelancers to submit bids for the completion of the work.

Freelance digital marketing-

With freelance digital marketing, you're basically helping companies promote their products and services online. Your job is to reach out to your client's target audience, drive them to your client's website and convert them as paying customers. If you recognize that you have a skill that's valuable to a business' ability to market online and you offer that skill to businesses for a fee, you're engaging in freelance digital marketing.

Freelance marketing allows you to have the freedom to work for yourself, and try out ideas on a global scale, with very little start-up capital. Not to mention the fact that there is pretty much infinite scalability with it. It is the perfect place for those who have ideas and the work ethic to implement them. An important key to your success in freelancing is making sure that you love the journey as it won't always work out exactly as you expect it to.

13.4 FREELANCE DIGITAL MARKETING- REACHING THE AUDIENCE

You can have the most aesthetically appealing online store with easy navigation, the highest quality products backed by top-notch customer service and bottomless pockets when it comes to marketing budget. Yet, none of this matter if you aren't reaching and engaging the right audience for your brand. In order to drive the right traffic to your online store and increase sales, you first need to define what a qualified audience is for your brand. You want to determine who they are, what they value and how they use each channel at the various stages of their purchase journey, from interest and validation through to decision and advocacy. Following are four ways you can identify and engage the right audience with digital marketing.

[1] Learn what is important to your Audience

As marketers and business operators, we have near limitless amounts of data at our fingertips. Google Analytics and Search Console can tell us how people find our store and what they do upon arriving. Facebook Insights and Ad Manager can tell us the age, location, relationship status, interests and behaviors of our fans and customers. Social media listening tools can tell us what customers think about our company and products, and what other topics are interesting to them.

Use these tools to unearth insights about your audience's demographic and psychographic profiles to gain a better understanding of what is most important and interesting. There are multiple tools that easily integrate with the Big commerce backend that can help out in this arena. These tools use your store data as well as data from connected accounts (Facebook Power Editor, for instance) and then retarget or push ads out to pull additional clients back to your site.

[2] Speak your audience's language

You'll never get through to Belieber teen girls if you're using an extremely formal tone. And you'll likely ostracize male boomer sports car fanatics with flowery prose and exclamation points. To relate to and connect with your audience, you need to speak their language. That means not only using the appropriate voice and tone, but also peppering in actual words and phrases they use.

Through an extensive ethnographic study for a woman's apparel brand, our team learned that numerous customers used the term "darling" to describe their clothing products. We began using this term in advertising creative and social media conversations to better connect with their customers and immediately saw an increase in the campaign's click-through rate.

You don't need a large-scale and lengthy study like this to uncover these common phrases however. Simply using social media listening tools or manual monitoring of social media conversations can reveal your audience's common dialect. We often use Tweetdeck and hop on the phone with customers regularly to hear them speak about their business and our product naturally- and then incorporate that verbiage into specific campaigns.

[3] Know your organic keywords

Organic search is typically the largest source of traffic for any website. It's important to understand not only what terms are bringing folks to your store, but why those terms are being used and what stage those audience members are in. Keywords typically fall into three main categories:

- Informational Keywords- Used to find broader topics or items. User probably doesn't know what they want or need just yet. They're still researching. This is your opportunity to be helpful and/or interesting, increasing chances that you'll be considered when they are ready to purchase.

- Navigational Keywords- Used to find a specific website or product. For example, they may be searching for your brand name, or a specific product you carry. These users have likely already done their research or know exactly what they want, but may not be ready to purchase just yet or they may be existing customers coming back for a repeat purchase.

- Transactional Keywords- Used to find a product to purchase. For example, "Buy bicycle tires." The user is either ready to purchase immediately or well on their way.

By identifying relevant search terms and the user intent behind them, you can develop content to better address your audience's need. Informational content is often found in blog posts, FAQs, learning centers or resource sections. Navigational and transactional content is found in product category pages and product pages.

You can use tools like Ahrefs or BuzzSumo to do some research on which other sites are currently occupying the leading spots on a search term. These platforms will show you number of linkbacks, publisher, date of publishing and more. Do a bit of research into what your competitors or what the most successful brands out there are doing — and then recreate it with your own branded tone and style.

[4] Stay Top of Mind with Retargeting

When customers reach your store early in their purchase journey- whether they come from an informational keyword search, guest blog post link, display ad or any other means- they're likely not going to make a purchase that visit. That's expected and it's okay. You can remain in the consideration phase and bring those customers back to your store through retargeting efforts.

Numerous digital channels offer retargeting campaign options. You can use AdWords to run search retargeting, Google Display Network or a DSP, or Facebook for retargeting on desktop and mobile devices. Knowing who your audience is and what channels they use, will help you decide what the best channels are for your retargeting initiatives. The list of integrations above is helpful for determining channel ROI from advertising efforts and can be a great starting point in figuring out where retargeting might most make sense for your brand.

Gaining a deep understanding of who your customers are and what motivates them will help you define a more qualified audience. Only then can you use digital channels to reach that audience, drive higher quality traffic, improve on-site engagement and most importantly increase sales.

13.5 FREELANCE DIGITAL MARKETING- GENERATE LEAD

Lead generation strategies are one of the biggest challenges for digital marketers, as they need more customers for their business to grow. The key to driving more traffic to boost up sales is the quality of the service being provided and quality of the content designed to attract the targeted audience. With the advancement in technology, a new sun has risen. The world has turned into a global village and the era of digitalization has changed how we conduct or manage our business.

No matter how much changes you see in the marketing or advertising area, the main goal will always be to direct and engage more traffic onto your website in order to boost sales and improve the conversion rate. Here are twelve lead generation strategies to help digital marketing agencies with some impressive results.

[1] Webpage Optimization

First things first, you start from the very roots and since your website is the main source of driving all the traffic, you have to check whether it is functioning properly or not. Website loading errors, lagging speed, and bad user interface drive the traffic away rather than bringing more in. There are many tools that help scan your website for any errors. Knowing which clients or companies have viewed your website is necessary for sales specific marketing. This can later be given to a sales representative for a precisely designed follow up conversation to land in more clients.

[2] Running A/B Tests

Running an A/B test allows you to determine which version of your webpage is causing more traffic. The performance is checked through statistical analysis. Shortening the forms on webpages ensures higher conversions. This helps companies increase the conversions rates and in turn more leads are generated.

[3] Do Routine Website Checks

If you're like most businesses and only check your website for bugs- when something is broken or you get repeated complaints- chances are that you are going to lose clients faster than you are gaining them. This laid-back approach secretly causes the website to lag and possible visitors to turn the other way, without you even ever knowing. Broken links that never load or 404 error pages can easily make visitors turn away forever. A weekly routine website scan is crucial not only to make sure the system is running smoothly but also to make changes and improve user interface whenever needed.

[4] Create a Mobile Friendly Website Version

Google deems it necessary for websites to be more mobile friendly. Consider your website as your digital business card. If your website is not optimized for a smooth experience on the user's smartphone it can be alarming. If your webpage is not loading or working properly on a cell phone, it's a big reason to worry; considering the number of people using their cell phones and how much traffic are you diverting from your website due to this cause alone.

Best solution is to do a full website scan and target the areas or pages that are not mobile friendly. Have your web developer create webpages that are either more responsive or have a totally different stand-alone website for a mobile version.

[5] Keep Updating Keywords

Uncovering the keywords that your competitors are already using and generating traffic from can be very beneficial. By understanding which keywords are working for them, you can optimize your content accordingly. Besides, you can get your website to rank higher with similar keywords. Adding long-tail keywords to structure your web content is a good tip for effective lead generation strategies.

[6] Create Lead Magnets through SEO

No matter how attractive your webpage is, it won't generate leads if it is not visible to the potential customers. That's when SEO jumps in for help. SEO strategies put your webpage into the first search page of Google results. Lead magnets are pieces of contents like PDF or recorded files that can be viewed and downloaded by the visitors in exchange for their email addresses or other contact information. There are many forms of lead magnets but they all have one thing in common; they allow a conversation with the possible clients who are not ready to buy from you yet but can be persuaded.

[7] Personalizing Your Content

A general version of a landing page will never do you any good and won't really increase the conversion rate since they always target a broad spectrum which, in this case, is not a good thing. Your website's prospects can be increased by providing personalized content to the end user. For instance, you might want to show different content to the CEO of a company than you might want to show to an advertising agency. Identifying each person's wants and desires and channeling that into your content will help you generate more leads.

[8] Building an App

Building an app is now the easiest way to get more traffic, for upgrading your lead generation strategies. It is easily accessible but you can't expect customers to download an app just because you ask them to. You have to offer unique services or services that your competitors haven't thought of yet. An app that keeps offering immense value to its user and is always a source of ease will continue to produce more traffic and generate a huge number of leads, while also taking care of its existing customers.

[9] Make Videos for YouTube and Vimeo

Vimeo and YouTube are the leading online video platforms that get millions of viewers every day. If you own a business, you can easily use this platform to target a specified audience with a bunch of how to videos or any relatable content that you might be able to think of. YouTube now is more than an entertainment tool and people use it for a lot of product reviews or to find answers to questions they can't anywhere else. You can add the link to your website in the description box of the video. Taking advantage of video marketing is the smartest move you can make.

[10] Set Up a Blog

In order to sell your products, you have to think from buyer's perspective. Many times, when people come across a product, the information provided is not enough to satisfy them and they end up brushing off the idea of investing in it at all. Create a blog or do guest blogging to publish more personalized content or talk about the product in depth so that it can help drive more traffic. You can use different keywords to attract customers, write a bunch of how-to articles as well. The best way is to keep a keen eye on the feedback you get from the customers and try to incorporate it into your product and your blog posts as much as you can.

[11] Use social media

Social media marketing has been immensely fruitful for many businesses. Also, there are many ways to generate leads using different online platforms. You can record podcasts that can be played by multiple people and can be a source of generating new leads. They will also

come up on Google's search results whenever similar keywords are searched. You can upload this on iTunes and SoundCloud to promote your product. You can also advertise your products on different social media websites or get in touch with bloggers to promote your product in a very subtle manner that will only generate more leads and drive further traffic.

[12] Live Chats and FAQs

You may have a separate page for complaints and questions but half of the customers don't bother sending in their queries because it is time-consuming. The only way to know what most of your visitors are really looking for is if you engage with them on the spot. A live chat allows a customer service representative to engage with potential customers and help them out. You can also go through customer emails and live chats to compile all the questions your customers have asked frequently and try to answer them as elaborately as you can. You can even link the blog posts on the FAQ page to generate further leads. This will not only help your customers but also direct them to the products you're selling.

Successful lead generation strategies differ for each business. Moreover, generating a stream of new leads is not something that will happen overnight or even in a couple of days. It is a process that requires an inspection to identify which parts need improvements and how to effectively improve them.

13.6   FREELANCE DIGITAL MARKETING- PRESENTATION STRATEGY

Every good presentation needs a good marketing plan. Every good marketing plan needs to include the latest trends. Digital marketing trends are the newest trends to change industry. Research shows that 50% of businesses use digital marketing but without a strategy. Using digital marketing trends to promote your presentation can help you build upon your strategy and build your audience.

What are the latest digital marketing trends?

According to Entrepreneur, business should include these in their strategy: visual content, interactive content, live video, expiring content and in-store applications. These trends are important for overall marketing strategies, but they can also be used in promoting your presentation. Here are some tips to use today's digital marketing trends for your presentations.

Visual Content-

Visuals speak volumes when compared to text on a PowerPoint slide. As we have written many times before, research shows that the brain processes visual information 60,000 times faster than text. Presenters should rely on their visuals to spread their message instead writing it out. Include design elements and themes that will make your presentation more shareable. Use infographics, illustrations, photography filters, iconography and typography.

Expiring Content-

Entrepreneur reports that SnapChat has had a big influence on digital marketing trends. Creating a story that disappears forever once it's viewed is exciting for consumers. It can make them feel like they are part of something special and exclusive. In a way, presentation themselves are a form of expiring content. No presentation performance is exactly that same as another. Make your audience aware of that through social media messages of how special the event will be.

In-Store Applications-

Beacon technology allows businesses to interact with customers digitally. For example, a retailer can send push notifications to shoppers in their area alerting them to a sale. Maybe you can offer discounted tickets to your event by notifying your contacts. This is a digital marketing trend to keep an eye on.

Digital marketing is evolving as new technology gets released. Stay up to date with the best ways to promote your presentations by joining the Presentation Revolution.

13.7 FREELANCE DIGITAL MARKETING- AFTER SALES SERVICE

Finding new customers is important for any business, except the list of current customers mustn't be forgotten. Immediately after a sale is the right time to try and persuade a second purchase. According to the BDC, it is seven times more expensive to sell to a new

customer compared to a returning customer. The relationship you establish with your customers is therefore essential to ensure a favourable after-sales service for your company. To do so, here are the five steps for effective monitoring, along with the benefits involved!

The Benefits of Promoting Good After-Sales Services

Competition in some areas can sometimes be fierce and consumers do more research before purchasing. They therefore expect companies to meet their needs and respond to their problems effectively. This is even more important when it comes to bigger purchases. Consumer will not only buy your product; they will expect the service they receive to be up to their expectations. The after-sales services play a role in the client's decision to purchase.

To show that your business stands out, the after-sales services must have a big impact to improve your sales. Using a satisfaction survey is always a good way to gather information about your services, making way to improvements.

Several benefits include:

- An increase in sales

- Loyalty of your customers

- Improvement in your performance

- An element differentiating you from competitors.

Thanking your Clients Immediately After their Purchase

If your customer has just made a purchase then they deserve a thank you, whether by sending an automated email after their purchase or a thank you note added to the invoice (especially if it's written by hand). You make your customer's experience more attractive and you show that they chose well by doing business with you. In addition, with the name of a person to contact in case of questions, you reassure the buyer that your company is doing everything they can.

Contact your Customer After 1-2 Weeks

One or two weeks after the purchase, it is advantageous to contact your customer to ask them if they are satisfied, received good service or if they have any questions. This contact serves only as a mark of attention, not to sell them more. The goal is to know his appreciation of the product or service sold.

Maintain Communication

You can continuously maintain communication with your client by sending an e-newsletter to inform them about topics that affect them, or by offering information through articles, videos, guides and webinars to help advise them on needs. You will show, by maintaining

communication, your professionalism and expertise. If you give them all the information they need, they will be much less likely to go elsewhere.

Suggest a Second Sale

Now that your customer has confidence in you, it's the time to offer another sale. Offering them a new product, service or something related to their previous purchase.

Ask for Recommendations

If your client appreciates you, there is no reason not to recommend you. Happy customers will be eager to help you offer your services or products to those around them. Their opinion will be more taken into consideration than an advertisement**.**

13.8   POINTS TO REMEMBER

- Digital marketing is any form of marketing products or services that involves electronic devices.

- Digital marketing can be done both online and offline. Choose the right mediums.

- A keyword is word or phrase that your audience uses to search for relevant topics on search engines. If you are a flower shop, a relevant keyword could be "Buy Red Roses" or "Looking to purchase roses from a flower shop".

- Search Engine Optimization is a way a company optimizes its webpage allowing the website to rank higher on a search engine's results page (SERP). The higher your ranking, typically more traffic is generated (if the keyword has traffic) and more targeted traffic.

- Search Engine Marketing is a way companies can get higher placement on search engines by bidding on search terms.

- Viral Marketing is a way of marketing where the audience is encouraged by companies to pass on their content to others for more exposure. Usually a successful viral marketing campaign has easy share functionality. If you had to pay a lot to generate awareness, it wouldn't be considered "Viral Marketing" (it would be considered paid traffic).

- Social networking is the practice of using web-based platforms (or mobile) to build online communities where people share common interests or activities. The most common social networks are: Facebook, LinkedIn, Twitter, Pinterest just to name few.

- Evaluate your past successes and failures.

- Be genuine, figure out your budget.

13.9   GLOSSARY

- Ad Extensions – Additional pieces of information that can be added to Google Adwords ads, including reviews, address, pricing, callouts, app downloads, sitelinks, and click-to-call.

- Adwords (Google Adwords) – A Google owned program used by advertisers to place ads on Google search results pages, Youtube, and Google ad network sites. Adwords is the primary platform for PPC advertising.

- Adsense (Google Adsense) – A Google platform allows websites to earn money by publishing Google network ads on their website.

- Banner Ad – A popular type of digital image ad that can be placed across various websites.

- Business Manager – A Facebook platform that allows marketers to manage multiple pages and ad accounts in one central location.

- Buzzword – A trendy word or phrase used more to impress than explain.

- Campaign – A series of advertising messages that share a theme, and market a product or service. In the context of digital marketing, campaigns can be run through search and display network advertising platforms (i.e. Google, Bing), social media, email, or other online platforms.

- Content – Any form of online media that can be read, watched, or provides an interactive experience. Content commonly refers to written materials, but also includes images and videos.

- Digital Marketing – A catchall term for online work that includes specialized marketing practices like SEO, PPC, CRO, web design, blogging, content, and any other form of advertising on a internet-connected device with a screen.

- Domain name - Location of an entity on the Internet.

- Email marketing -The promotion of products or services via email.

- Keyword marketing- Putting your message in front of people who are searching using particular keywords and key phrases.

- Pop-up ad- An ad that displays in a new browser window.

- SEO- The process of choosing targeted keyword phrases related to a site and ensuring that the site places well when those keyword phrases are part of a Web search.

- Social networking- The process of creating, building, and nurturing virtual communities and relationships between people online.

- Viral marketing – Marketing phenomenon that facilitates and encourages people to pass along a marketing message.

13.10 CHECK YOUR PROGRESS

Descriptive type questions-

a)   Explain what is digital marketing?

b)   Explain what is SEO?

c)   Explain what is a keyword in digital marketing? How important is it from the point of SEO?

d)   List out some of the useful online marketing tools.

e)   In what segments you can categorize digital marketing?

Objective type questions-

a)   Which of the following is not a type of digital marketing activity?

[A] e-marketing. [B] Social marketing. [C] Print advert   [D] Internet marketing.

b)   An advertising model used in which advertisers pay their host only when their sponsored ad or link is clicked, is called:

[A] Search Engine Optimization (SEO).   [B] Contextual Advertising.

[C] Digital Asset Optimization (DAO).   [D] Pay Per Click (PPC).

c)   This attempts to improve rankings for relevant keywords in search results by improving a website's structure and content:

[A] SEM.   [B] SEO.   [C] SST.   [D] SFA.

d)   A form of marketing communications that uses Internet-based resources for the purpose of advertising, delivering messages to drive traffic to a website ('click-through rate') and also encourage trial, purchase, or repeat-purchase activity is called:

[A] Search marketing.   [B] E-mail marketing.

[C]Internet advertising.   [D] Social web marketing.

e)   A method of marketing by electronic mail wherein the recipient of the message has consented to receive it is called:

[A] Search marketing.   [B] E-mail marketing.

[C]Internet advertising.   [D] Social web marketing.

13.11 BIBLIOGRAPHY/ REFERENCES

- Palmar, A. and Koenig-Louis, N. (2009), "An experiential, social network-based approach to direct marketing", direct marketing: An international journal, Vol. 3 No. 3, pp. 162-176.

- Parsons, A. (2013), "Using social media to reach consumers: A content analysis of official facebook pages", Academy of Marketing Studies Journal, Vol. 17 No. 2, pp. 27-36.

- Pashkevich, M. et al. (2012), "Empowering online advertising by empowering viewers with the right to choose- the relative effectiveness of skippable video ads on YouTube", Journal of advertising research, Vol. 52 No. 4, pp. 451-457.

- Phelps, J. E. et al. (2004), "Viral marketing or electronic word-of-mouth advertising: examining consumer responses and motivations to pass along email", Journal of Advertising Research, Vol. 44 No. 4, pp. 333-348.

- Pherwani, S. (2012), "How social are you?", Business India, No. 889, p. 98.

- Philipp, K. (2013), "New insights from practice-exploring online talent management strategies and the use of social media as a management research tool", International Journal of Market Research, Vol. 55 No. 6, pp. 829-838.

- Saluja, S. (2014), "The digital challenge", Business India, No. 935, p. 83.

- Sawhney, M. S. & Kotler, P. (2001), "The Age of Information Democracy", Kellogg on Marketing, New York: John Wiley and Sons, pp. 386-408.

- Schau, J. H. and Mary C. G. (2003), "We are what we post? self-presentation in personal web space," Journal of Consumer Research, Vol. 30 No. 4, pp. 385–404.

- Tuten, T. and Angermeier, W. (2013), "Before and beyond the social moment of engagement: perspectives on the negative utilities of social media marketing", Gestion, Vol. 30 No. 3, pp. 69-76.

- Hughes, U. M. (2014), "A social media campaign application in a marketing field experience course", Business Education & Accreditation, Vol. 6 No. 1, pp. 95-100.

- Ulrich, J. (2013), "Social media should be part of your successful marketing", Enterprise/Salt Lake City, Vol. 43 No.14, pp. 18-19.

13.12 SUGGESTED READINGS

- Social Media Marketing All-In-One for Dummies by Jan Zimmerman and Deborah Ng,2017.

- Digital Marketing for Dummies By Ryan Deiss and Russ Hennesberry, 2017.

- Become a Content Brand: Build a Team, Own Your Audience, & Create Video Your Customers Will Love by Chris Carter.

- Content Marketing: Proven Strategies to Attract an Engaged Audience Online with Great Content and Social Media to Win More Customers, Build Your Brand and Boost your Business by Gavin Turner.

- "Start with Why" by Simon Sinek.

- "All in Startup" by Diana Kander.

- Digital Minimalism: Choosing a Focused Life in a Noisy World by Cal Newport.

- Dreyer's English: An Utterly Correct Guide to Clarity and Style by Benjamin Dreyer.

UNIT- 14

CONTENT MARKETING

14.1   INTRODUCTION

Content marketing is a marketing technique of creating, distributing valuable, relevant and consistent content to attract and acquire a clearly defined audience – with the objective of driving profitable customer action. The keyword here is "valuable." It's what changes this definition from one that could be described by almost any form of advertising or marketing. You can tell if a piece of content is the sort that could be part of a content marketing campaign if people seek it out, if people want to consume it, rather than avoiding it. Some popular mediums of content marketing are-

WebPages- What's the difference between a normal webpage and a webpage that is content marketing? Consider the Beginner's Guide to SEO from Moz, a provider of SEO related tools and resources. This resource, offered for free, has been viewed millions of times, bringing in countless customers who otherwise might never have stumbled across Moz and the services they offer or take a look at a case study from the design firm Teehan+Lax. Most case studies are boring. Their case studies are fascinating. That's the difference between simply putting content on your website, and content marketing.

Podcasts- Michael Hyatt, author of the best-selling book Platform: Get Noticed in a Noisy World, practices what he preaches. His "This is Your Life" podcast is downloaded 250,000 times each month. As Hyatt elaborates on his blog post 4 Reasons You Should Consider Launching Your Own Podcast, "A podcast gives you visibility in a completely different world- primarily iTunes. I have had scores of new people say they had never heard of me until they stumbled onto me in iTunes." Hyatt gives valuable information and advice in his podcast--all for free. But that podcast leads to more sales of his books, signups for his courses, and requests for him as a speaker.

Videos- Gary Vaynerchuk is a master of content marketing using online video; just take a look at his YouTube channel. He got his start creating videos to promote his family's wine store and through those videos and other online marketing he eventually grew it to a $45M empire. Videos and podcasts are a largely untapped form of content marketing because people think it's expensive and hard. But with the falling cost of professional grade equipment creating high quality video and audio content is easier than ever. Amateur video content marketing has been used to sell blenders, launch new dental products, and market Hong Kong visa consulting services. What video could you throw together for your company that might change your fortunes overnight? It might be easier than you think.

Books- Like movies, people often think of books as selling themselves, but savvy marketers don't sell books just to sell books, they sell books as marketing tools. Michael Port's sales manual Book Yourself Solid is a great read for entrepreneurs, salespeople, and marketers, and while I'm sure Port enjoys selling his book, the book is a tool for driving customers to his coaching and speaking services. Although, with self-publishing it's easier than ever to publish a book, there is still the perception that it's difficult and that only reputable professionals can publish a business book.

14.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Understand content marketing for lead generation, brand awareness, support selling and thought leadership.

- Know about the impact of subtle marketing of content marketing on consumer decisions.

14.3   CONTENT MARKETING STRATEGY

Steps in developing Content Marketing Strategy are-

Step1. Set Your Mission and Your Goals

Step2. Establish Your KPIs

Step3. Know Your Audience

Step4. Assess Your Current Position

Step5. Figure Out the Best Content Channels

Step6. Decide on Content Types

Step7. Identify and Allocate Resources

Step8. Create a Content Calendar

Step9. Create Content

Step10. Distribute and Market

Step11. Measure Results

Facebook-

This is easily the largest social networking site in the world and one of the most widely used. Facebook was perhaps the first that surpassed the landmark of 1 billion user accounts. Apart from the ability to network with friends and relatives, you can also access different Facebook apps to sell online and even market or promote your business, brand and products by using paid Facebook ads.

Recently Facebook has lost the trust of millions of its users by allowing 3rd parties to access over 87 million users' personal data. This is a massive breach of trust and has created a feeling of unrest amongst the social media platform's audience. So much so that there is now a #deletefacebook campaign where people are completely removing themselves from Facebook and using other networks instead. If you're concerned about what Facebook is doing with your data, then why not check out my guide on alternatives to Facebook, and see if there's a better place for you to interact with family and friends. Numbers of active users per month: 1.59 billion approximately.

WhatsApp-

Despite having been acquired by Facebook in 2014, this instant messaging platform exists as an independent entity. It arrived on the scene much later than Facebook, but has been able to capture the imagination of millions of people across the world by giving them the ability to communicate and share instantly with individuals and groups. WhatsApp's call feature is just the icing on the cake! Number of active users per month: 1 billion approximately.

WeChat-

This is an all-in-one communications app for messaging and calling (similar to WhatsApp) that enables you to connect with the people of your choice. It was also developed by Tencent in China and can easily work alongside QQ. As per the BI intelligence report, the number of WeChat users is fast catching up with the number of WhatsApp users. Number of active users per month: 697 million approximately.

Instagram-

Instagram was launched as a unique social networking platform that was completely based on sharing photos and videos. This photo sharing social networking app enables you to capture the best moments of your life, with your phone's camera or any other camera, and convert them into works of art. This is possible because Instagram allows you to apply multiple filters to your photos and you can easily post them to other popular social networking sites, such as Facebook and Twitter. It is now part of the Facebook empire. Number of active users per month: 400 million approximately.

Twitter-

This social networking site enables you to convey your message to the world through posting short text messages (called tweets), containing a limited number of characters (up to 280). With the growing craze for online shopping, Twitter also makes it possible to promote your businesses and even shop directly through tweets. Number of active users per month: 320 million approximately.

Google+

Owned by the tech giant Alphabet (Google), this interest-based social networking platform enables you to stay in touch with people by sharing messages, photos, videos, useful links to sites and so on. It also extends support for video conferencing through Hangouts and allows businesses to promote their brands and products through Google+ business pages. Number of active users: 300 million approximately.

Skype-

Skype, owned by Microsoft, is one of the most popular communication-based social networking platforms. It allows you to connect with people through voice calls, video calls (using a webcam) and text messaging. You can even conduct group conference calls. And, the best part is that Skype-to-Skype calls are free and can be used to communicate with anyone, located in any part of the world, over the internet. Number of active users per month: 300 million approximately

LINE-

LINE is a globally available messaging social network that enables you to share photos, videos, text messages and even audio messages or files. In addition, it allows you to make voice and video calls at any time of the day. Number of active users per month: 215 million approximately.

Snapchat-

This is an image messaging social platform that enables you to chat with friends by using pictures. It allows you to explore news and even check out live stories that are happening around the world. Number of active users per month: 200 million approximately.

14.4 MARKETING BUDGET AND MEASUREMENT

A marketing budget can be defined as marketing plan evaluated in terms of costs. Marketing budget can be understood an estimated amount of cost that will be required to promote products or services. Marketing budget is generally part of a marketing plan and crucial part of the marketing process. It includes all promotional costs like advertising and public relations, employing staff, office costs and other expenses included for marketing. This budget is created to estimate the costs necessary for growing a business. A marketing plan is a detailed roadmap that outlines your marketing strategies, tactics, costs and projected results over a period of time. The marketing plan and budget keeps your entire team focused on specific goals – it's a critical resource for your entire company.

Some statistics have shown that up to 85% of small- to mid-size companies operate from a budget only- without a written plan to accompany it. This explains why so many marketers are tactically focused – they're figuring out how to spend a defined budget, instead of thinking about goals and strategies. Writing a marketing plan is a time-consuming exercise, but it forces you to think through your strategies and relevant tactics. A good marketing plan typically includes:

- Financial goals
- Positioning strategy

- Brand strategy

- Product/service overview

- Detailed goals by product, distribution channel &/or customer segment

- Sales plan

- Major marketing campaigns

- Detailed budget

- Dates to review progress.

14.5   IMPORTANCE OF MARKETING BUDGET

Most of the businesses have tough time in predicting promotional and marketing costs. Generally, high marketing budgets are kept when new products or services are launched in the market as companies have to spend on advertising. Percentage method is used for predicting budget, i.e. marketing budget is set according to percentage of sales or profit. It is critical resource for entire company because failure to properly estimating cost can lead to various problems.

Some statistics have stated that 85% of the small to mid size companies just operated on budget without any specific marketing plan. That's why so many marketers are focused on tactically preparing marketing budget. Budgeting is a difficult process and many companies rely on their last year's spend as a base in estimating the budget. Marketers also use ROI to prepare the appropriate budget.

How to prepare Marketing Budget?

It takes time to develop a good marketing plan and budget, but it's important because it ties all of your activities to tangible goals. It's also a great opportunity to focus on the future, generate new ideas, and inspire your team. Even a simple plan is better than none, but when you invest more effort upfront, you'll have a better roadmap toward your goals.
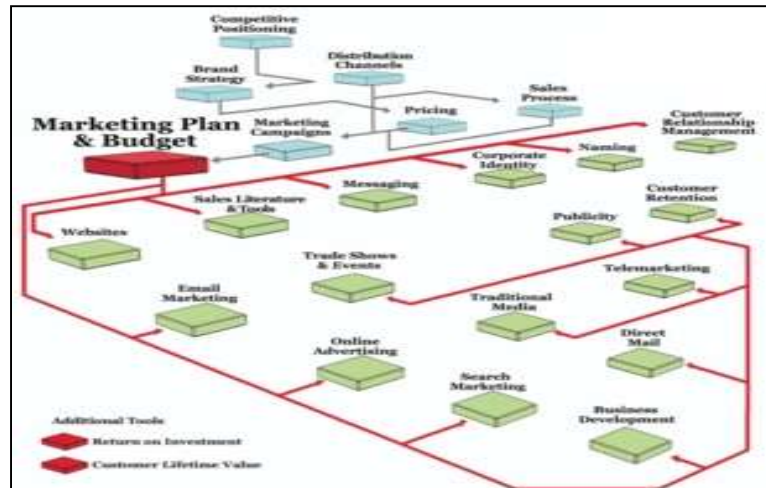
14.6 MARKETING BUDGET KEY CONCEPTS

Design your plan to achieve the goals that you define-

Quantitative (numeric) goals such as total revenue, profit, number of customers, units sold, and breakdowns by product or channel as needed. Strategic goals — for example, you may want to expand into a new market with a new distribution channel, or you may need to reposition your brand to reflect a change in your business.

Emphasize your positioning in the marketplace-

Your positioning strategy defines how you'll differentiate your offering from those of your competitors. Your brand strategy defines what you stand for and how you'll communicate with the market.

Develop a marketing budget-

Budgeting can be a difficult process. Many companies just estimate, or base their budget on last year's spending. An estimate is better than nothing, but if you've defined your major campaigns and needs, you can develop better numbers. You also use ROI to determine the appropriate total budget for your marketing efforts.

Marketing Budget Measurement

When meeting potential clients, we always have to ask the dreaded question: "What is your marketing budget?"Typically, we get a blank stare and a shrug...and that's okay! Unless you're a marketing expert, most people don't think about how much money goes into a steady marketing campaign.

A good marketing agency won't try and sell you on what you can't afford, but try and figure out what will work best for your situation. All companies are different and have individual

needs, but we have figured out a simple way to get your business on the right track for planning your marketing budget.

Calculating Revenue-

One of the first steps to figure out your marketing budget is to establish your total revenue. Talk to your CFO, financial department, or accountant and figure out your gross revenue or estimated revenue.

Gross Revenue- Revenue received before any deductions or allowances, as for rent, cost of goods sold, taxes, etc.

Estimated Revenue- Amount of earnings projected for a given accounting period. This calculation can be important for a number of financial activities including estimating taxes due, budgeting, and issuing statements to shareholders and interested members of the public.

Company Size-

Are you a new up-and-coming company or an older, established company? Typically new companies are truly the ones that need to push their marketing. They are trying to establish their brand and gain loyal customers.
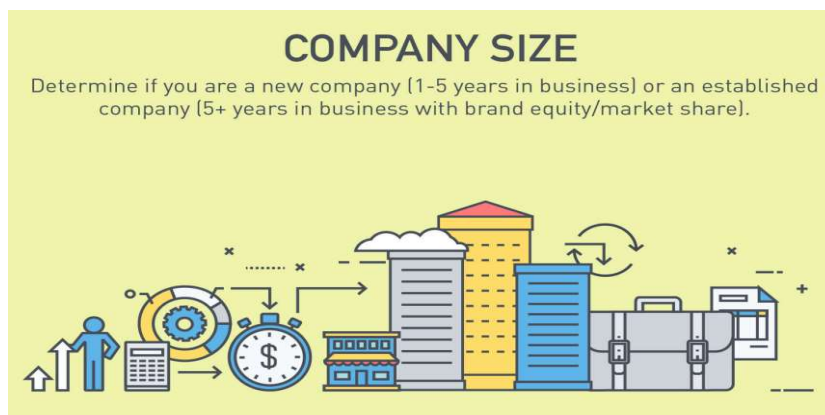
Established companies, while they should always be marketing, don't have to push as hard; customers know their name and will purchase without even giving it a second thought.

Marketing Budget Allocation-

For those new companies, at least 12%-20% of your gross revenue should be allocated to marketing. That seems like a lot, doesn't it? Especially for a smaller company!

Well, think about it this way: You have this amazing new product or service – a major game-changer in your industry. But, no one is buying. Why? Well, probably because they have no idea it's even a real t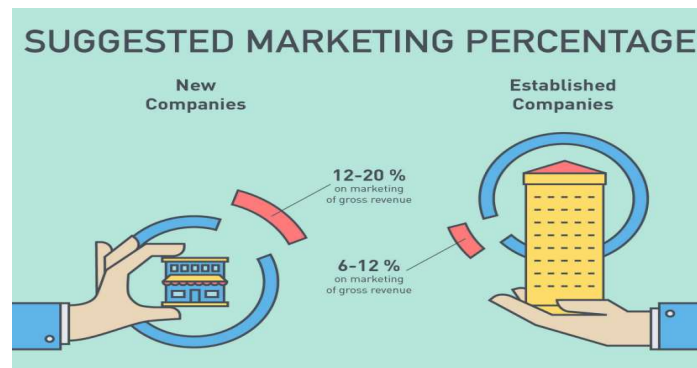hing yet. Word of mouth only does so much, and new companies need to take their business to the next step. Marketing should be a major focus of these young companies; not only does it bring in new customers and leads, but establishes your brand in the industry. Once your brand is established, you can definitely discuss bringing down your marketing budget.

Marketing Budgets for Established Companies-

For established companies, at least, 6%-12% of your gross revenue should be allocated to marketing. But why so little compared to those little companies? As previously mentioned, established brands don't need to market as heavily. They have their loyal customers that really aren't going anywhere. While they still need to market, they certainly don't need to allocate as many resources as a small company. For our example, our small company with a revenue of $100,000 has decided to allocate 15% of their gross revenue to marketing. By taking our revenue (100,000) and multiplying it by our marketing percentage (.15), we have come to a marketing budget of $15,000 for our accounting period.

14.7   POINTS TO REMEMBER

- Make adequate research about competitor's strategies and user intent.
- Confirm all social profiles are well built with adequate bios.
- Most importantly, the most story live should engage people, solve a drag, and encourage them to require an action.

- Content Marketing may be a process. Content marketing is that the ability to supply enough quality content to support other marketing strategies likes inbound marketing. Content marketing must reinforce or change behavior. Otherwise, it's just content.

14.8   GLOSSARY

- Agile- Having the ability to move quickly in the world of content creation is a necessity for inbound marketers.

- Analytics- Making use of analytics is the only way you'll have insight into which content is working or falling flat.

- Blogging- Blogging is a core component of content marketing, driving site traffic, quality leads, and establishing your position as a thought leader in your industry.

- Copywriting- Copywriting is one of the most essential elements of effective online marketing.

- Cost Per Click (CPC) - An online advertising model where a company pays for each click instead of paying by the number of impressions.

- Landing Page- A page on a website designed to receive visitors directly from organic or paid links on other online channels.

- Promotion- Any type of marketing communication that aims to inform or persuade a target audience of the merits of a company, product, or service.

- Quality- In terms of content, quality refers to any content that is original, well written, concise, and delivers value to the target audience.

- SEO (Search Engine Optimization) - SEO covers all strategies that are aimed at making a website easier for search engines to index and rank.

- Storytelling- Storytelling in content marketing is a powerful way of writing that includes a narrative to help readers identify with a brand and see the benefits of its products or services.

14.9   CHECK YOUR PROGRESS

Descriptive type questions-

a)   What is content marketing?

b)   How do we convince the management team that content marketing works?

c)   How does marketing without talking about or promoting our product/service help us create leads and sales?

d)   How can content marketing help address our target audiences throughout the customer purchase journey?

e)   Why are companies using content marketing? What are the benefits?

Objective type questions-

a)   Content marketing helps with-

[A] SEO   [B] Brand building   [C] Social media   [D]   All of the above

b)   What does CTA mean?

[A] Click through art   [B] Click through amp

[C] Call to action   [D] Call to arms

c)   Creating great content is not enough. It needs to be promoted.(True/False)

d)   Cornerstone content has a short shelf life.(True/False)

e)   The headline is one of the most important elements of a blog post.(True/False)

Answers (Objective type questions)-

[a] All of the above   [b] Call to action   [c] True   [d] False   [e] True

14.10 BIBLIOGRAPHY/ REFERENCES

- Bansal, H. and Bharti, C. (2011), "Social media marketing: a study of marketing of ayurvedic brands through social media", Proceedings of International conference of Management & Behavioural science, June 04-05, p. 138.

- Bansal, H. and Bharti, C. (2012), "Social networking websites as marketing tool: a study on use of snws as an effective marketing tool", Souvenir of National conference on emerging challenge for sustainable business of I.I.T. Roorkee, June 01-02, p. 21

- Bauer, I. (2012), "Role of social media in Serbia", Singidunum Journal of Applied Sciences, Vol. 9 No. 2, pp. 1-8.

- Becky, R. (2014), "Marketing, branding and social media", Hudson Valley Business Journal, Vol. 3 No. 3, pp. 3-9

- Clark, S. (2014), "Boosting ROI with powerful PR and social media", Adhesives & Sealants Industry, Vol. 21 No. 3, pp. 20-23.

- Cocheo, S. (2009), "Shred your marketing beliefs at the door", ABA Banking Journal, Vol. 101 No. 6, pp. 12-12.

- Geho, P. R. (2012), "The evolution of social media as a marketing tool for entrepreneurs", Entrepreneurial Executive, Vol. 17 No. 2, pp. 61-68.

- Geho, P. R. and Dangelo, J. (2012), "The evolution of social media as a marketing tool for enterpreneurs", Enterpreneurial Executive, Vol. 17 No. 1, pp. 61-68.

- Kaavya, C.(2013), "Race course run", Business Today, Vol. 22 No. 22 pp. 18-20.

- Kane, G. et al. (2009), "Community relations 2.0", Harvard Business Review, Vol. 87 No. 11, pp. 45-50.

- Newman, B. (2012), "Social media and the power of one", Fairfield County Business Journal, Vol. 48 No. 53, p. 10.

- Newman, B. (2014), "Where's your social road map?", Westchester County Business Journal, Vol. 50 No. 8, pp 7-7.

- Offenberger, B. (2013), "Social media marketing", Casual Living, Vol. 53 No. 7, p. 90.

- Padhy, M. (2010). Internet advertising: the Indian experience", Advertising Express, pp. 30-34.

14.11 SUGGESTED READINGS

- Become a Content Brand: Build a Team, Own Your Audience, & Create Video Your Customers Will Love by Chris Carter

- Content Marketing: Proven Strategies to Attract an Engaged Audience Online With Great Content and Social Media to Win More Customers, Build Your Brand and Boost your Business by Gavin Turner

- "Start With Why" by Simon Sinek

- "All in Startup" by Diana Kander

- Digital Minimalism: Choosing a Focused Life in a Noisy World by Cal Newport

- Dreyer's English: An Utterly Correct Guide to Clarity and Style by Benjamin Dreyer

UNIT- 15

FUTURE PROSPECTS OF DIGITAL MARKETING AND MANAGEMENT- I

15.1   INTRODUCTION

In simple terms, digital marketing can be called a process of marketing products or products through electronic media. It happens mostly on the Internet. Other platforms include mobile phones, digital signage,etc. In fact, digital marketing is an interactive term used where advertising and marketing combine with the new web and various types of online communication platforms.

Digital marketing is the most popular name of the day. Many brands are continuing digital marketing because that's where the new market is. Digital is an unlimited platform for marketing and promoting your business to reach the largest audience, in one place!

15.2   OBJECTIVES

After successful completion of this unit, you will be able to-

•   Know about Google Digital Marketing & Management

- Know about various tools & techniques used in Digital Marketing

- Know about the prospects of Digital Marketing & Management.

15.3   DIGITAL MARKETING AND MANAGEMENT

What is digital marketing?

In general terms, it is the term used to market your products and services on the internal digital, i.e. the Internet, using digital technology. This has become an important revenue generating strategy due to the growing number of Internet users. Also, since digital marketing is plentiful, it helps a lot when this method is used again in your marketing plans.

Usually, your competitors will be available online. They will be staying in the digital space to respond to customers, establish brand ownership, and keep them engaged with visual content. So, if you don't mind taking digital marketing as your way of doing marketing and traditional marketing, you might lose a piece of the pie!

Some of the most used techniques are SEO, social media marketing, PPC (per click), site search and mobile marketing. These tools are focused on generating revenue for your business and increasing your brand visibility on online channels.

Management of Digital Marketing

A digital marketing manager is responsible for developing, implementing and managing marketing campaigns that promote the company and its products and / or services. He/She plays a major role in increasing brand awareness within the digital realm as well as driving website traffic and finding leads / customers.

Difference between Traditional and Digital Marketing

Traditional Marketing

- Communication does not require traditional advertising, i.e. the organization communicates its services with its audience.

- The link between traditional advertising often calls emails and letters.

- A traditional marketing campaign takes a lot of time in designing, preparing, and launching.

- Better to reach a local audience.

- It is probably not possible to measure the effectiveness of a traditional marketing campaign.

Digital Marketing

- Communication requires digital advertising as businesses can communicate with customers and customers can ask questions or make suggestions to businesses.

- Medium communication is powerful and includes social media websites, chats, apps and email.

- Digital marketing campaigns can be created quickly and with digital tools, organizing digital marketing campaigns is easy.

- It works well to reach a global audience.

- Digital marketing allows you to measure the effectiveness of a digital marketing campaign using analytics.

Benefits of Digital Marketing

- Understanding your customer's performance is one of the most important aspects of a successful market. Digital marketing helps you stay connected with your customers. This helps you get valuable information about your customers to improve your business to suit your audience's preferences.

- You can get an edge over your competitors! With more useful tools like Google Alerts, you can follow the latest tracked on the web. Also, you can look at the strategies presented by your competitors and try to improve them to suit your business. With this, you can take the best practices followed in the market to stay ahead of your competitors.

- It helps you gain credibility for your brand and establish brand identity. Promoting your brand on digital platforms allows consumers to talk about our products or services online. Your audience can trust more customer feedback than your ads do! Digital marketing gives you a great opportunity to build your business's reputation.

It works as a way to look at how well your marketing strategies are working, how people are engaging and responding to them. Analytics tools like Google Analytics help you get real-time results of the strategies you use to grow your business online.

15.4 OVERVIEW OF TECHNIQUES USED IN DIGITAL MARKETING

Digital marketing encompasses all online marketing activities. However, it may include some offline activities, too. Here, are few digital marketing techniques one must consider for businesses- Website design, Search engine optimization, Social media advertising (marketing), Social media management, Pay-Per-Click advertising, Email marketing and Content marketing,

Website Design

Your website is the face of your business. Its structure, colour, texture, and text (content) affect how your viewers perceive your product. That's why we always emphasize that your site should reflect your brand style and personality beyond the general context of your business. View your website as an important extension of your business. Here, are some important guidelines you can follow to make sure your website helps you build brand awareness:

- Make website responsive

- Design a good-looking website - According to research, 48% of online visitors decide the reliability of a company on the basis of its site design, and 94% people reject a site on the basis of its design.

- Optimize your website – Optimize your website for speed, security & mobile friendly.

Search Engine Optimization (SEO)

Search Engine Optimization (SEO) is a way to optimize site content to improve its ranking on the Search Engine Optimization (SERPS) page. It is a proven technique to achieve this and it is not a true beginner's job as there are many pitfalls that can have Google disapproving your site. SEO consists of the following tasks- Site Structure, Keyword research and analysis and its use (both on-page and off-page), Analytics, Link building, and Content delivery.

How SEO works?

Google (or any program you're using) features a crawler that goes out and gathers information about all the content they will find on the web. The crawlers bring all those 1s and 0s back to the program to create an index. That index is then fed through an algorithm that tries to match all that data together with your query.

Social Media Advertising (Marketing)

Social media marketing refers to the use of social media platforms to promote and market your products / services. If you want to get acquainted with the basics of digital marketing, getting started with social media marketing is a good idea. One of the biggest benefits of advertising on social channels such as Facebook, Twitter, Instagram, Pinterest, LinkedIn, etc is that you can choose your own audience. According to Hubbops, 92% of business owners and marketers say social media is important for their business.

The two sorts of social media online advertising are organic: a web word-of-mouth technique, and paid. Placing paid ads, promoted posts or sponsored stories are well-liked thanks to reach more of the demographic of the corporate, without paying a bundle. As you'll see from the chart below, Facebook and Twitter are the foremost popular social media platforms for companies to succeed in potential new customers with LinkedIn a well-liked avenue for B2B sales.

Social Media Management

Social media management allows you to manage all your social profiles (Facebook, Instagram, Twitter, etc.) in one place. Social media management also helps you manage your internal and internal interactions better. In simple terms, it guides how you participate in discussions taking place on different platforms - blogs, social networks (such as Facebook), and local and private communities.

Pay Per Click (PPC) Advertising

Each click is an advertising model where advertisers pay a fee every time people click on their advertisement. Basically, it is the process of buying a visit to your site, as opposed to finding them to use SEO or other forms of digital marketing.PPC is one of the types of paid search. It's similar to SEM (search engine marketing) but it can also include display ads (used per click), as well as affiliate marketing. In addition to Google ads, Facebook Advertising is also a popular PPC platform. Here are two interesting facts to think about:

64.6% of people click on Google ads when they want to buy something online. Among companies that use PPC advertising, 84% use Facebook as a platform, 41% use Google and 18% use LinkedIn.

Why is PPC so popular with advertisers?

Because it helps them attract quality traffic. By placing ads that are only visible when certain search terms or websites are used with a certain type of audience base, you can target the audience that best fits your business. This ensures that your website attracts visitors who may turn it into buyers.

Email Marketing

The below figure explains why email marketing is an important digital marketing technique-

Source https://www.lyfemarketing.com/blog/digital-marketing-basics/
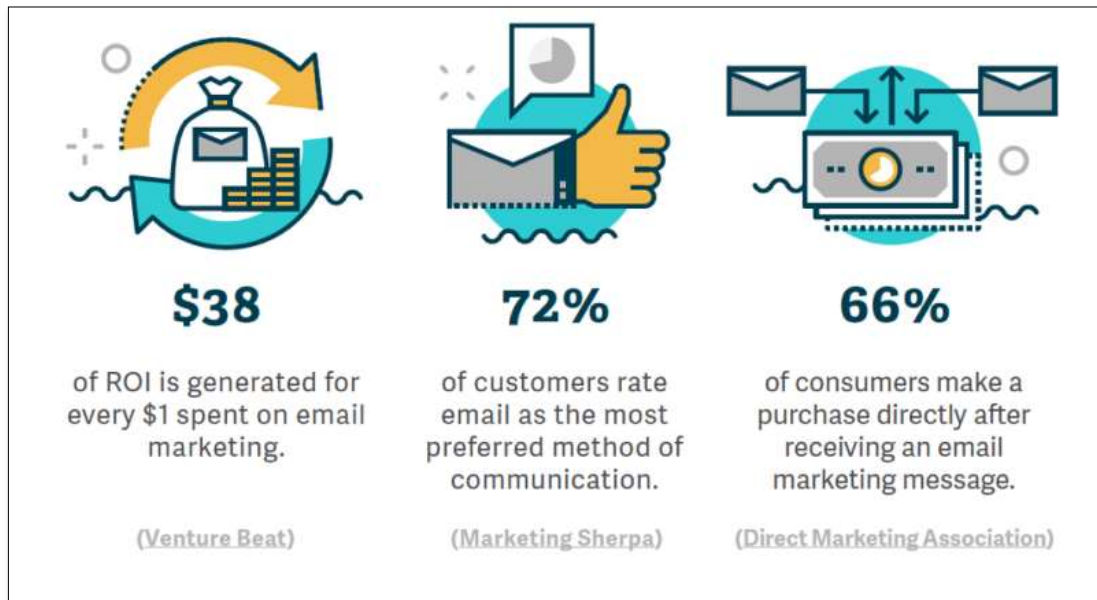
In fact, 82% of B2B and B2C businesses use email marketing today. Why? Because:

- For every $1 spent, email marketing generates $38 on average

- Over 50% of people worldwide use email.

That is why email marketing has become so competitive now. It is one of the most effective channels in our guide to digital marketing foundations. The key is to make your emails stand out, which is easier said than done. Before you can create an email campaign, you need to understand the psychology of your potential customers. Engaging with emails to promote your brand will damage your brand image. According to a survey, 78% of people signed up for email subscriptions because the product sends "multiple emails."

Content Marketing-

Content marketing is a digital marketing strategy that focuses on creating and distributing content for the target audience. Content aims to be valuable, relevant, and (rightly) consistent. Its ultimate goal is to drive meaningful customer action. Creative content creation is a way to improve customer interaction to drive engagement and customer engagement. Content can mean anything from blogs to soft and white videos that work well and through content marketing strategies. The goal is to gain customer loyalty and maintain it. Apart from this, it is important to continually monitor and analyze the results of your efforts. Using this data-driven marketing approach your content marketing will ensure you get the best results.

Some examples of content marketing include: blog posts, videos, podcasts, infographics, white papers, case studies, and eBooks.

15.5   FUTURE OF DIGITAL MARKETING

Here, are some of the most important and enjoyable styles that digital marketers should pay attention to and think about ways to incorporate them into their strategies. This will be the basis of what keeps the digital space moving forward in 2020 and beyond. Below we highlight innovations happening within traditional digital marketing channels, and explore why marketers need to evolve for a high-tech digital marketing evolution.

AI (Artificial Intelligence)

Artificial intelligence (AI) is the science responsible for building intelligent machines that can think and respond as a human being. It has special future opportunities in the digital market. The impact of AI and machine learning extends far beyond mundane. Further, organizations rely on AI for cutting-edge applications with at least three additional benefits.

While technology is still in its infancy, we are already seeing some great examples of this in the everyday world. Self-driving cars are already for sale, for example. And both Amazon and Netflix already have built-in AI features that help with recommendations and transactions. We will continue to see it used in a variety of marketing applications to come, including content creation, voice recognition, face-to-face interviews, digital assistants, and highly targeted marketing strategies. AI will become majority in terms of marketing strategy due to its increased ability to analyses consumer behaviour and eat into better, more interactive and personalized purchases.

Personal Digital Assistance

You are probably start using of Alexa and Google Assistant now, personal AI-driven assistants designed to stay connected, on a personal level, to people at all times in their daily lives. This market is expected to double this year and reach 1.6 billion users by the end of 2020. Devices made by different companies can communicate with each other for details - yes, they actually work together. Daily users of these devices will be able to watch AI evolve into play at a personal or business level. This technology will continue to improve on many levels, including voice recognition (Alexa sees 10 words), and personalized services, many of which are based on data analysis of consumer behavior. They are also integrated with various production and business systems and software in order to help us be more productive.

Social Media Will Shift in Function

There is nothing new for social media designing you should know about the actual platform, but it's more that all the light on how we use social media is close to seeing the big change. Social media is no longer used for its original purpose, at least not the way it used to be, which peer-to-peer communication was. It might also be the answer that users want more control of what they see and they want more user-focused, more focused ways to enjoy themselves and interact with peers.

Many people spend more time on social media, but the way we use them is changing. For example, we watch more videos and other media than use it specifically for "social" reasons. Users desperately want to have fun with new technology as a virtual reality and are looking for ways to do this separately from their interactions with people. Top communications leaders and activists split the two areas, and Facebook is also introducing a new media option ("Check") that separates social feeds and ads.

In addition, your blogs and websites are becoming more popular as online communication channels, and fewer people are using instant messaging. This means that digital marketers need to look at (fluctuating) trends in communications platforms that prefer to incorporate more precise marketing strategies, as well as to understand new ways of collecting customer information perfectly to guide their strategy.

Blockchain Technology

Blockchain is a hot topic these days. It is also uncontrolled, which makes it not a good idea to get into the business now, but to understand the business opportunities that can occur here as it grows. In a business context, this type of technology can serve as the most effective way of preventing fraud and ensuring the security of customer transactions in all sectors. In this case, it is likely to be used for product development and customer loyalty programs, for example, especially in B2B where multiple and large transactions can become the norm.

Chatbots

As AI progresses, chatbots will be able to have "real" conversations, thus enhancing the UX look in a big way for digital marketers. They will continue to evolve into functional, versatile tools for businesses and consumers. Next year is the most promising in terms of integrating discussion forums across multiple industries and platforms and by 2020 they will become a regular part of the user experience.

Another way that active conversations are being drawn these days is through product-focused conversations on social media messaging platforms. Facebook is currently busy leading the charge as they create a bot designed for businesses to integrate with their messaging service. Marketing professionals should stay on top of this incoming situation and take advantage of it if they have relied heavily on Facebook and Facebook for marketing activities.

Voice Search

Those thinking of going for a SEO-focused specialty should at least have a basic understanding of how voice search and speech recognition can shape brand building. One study suggests that more than 40% of teens and adults use voice search every day and this number is growing.

What does this mean for digital advertisers? The market's ability to grow their strategies to receive voice search for SEO success is about to become a major agreement. One thing that can say this for content advertisers and performance scientists, in particular, is they focus too much on long keywords and detailed search phrases.

Influencer Marketing

Influencer marketing is the idea of using "influential" people for clearly and completely market products and services, and sees the most direct success on social media channels. This will continue to grow and grow in 2018 in B2B and B2C. So far it has been widely used in campaigning for certain campaigns, but it is likely to grow into an ongoing strategy rather than something focused on, for example, one product.

Advertisers, especially those in the millennial and Gen Z, will want to think about building relationships with influencers, both at micro- and macro- levels. This is easily possible on all social media channels, for example, getting future YouTube stars.

The reason why this is so effective is that there is a built-in audience, which means you have the opportunity to create a paid quality easily.

Micro-moment Marketing

This type of marketing is extremely consumer-focused and is predicated on the very fact that buyers have such a lot choice and power in their behaviour and buying lately. Essentially,

it's not about ads reaching consumers because it is consumers doing searches on their own terms.

They're using mobile almost exclusively for tons of their research, and they're ready to do research at the touch of a button so basically, they don't need ads. Think with Google breaks this down into three key points: consumers are "well-advised," "right here" and "right now".

The challenge for marketers is to be ready to essentially be ready to "catch" their target buyer within the small window of this moment. Businesses got to find out the way to keep themselves visible and engaged supported this new sort of consumer behaviour via, as an example, single-touch (mobile-friendly) offerings and ensuring they will still hold their own in search rankings (versus Amazon). Highly customized content (via AI) is a method that companies could also be ready to compete.

All digital marketers got to stay top of the trends listed above to make sure that their marketing strategy is staying competitive. Marketers will get to have a transparent vision and goals and keep a somewhat flexible longer-term strategy to include a number of these trends. They always got to be thinking, learning, and testing so as to accommodate new technology because it becomes increasingly affordable and accessible.

15.6 HOW TO BECOME EXCEPTIONAL IN DIGITAL MARKETING?

With the advancements and changing trends in digital technology, digital marketing is predicted to require giant strides within the future. We see E-commerce players like Amazon prioritizing marketplace and therefore the program giant, Google testing out new approaches like shopping tab to reinforce customer experience and leverage buying intent and giving importance to customer experience and engagement by rolling out algorithm updates. Voice searches and Vernacular Searches are growing at a rapid pace and therefore the trend will witness an exponential growth by 2020.

According to a survey, Digital advertising is predicted to grow at 32% to succeed in approximately 19,000 Crore by 2020. The info also suggests that digital media spend which is 15% at the present, will go up to 24% by 2020. With CAGR growth of Video by 38%, Display by 36%, and Search by 25%; all three verticals are found to extend their share in spends by 2020. Here are some of the techniques to become an exceptional in Digital Marketing –

Technology and Marketing Integration

Prepare an end to end customer experience

It is important for business organizations to integrate their sales and technology information. Organizations are now discovering the value of customer experience and its value in

business. The emergence of Artificial Intelligence will play a major role in partnering with digital marketers to provide end-to-end customer capabilities.

Automation in Marketing- Everyone prefers personalized and personalized content; with data now being more widely imported than ever before and countless data being available for large amounts of data, marketers will have to look to provide customized and customized content. Therefore, marketing with automation will not only happen but is expected to undergo significant change as a result of technological and marketing meetings.

Invest in AR / VR- The use of augmented reality (AR) and Virtual Reality (VR) has already forced retailers to develop strategies to provide consumers with better services through technology. This will bring more flexibility to the data collection process of business and customer organizations. Advertisers will need to import digital media to improve the Internet consumer experience.

Facebook AR Ads- Facebook has been investing heavily in AR and expects it to be a wave of the future. Organizations can communicate with their target audience and offer product features on the basis of their purchase patterns. Facebook has provided a new platform for advertisers to showcase their products by rolling out real-time organic ads. With AR feed ads, online shopping will be a more interactive experience and help business organizations better transition.

Turn to Measure Online Store Travel- With a business with an online presence, the biggest challenge is to find out how many store visitors or footballs have received through online promotions. Using digital marketing technology and offline behaviour, business organizations should invest in a digital tool that provides information with precision.

Miscellaneous Budget for Marketplace

Amazon Will Emerge as a Major Player in Digital Marketing- Amazon had recorded three quarterly growths in ad revenue, last year. Higher consumer buying intentions make it a great platform for any consumer product client. It is developing at high speed and shows just how much Amazon is willing to change the state of digital marketing.

Invest in Amazon Automation Tool- With about two-thirds of Amazon advertisers using ad campaign tools or expected to use them in the next twelve months, the market is poised to grow significantly over the next few years as Amazon ads will increase their market share.

Amazon SEO Optimization- At the discretion of each industry, Amazon is the first choice for consumers over 56% if they want to shop online, and 51% cross with Amazon when shopping on any other platform. This behaviour is predicted to increase by 10-15% by the end of 2020. This demonstrates the importance of using 'Amazon optimization' in any e-commerce SEO strategy and using Amazon in direct word search.

Become the master of Google Shopping

At Digital Marketing Space, major changes are expected in Google Shopping and it is advisable to keep an eye on everything related to Google Shopping. Since, Amazon is thought to be the next big thing in online shopping ads; Google Shopping will make a category entry for the category. Google has already started rolling out the tabs to organic search across the spectrum that offers structured shopping options to choose from. Therefore, it is important for digital business organizations to prepare their digital wing for cost-effective purchasing.

Transform and lead major changes

Voice Search- As demand for voice-based AI devices increases, for example, Siri, Alexa, and Google Assistant; a steep rise is expected on the voice bases of retailers. By using these products, people will be able to order products by their name and size. The volume of voice search is increasing every minute that passes and this will make a big difference in 2020.

Video Size- With a limited time of 30hrs/week spent on watching TV or any type of video content, video viewing video is already at its highest ever. This huge change in status has been made in the form of videos watched on Mobile and TV. There has been an increase in content for video channels such as Amazon Prime, Netflix, Hotstar, Voot, Zee5 being consumed at a higher rate all the time. For digital marketers, the use of mobile or channel video content marketing will be important. With the availability of the Internet by service providers, new opportunities are now available for digital marketers.

Native Mobile Ads- Of Mobile advertisement revenue, the average percentage of native mobile ads is 63 %. This clearly indicates that native ads control the status of the ads displayed. Native ads include interesting and relevant content and therefore, a higher engagement opportunity than any other display ads.

Get the most out of Customer

Focus on Personalized and Personalized Messages- In a position to provide more customers, brands are shifting their focus to private messaging apps and this trend is set to continue in the coming years. App marketing for private messaging is a puzzle of digital marketing and will replace digital advertising in a whirlwind.

WhatsApp Advertising- WhatsApp is still not fully utilized being the largest social messaging app. Recently, the first WhatsApp TV was introduced; and is expected to grow as a multi-channel access channel through a change in ad budgets on WhatsApp.

Strong Presence on Social Media- One survey revealed that 63% of marketers think that social media will be huge compared to apps or the web. To build brand awareness and communicate about product type among customers, the boundaries of social programs

should. Social channels are constantly evolving as more new features are added to Instagram, YouTube, etc. Telecommunications and media will get here is pointless. Therefore, it is very important for digital advertisers to mark their presence on social media.

15.7 POINTS TO REMEMBER

- Digital marketing is an interactive term, used where advertising and marketing combine with the new web and various types of online communication platforms.

- Digital is an unlimited platform for marketing and promoting your business to reach the largest audience, in one place.

- A digital marketing manager is responsible for developing, implementing and managing marketing campaigns that promote the company and its products and / or services

- Digital marketing campaigns can be created quickly and with digital tools, organizing Digital Marketing campaigns is easy.

- Understanding your customer's performance is one of the most important aspects of a successful market. Digital marketing helps you stay connected with your customers.

- Micro Moment marketing is extremely consumer-focused and is predicated on the very fact that buyers have such a lot choice and power in their behaviour and buying lately.

- Artificial intelligence (AI) is the science responsible for building intelligent machines that can think and respond as a human being.

15.8 GLOSSARY

- Ad Manager Account- An advertising account on Facebook that allows you to run ads on the Facebook Ad Network.

- Ad Network– A grouping of websites or digital properties (like apps) where ads can appear. For example, Google has 2 ad networks: the search network (text ads that appear in search results) and the display network (image ads that appear on millions of websites that have partnered with Google)

- Adwords (Google Adwords)– A Google owned program that is used by advertisers to place ads on Google search results pages, on Youtube, and on Google ad network sites. Adwords is the primary platform for PPC advertising.

- Analytics (or Google Analytics) – A Google platform that allows webmasters to collect statistics and data about website visitors. Google Analytics (sometimes abbreviated as GA) allows webmasters to see where web traffic comes from and how visitors behave once on the site.

- Banner Ad– A popular type of digital image ad that can be placed across various websites.

- Blog– A blog or web log is a web page or a website that is regularly updated with new written content. Blogs are an important section of a website in digital marketing, as they offer fresh new content on a regular basis which can help attract new visitors, engage existing visitors, and give authority signals to Google.

- Bot– An automated program that visits websites, sometimes also referred to as a "crawler" or a "spider". Search Engines like Google uses bots to crawl websites so that they can be ranked and added to search indexes.

- Campaign– A series of advertising messages that share a theme, and market a product or service.

- Call to Action (CTA) - A CTA is literally the action you want your searcher to take.

- Click Through Rate (CTR) - Your CTR measures how many people who have seen your ad click through to your link destination.

- CPC- Cost-Per-Click is the most common bid type on Google AdWords. It means you pay every time a person actually clicks on your ad.

- PPC- Pay-Per-Click is the same as CPC.

- CPM- Cost-Per-thousand impressions is a bidding method that bases your costs on how many times your ads are shown (impressions).

- AdSense- A tool by Google that gives publishers of all shapes and sizes the ability to host ads on their site to make money off ads.

- Approved- The status given to ads that are allowed to run on the AdWords network.

- AdWords Editor- A free tool from Google that allows advertisers to make bulk changes to their account (bids, keywords, ads, and other settings changes).

- Approved (Limited) - The status given to ads that adhere to Google's policies, but are limited in where they are able to be shown.

- Analytics- A free tool Google created to help you better understand the types of customers that visit your website, how much time they spend there, where they come from, and other important metrics that AdWords can't provide in as much detail.

- Daily budget- Your daily budget is what you're willing to spend per day per ad.

- Bid Strategy- Your bid strategy is basically how you set your bid type to pay for viewer interaction with your ads.

- Ad Rank- Your Ad Rank is the value that's used to determine where your ad shows up on a page. It's based on your Quality Score and your bid amount.

15.9   CHECK YOUR PROGRESS

Descriptive type questions-

a)   What is Digital Marketing?

b)   How can we become the master of Google shopping? Explain.

c)   What is PPC & CPC? Explain.

d)   What is the role of Digital Marketing Manager?

e)   What is WhatsApp Advertising?

f)   How Google is important to our business?

g)   What is meant by Ad Rank?

h)   How can we make a search engine optimized website?

i)   How to become good in Digital Marketing?

j)   What is Google AdWords quality score?

k)   What are the techniques used in Digital Marketing? Explain

l)   How social Media involved in digital Marketing?

m)   Explain SEO in detail.

15.10 BIBLIOGRAPHY/ REFERENCES

- https://neilpatel.com/what-is-google-adwords/

- https://www.geekpoweredstudios.com/digital-marketing-glossary/

- https://www.wordstream.com/blog/ws/2016/06/02/adwords-tutorials-for-beginners

- https://www.leadsquared.com/google-adwords-tutorial/

- https://www.digitalvidya.com/blog/digital-marketing-glossary/

- https://www.spyfu.com/blog/tutorial-start-adwords-campaign-scratch/

- https://ads.google.com/

- https://www.marketingterms.com/dictionary/

- https://www.forbes.com/sites/ryanerskine/2018/02/28/6-surprising-ways-to-use-google-adwords-you-havent-tried-yet/#64213be6366b

15.11 SUGGESTED READINGS

- **"Digital Marketing for Dummies",** Book By Ryan Deiss and Russ Hennesberry, 2017

- Don't Make Me Think Revisited**:** A Common Sense Approach to Web Usability, By Steve Krug, 2000

- Blogging: A Practical Guide to Plan Your Blog: Start Your Profitable Home-Based Business with a Successful Blog, By Jo and Dale Reardon, 2015

- Ultimate Guide to Google AdWords: How to Access 100 Million People in 10 Minutes (Ultimate Series) by Perry Marshall, Mike Rhodes, Bryan Todd.

UNIT- 16

FUTURE PROSPECTS OF DIGITAL MARKETING AND MANAGEMENT- II

16.1   INTRODUCTION

In today's world of social media digital Marketing and Management has played a very important role in the fast advancement of world's economy. It becomes a very important tool in the marketing area for big and small brands. Digital Marketing is the avenue of electronic communication which is used by the marketers to endorse the goods and the services towards marketplace. In the developed global markets, it is one of the most leading, well known and established platforms. In the current era of digitalization, it makes brand enable to remain where the customers of the brand stay i.e., Instagram, Quora, Facebook, YouTube, Twitter and other social media applications. The digital channels include mobile, display, search, social, and video. Referred to as "Inbound marketing" digital allows you to interact with

advertise and connect back to the advertisers. It is maintaining its spectacular growth in global markets; no matter they are big or small. Big markets are those countries which are always going to be e-commerce because of their size, and the small markets are encouraging markets where prospective matters along with size. Digital market becomes the important platform to sale, promote, endorse and launch new products which gives high exposure in low cost. Digital Marketing can be understood as a well-targeted, conversion-oriented, quantifiable, and interactive marketing of products or services by utilizing digital innovation to achieve the customers, and transform them into clients in a sustainable fashion. The whole concept and functionalities of Digital Marketing are more competent, effective, result-oriented and measurable, which make it very different from traditional marketing.

16.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

- Understand the concept of digital marketing.
- Understand the role of digital Marketing and Management for smart administration.
- Define the importance of digital Marketing and Management.
- Understand the difference between traditional and digital marketing.
- Explore 5Ds of digital Marketing.
- Do SWOT analysis of digital marketing.

16.3   DIGITAL   MARKETING   AND   MANAGEMENT: AN OVERVIEW

The term Digital Marketing was first used in the 1990s while internet search traffic increased in 2006. In 2010s, digital marketing became more sophisticated as an effective way to create a relationship with the consumer that has depth and relevance. Digital marketing is a subset of traditional marketing. It promotes your brand or products using digital channels such as the internet, emails and mobile phones, as opposed to more traditional media such as print, radio, TV or billboards. Finding new customers is the primary aim of digital marketing. It has the advantage over traditional marketing techniques because online programs such as Google Analytics exist which enable you to analyze your marketing campaigns in real time. This is much faster than any non-digital or traditional technique. It is the strategy and processes that connect advertisers with their audiences across digital channels. An advertisement itself is a piece of creative shared via digital inventory- the space a publisher makes available for advertisements on its platform. In this overview of digital marketing, we will summarize their key points and discuss how they are inextricably interlinked and how a great campaign cannot have done without the others.

Search Engine Optimization (SEO): It is a process which aims to improve the position of your website in organic search engine results. One of the ways it does this is by utilizing

keywords. Google gives the following examples of keyword stuffing: As- (i) Lists of phone numbers without substantial added value, (ii) Blocks of text listing cities and states a webpage is trying to rank for repeating the same words or phrases so often that it sounds unnatural. Another effective way that SEO increases the organic rankings is through link-building. This is the process of getting links to your website from other websites.

Social Media Optimization (SMO): It is a type of SEO. It involves engaging in social media in order to increase your organic search ratings. The aim is to develop highly active social media accounts with a large audience, where you post content and links from your sites in order to draw users from there, and where you post content that is unique to social media in order to broaden your audience so that a large number of people can feel your presence there.

Online Reputation Management (ORM): It's maximized your positive presence on the internet while minimize any negative discussions. It is mandatory for all businesses to ensure that someone Googling their brand or company name will not be inundated with negativity. It is harmful for a business to let go their single buyer. The most important point to remember about managing your online reputation is that if you only start doing it when you have been bombed by something negative, you are starting too late. You should begin monitoring your online presence as soon as you can, using a program such as Google Alerts or something more online options.

Pay Per Click (PPC): It is a type of paid advertising through which you can influence your website's standing in paid search results. You would sign up to a service such as Google's free AdWords program and set up your campaign there. Every time a user clicks on your advert, you pay your search engine a small fee. In order to ascertain the top spot on the advertising areas, AdWords gives every advert a quality score. The score depends on factors such as picking great keywords, the amount you pay Google, and the quality of your landing page. It is vital to have a well-presented page which gives the user all the information that they need. Users consider speed and ease of use to be vital in their choices, so won't take kindly to being directed to a homepage and having to do the navigation themselves. You are also likely to lose potential customers if your website is not optimized for the main browsers or mobile phones.

Conversion Rate Optimization (CRO): It uses an analytics program such as Google Analytics to find out how your site is affecting a variable you find important. The first step of CRO is discovering your current conversion rate using Google Analytics. Next you would look at other factors given to you by Google Analytics, such as bounce rate. These would help you to discover potential flaws in your site. Whether you want to make a big change like an entire page redesign or just change the size of the call-to-action button, all the essential changes required can be made and tested simultaneously with the original version, and the results seen on Google Analytics. It is very important to test these factors out for you and not

to copy other businesses. Their conversion optimization may not have been carried out rigorously, and therefore their result may not be genuine. So, digital marketing is the interweaving of these and other strategies in order to find and retain new customers, and promote your brand. It is often carried out by specialized digital marketing agencies, but individuals and businesses can also handle their own.

16.4   5Ds OF DIGITAL MARKETING AND MANAGEMENT

Digital marketing revolves around these 5Ds, as- (i) digital devices, (ii) digital platforms, (iii) digital media, (iv) digital data, (v) digital technology.
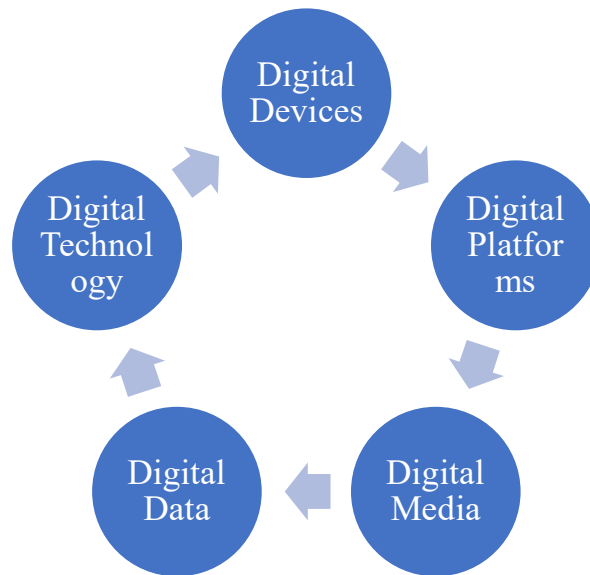
a)   Digital devices: It mainly focuses on the target audience's interaction and engagement on websites and mobile applications using a combination of connected devices. These devices may include smart phones, tablets, desktop computers, TVs, and gaming devices.

b)   Digital platforms: It involves the analysis of the preferred platforms or services of the target audience. Most engagements using popular platforms such as Facebook, Instagram, Google, YouTube, Twitter, Snapchat and LinkedIn.

c)   Digital media: It refers to paid, owned, and earned communications channels utilized to build engagement with the target market through several ways such as advertising e-mails, messaging, search engines, and social networks.

d)   Digital data: It normally consists of audience profiles and engagement patterns with businesses, while digital technology focuses on building interactive experiences across a wide range of platforms, from your websites and mobile apps to your in-store kiosks.

e) Digital technology: the marketing technology or companies use to create interactive experiences from websites and mobile apps to in-store kiosks and email campaigns. It uses websites and mobile apps to achieve the goals of digital marketing.

All 5Ds are essential to gaining an unparalleled edge in digital marketing campaigns. Optimizing the benefits and becoming an expert in the 5Ds of digital marketing are considered a step in the right direction in today's highly competitive era.

16.5   IMPORTANCE AND BENEFITS OF DIGITAL MARKETING AND MANAGEMENT

The main objective of digital marketing is attracting consumers and allowing them to interact with the brand through digital media. Digital marketing is taking over the traditional marketing channels is because the internet has enabled businesses to interact with targeted audiences in real time. The importance of digital marketing is increasing day by day because:

- It reaches to people on that place where they spend their time & money.
- It levels the playing field for small business.
- It is more targeted compared to the traditional marketing.
- With email marketing, yet another important part of digital marketing, you can target almost down to the individual level.
- With digital marketing you could know whether users actually saw your advertisement, like it, lingered on it or shared it with a friend.
- It is easy to scale & adapt than traditional marketing.
- Integrates Marketing with Mobile Technology.

There are many benefits of digital marketing because of which business and companies are moving towards it. Digital marketing allows you to build awareness of your brand and drive sales. We can understand them with following list-

a) It lets you effortlessly reach current and new audiences- With digital marketing, you can reach audiences on a global scale. You can market your products and services locally, nationally, or internationally for a little to no cost compared to traditional marketing means. Many digital marketing strategies enable you to reach more people interested in your products or services, as well as new markets and undiscovered interested audiences. You can target people locally to internationally, allowing you to expand your market.

b) It reaches people at the start of the buying journey- Whenever someone visits the site, you can greet them with targeted offers initially at the point of starting of their buying journey. The more they buy from you, the more you can refine your customer profile and market effectively to them. Getting involved with social media and managing it carefully, you can build customer loyalty and create a reputation for being easy to

engage with. Which attracts your customer every time they start to buy a new plan or product?

c) The power to make changes whenever you want- It is a very big opportunity in the field of digital marketing. This advantage was never available in traditional marketing. Once we published or print something in traditional marketing in the form of posters etc it will remain same as always it is but on digital platform, we have power to improve the quality of our content always on our fingertip. It affects the number of our target customer and allows us to show the better and improving side of our product.

d) It is cost-effective- Digital marketing costs much less when compared to many traditional marketing strategies. We'll dive into more detail on this later, but overall, running digital marketing strategies is more cost-effective than traditional media. With many digital marketing strategies, such as content marketing, social media marketing, and search engine optimization, you can implement them for free if you're willing to spend some time and put in the effort. Even online paid advertising methods (such as social media advertising or pay-per-click (PPC) advertising) are much cheaper compared to advertising traditionally. Advertising online with digital marketing lets you pay per person who clicks on your advertisement Combine that with the far-reaching, advanced audience targeting that digital marketing allows, and you'll be getting the most out of your advertising budget.

e) It is measurable- When you invest in digital marketing, you can easily track and measure the results of your campaign. Digital marketing allows you to track a wide variety of real-time data such as clicks, dwell time, devices, and more. You can access programs like Google Analytics, where you can track all these metrics in one place. Access to this data enables you to see the results of your digital marketing efforts. Using the data, you can measure how well your digital marketing is performing against your marketing goals. Additionally, you can adapt and optimize your strategy as needed. By tracking your results, you can quickly figure out what works well and what doesn't, which allows you to make changes as you need.

f) It improves the conversion rate- Digital marketing provides a seamless conversion process for visitors. Users on the Internet often find making a purchase easier, quicker, and more convenient online than through traditional mediums, which means that, due to your digital marketing, you'll have a greater percentage of users who are highly likely to convert using your website.

g) It allows to target ideal customers- Digital marketing enables you to create personalized content that you can tailor to your audience. With digital marketing, you don't have to create one piece of marketing to try and appeal to everyone. Instead, you can create multiple pieces that are tailored to people with different interests. You can also

personalize the content you create to hit your audience's interests and helps solve their problems. Every time you interact with someone, you can continue to gather information to better match their preference.

Digital marketing also has a wide variety of content types you can personalize to match individuals in your audience. For example, you can craft as- (i) Personalized ads based on search history, (ii) In-depth content based on commonly asked questions, (iii) Engaging social media ads based on likes and interests, and (iv) Unique email marketing campaigns based on shopping behavior.

Difference Between Digital Marketing and Traditional Marketing-

Traditional marketing and Digital marketing have a huge difference though digital marketing is a subset of traditional marketing. Traditional marketing comprises print, broadcast, direct mail, and telephone while Digital marketing includes online advertising; email marketing, social media affiliate marketing, text messaging, search engine optimization, pay per click. The other differences are as following-

S. No.	Traditional Marketing	Digital Marketing
1	No interaction with the audience.	Interaction with the audience
2	Expensive and time-consuming process.	Reasonably cheap and rapid way to promote the products or services.
3	Results are easy to measure.	Results are to a high extent, i.e., easy to measure.
4	Success of traditional marketing strategies can be celebrated if the firm can reach large local audience.	Success of the digital marketing strategies can be celebrated if the company can reach some certain number of local audiences.
5	Limited reach to the consumer due to limited number of consumer technology.	Wider reach to the consumer because of the use of various consumers technology.
6	One campaign prevails for a long time.	Campaigns can be easily changed with expertise and innovations can be introduced within any campaign.
7	24/7 year-round exposure is not possible and no ability to go viral.	24/7 year-round exposure is possible and ability to go viral.
8	One-way conversation.	Two-ways conversation.
9	Marketing advertising campaigns are planned over a long period.	Advertising campaigns are planned over short period of time.
10	Needed much staff and efforts.	Needed good platforms and efforts.

These are few differences which show us that any business can target audience anywhere in the world from one digital marketing campaign. Digital marketing brings the greatest advantage for the consumers by allowing them to make comparison among products or services while traditional marketing have limited options.

16.6 SWOT ANALYSIS OF DIGITAL MARKETING AND MANAGEMENT

Strengths and Opportunities are positive factors while Weaknesses and Threats are negative factors. Strengths and Weaknesses can be controlled by the firm itself. On the other hand, Opportunities and Threats are part of external environment.

To gauge strengths, a complete 360-degree view is required. This includes how the customers, competitors, and stakeholders view the market. To improve the digital strength, we need to discover more about the market and customers, we require more experience and exploration. We need to promote, find and talk about the strategies. While to identify weakness we need to know that which internal processes need improvement? What the customers say needs improvement? What factors contribute to loss of sale? What do competitors view on firm's weaknesses? And what are the activities to avoid? Basically, the weakness of digital marketing is no priority, no time and no knowledge which a firm needs to remove

To find Opportunities we must need to know that Are there any interesting trends that we can benefit? Are there any good opportunities lined up? Opportunities can appear in different ways for example, a government policy that might help our industry. Change in population, economic and social patterns and in lifestyle. The opportunities of digital marketing are visibility, credibility and preferability which we need to grab from digital neighborhood market places, and to find threats we need to find out the barriers, any technology change that can make the product obsolete or a government regulation that can hurt the business. We also need to know about the competitors who working on a better product or service and one of the most important fact to know about Cash-flow or bad debt issues. Ignorance of ability brings disability so we should use available resources and expert guidance to keep constantly upgrade and to stay away from threats.

Once after finishing the digital marketing SWOT analysis, we need to translate these into short- and long-term strategies. These findings are just the tip-of-iceberg. The real work starts after this.

16.7 CHALLENGES OF DIGITAL MARKETING AND MANAGEMENT

Although a large number of firms are practicing digital marketing, it is not an easy job as there are number of problems which digital marketing may face. They are as following-

- Expertise and Knowledge with Digital Marketing.
- Target Market Engagement.
- Reaching Target Audience.
- Effective Social Media Management.
- Educating Stakeholder about Digital Marketing.
- Lack of Resources.

- Achieving brand awareness.
- Working with the right digital agency.
- Keeping updated on latest technology.
- Creating relevant and rich content.
- Showing Return on Investment.
- Building a good website to understand audience.
- Getting new leads and creating, promoting content.

Thus, digital marketing is a clear concept to understand the mindset of customer by their browsing history on social media platforms and application. Marketers make use of digital portfolio as a platform to promote a professional brand. Presently it becomes a very important platform in the field of marketing.

16.8 FUTURE OF DIGITAL MARKETING

The future of digital marketing is so vast and wide in area. Presently From banners to big data, digital marketing has continuously adapted to meet the needs of customers and brands alike. Today, with increased connectivity and established digital infrastructure, changes are happening much faster. Below we highlight the future prospectus of digital marketing-

Paid media- Paid search, or search engine marketing, is the marketing practice of generating web traffic by buying advertisements on search engines. A probable distribution to this traditional method of paid media is programmatic advertising, a type of paid media that employs to automatically buy advertising space, using data, to determine which audience the ads should target.

SEO (voice optimization)- As consumers adapt and begin to use voice assistants more and more, marketers working with SEO should consider optimizing their websites to recognize voice search. As the popularity of the technology rises, it is likely this number will increase, and the idea of a permanent, hands-free assistant will begin to feel like second nature.

Content (Personalization and video come to the forefront)- Following from SEO and voice search optimization, conversational content that feels personal and authentic remains key to engaging customers in future. As customers are drawn to experiences that reflect their preferences, determining what content will be most relevant to an individual is key to customer's satisfaction and loyalty in future. It will influence the society and create more opportunities in digital marketing.

Influencer marketing system get updated- Influencer marketing has become the equivalent of word-of-mouth marketing today. As people generally trust people more than brands, hearing positive information or feedback about a product or experience from an influencer often holds more weight and credibility than when it comes from the brand itself. Appealing to an individual with conversational, speech accessible, and visually engaging content are key

trends informing the way brands are going to position themselves in the near future. In an industry often saturated with sensationalist talk around technology, this should provide marketers and brands with an idea of practical and actionable improvements that technology can provide to their existing digital strategies.

16.9 POINTS TO REMEMBER

- Digital marketing is a subset of traditional marketing.
- SEO, SMO, ORM, PPC and CRO are the key points of digital marketing.
- 5Ds of digital marketing are digital devices, digital platforms, digital media, digital data, and digital technology.
- Digital marketing is easy to scale & adapt.
- Digital marketing is different in many fields from traditional marketing.
- SWOT analysis of digital marketing finds the strength, weakness, opportunity and threat of it.
- There are so many challenges in digital marketing which makes it a competitive platform.

16.10 GLOSSARY

- Search traffic-: refers to the number of all accesses that have been made via search engines.
- Inbound- Towards a particular place
- Substantial- Considerable
- The tip of iceberg- Small part of a problem
- Content marketing- A type of marketing that involves the creation and sharing of online material   that does not explicitly promote a brand but is intended to stimulate interest in its products or services
- SEO- Search Engine Optimization
- ORM- Online Reputation Management
- SMO- Social media optimization
- CRO- Conversion Rate Optimization
- PPC- Pay Per Click
- Googling- search for information about (someone or something) on the internet using the search engine Google.
- Big data- Extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions.

16.11 CHECK YOUR PROGRESS

Descriptive type questions-

a)   What do you understand by the term digital marketing?

b)   What are the 5Ds of digital marketing?

c)   Mention few benefits of digital marketing.

d)   What is the difference between traditional marketing and digital marketing?

e)   What are the future prospects of digital marketing?

Objective type questions-

a)   Digital marketing improves the conversion rate (True/False).

b)   Digital marketing has limited reach to the consumer due to limited number of consumer technology (True/False).

c)   Digital marketing is a two-way conversation (True/False).

d)   CRO means conversion rate optimization (True/False).

e)   Digital marketing revolves around the 5Ds (True/False).

f)   Influencer marketing system is a future prospectus of traditional marketing (True/False).

Answers (Objective type question)-

(a) True   (b) False   (c) True   (d) True   (e) True   (f) false

16.12 BIBLIOGRAPHY/ REFERENCES

- Toffler A (1980) the third wave. New York: Bantam Books

- Kotler P (1986) The Prosumer Movement: a new change for marketers. NA-Advances in consumer research, 13:510–513

- Shultz C, Holbrook M (1999) Marketing and the tragedy of the commons: a synthesis, commentary, and analysis for action. J Public Policy Marke 18(2): 218–229

- Kotler P (1967) Marketing management: analysis, planning, and control. New Jersey: Pearson Prentice Hall

- Rust RT, Lemon K N, Zeithaml VA (2004) Return on marketing: using customer equity to focus marketing strategy. J mark 68(1):109–127

- McCarthy EJ (1964) Basic marketing, a managerial approach. Illinois: R.D. Irwin

- Lauterborn B (1990) New marketing litany: four Ps passé; C-Words take over. Advert Age 61 (41):26

- American Marketing Association (2013, July) Definition of marketing. https://www.ama.org/ AboutAMA/Pages/Definition-of-Marketing.aspx. Accessed 31 July 2015

- Krishnamurthy S (2006) Contemporary research in e-marketing. Hershey: Idea Group Inc (IGI)

- Osterwalder A., Pigneu Y (2010) Business model generation: a handbook for visionaries. New Jersey: Wiley
- Doran GT (1981) there's a SMART way to write management's goals and objectives. Manag rev 70(11):35–36 12. Strong EK (1925) the psychology of selling and Advertising. New York: McGraw-Hill
- Rogers (2011) the network is your customer: five strategies to thrive in a digital age. New Haven: Yale University Press
- Lieb R, Owyang J (2012) the convergence media imperative: how brands must combine paid, owned, and earned media. Altimeter. http://es.slideshare.net/Altimeter/the-converged-mediaimperative. Accessed 20 June 2015
- Ries E (2011) the lean startup: how today's entrepreneurs use continuous innovation to create radically successful businesses. New York: Crow Bussines
- The Radicati Group (2015). Email statistics report, 2015- 2019. http://www.radicati.com/wp/ wp-content/uploads/2015/02/Email-Statistics-Report-2015-2019-Executive-Summary.pdf Accessed 31 July 2015
- Godin S (1999) Permission marketing: turning strangers into friends and friends into customers. New York: Shimon & Shuster
- Laudon KC, Traver CG (2012) E-Commerce 2012 (8th revised edition). Boston: Prentice Hall
- Korper, S., & Ellis, J. (2001). The E-Commerce Book: building the e-empire. San Diego: Academic Press
- Antevenio (2015) Diferencias entre CPM, CPC, CPL, CPA y CPI (2015). http://www.antevenio.com/blog/2015/01/diferencias-entre-cpm-cpc-cpl-cpa-cpi/. Accessed 31 July 2015
- Enge E, Spencer S, Stricchiola J, Fishkin R (2012) The Art of SEO (Edición: 2). Beijing: O'Reilly Media
- Statista (2015). Global market share of search engines 2015 Statistics. http://www.statista. com/statistics/216573/worldwide-market-share-of-search-engines/ Accessed 27 July 2015

16.13 SUGGESTED READINGS

- Desjardins, J. (Feb, 2018). 'The rising speed of technological adoption'.
- Carolina Machado, J. Paulo Davim, 'Theory and Application of Business and Management Principles'.
- A Modern Marketers Guide to Digital Marketing. http://bit.ly/freedmguide.
- The Scope of Digital Marketing in India & How to Get Started: http://bit.ly/2C0Lwu6.
- I don't have a degree. Can I do digital Marketing? http://bit.ly/2C22sQU.

UNIT- 17

FEEDBACK AND SURVEYS- TOOLS AND ACTIVITIES

17.1 INTRODUCTION

Whether it is a matter of product manufacturing or doing business, doing survey gives a way to assess the things done in the past. Survey may be defined as a mechanism in which we collect data from planned respondents who provides the insights on the product or the service in the prescribed form. It may also have other purposes to conduct survey. To conduct survey, various methodologies are available. Survey is not a new way of accessing your business or the service you provide, it was into practice since long back. Only the change is concerned with the way it was conducted earlier and the way it is conducted in the modern age of today.

Also, this is not limited to the trend of the day today, but many of the methodologies are being updated for the future need which seems to be totally paperless and smart. This survey aims in knowing the various factors-based need and requirements of the audience about your

product or the service. It may include their experience in both good and bad ways so that you may focus the good results and eradicate the factors which are of bitter experience for them. This objective will help on knowing the opinion of your users or customers or subscribers on newly provided services so that you may think if this newly provided service is accepted by them. It may be used to know the status of the company for giving new trends by promoting the endeavors made by the employee of their organization.

Conducting a survey is good way to create new relations with your subscribers or users in more formal ways. For those users who are already in the list of your subscribers may give them impact of their importance. Various mechanisms which may turn-out any kind of interaction with the valued customers is of due importance. So, creating such interaction may lead in generating more business. The main objective of the survey and feedback is to acquire critical information about their consumers to show them that they value the organization and crate a platform for new comers.

17.2   OBJECTIVES

After successful completion of this unit, you will be able to-

- Get critical customer feedback on services.

- Develop and maintain relationship with your subscribers.

- Understand the customer's tendency.

- Get suggestions for factual business decision making.

17.3   FEEDBACK AND ITS ROLE IN MARKETING

Feedback is transparent way to assess the status of produced goods from its user's or customer's perspective. This key operation is the responsibility of the marketing department of the enterprise. This marketing exercise allows customers to provide their views and concerns in a feel free manner about the product they use or the service they make use of. Various organizations are specialized in terms of conducting continuous feedback and surveys including both indoor and outdoor manner. Conduction of feedback gives the actual picture of the business status and keenly helps the decision makers of the firm. Feedback is also conduct to give its customer a feeling that you are the king for their business. On the other hand, the customer who gives feedback about any product he or she try to be loyal for the company for which he/she has loyally given the feedback. It helps the company to help such customers as deep-rooted customers to their companies.

It must also be taken seriously that if any production company or the service provider company does not interact with its customers using any kind of exercise such as feedback or survey, the company may ruin in near future because their future planning is not about caring their actual consumers. If such boosting exercise will not be organized for few sessions, the

company or the enterprise will lose its customers and will spoil in near future for sure. Such companies will become out of choice. The following roles of feedback process give it importance in the business:

- Feedback helps progress in the sales of products and services.

- Customer feedback helps you to measure customer satisfaction.

- It provides the opinions about the products and services by its actual users.

- It provides the state-of-the-art experience from the customers about the product and the services any company offers.

- Upholding the existing customers using feedback process helps in making the brand more popular among new customers.

- Building another layer of the customers is possible using surveys as it spreads the business through the customers.

- Overall, it is a process that seeds new policies or amendment in the existing policies that results in long lasting business success.

17.4 TYPES OF FEEBACKS

The feedback process is backbone of any business where it is about producing goods or providing services. It helps in getting the actual position and status of the business in the market which is the platform where buyers and the sellers meet. Also, from today's perspective, this platform is transforming from physical platform to digital or online platform. Whatever the mode of the platform it is, marketing rules applied to both places. In general, if we discuss about the type of the feedbacks taken by the company it is actually based on area for which we are planning a survey. If we are actually concerned for the growth of the business through feedbacks, then we must take into our considerations that there are different aspects on different products and services before conducting feedbacks. Portraying the contents in respective form and considering the sensitive areas are also of due importance. Based on the above stated variances, we may explore the feedbacks into following categories:

- Strength of Product and Brand Feedback

- Customer Satisfaction Feedback

- Brand Loyalty Feedback

- Product Sales Feedback

- Customer Inclination Feedback

Also, these categories are not limited these categories and also may further be increased or unified too if required.

17.5   SURVEY AND ITS ROLE IN MARKETING

Survey is a process which gives you the importance of the products from its user's perspectives. It usually covers the areas which involve key marketers, feedback about the product, loyalty, customer reaction, buying behaviour, brand awareness etc. Following are some points which depict the reason for conducting the survey:

- Important for doing market research.

- Helps in providing product offerings.

- Helps in product pricing.

- Helps in getting customer demographics.

- Helps in knowing the awareness of consumers.

- Provides the status of product use and customer satisfaction.

- Knowing the status of name and fame of the brand.

- Helps in boosting the conversions from one brand to another of the same domain.

Characteristics of survey samples and survey questions-

As there are various types of surveys there are variety of purposes to conduct them too. While there are variety in conducting the survey for variety of purposes but there are common characteristics among them. Following are few key characteristics which comprise making out the survey successful using survey samples and survey questions for any company:

- **Determining sample size-** It represents the total number of individuals in that particular sample. This size is relevant to the actual goal for which the survey is being conducted.
- **Types of sampling-** There are two types of sampling in practice which are probability sampling and non-probability sampling. These sampling types are for conducting the prudence survey for true business growth. These samplings are briefly discussed below:
  Probability Sampling- This is one of the popular methods of sampling which includes concept of theory of probability. The users are selected on the basis of this theory before starting survey.
  Non-Probability Sampling- On the other hand, this sampling method uses the samples on his own basis and his influenced samples. It has no bound from the theory of probability for conducting the survey.

- **Using variety of question types-** MCQs are the mostly used types of questions used for conducting surveys.

17.6   TYPES OF SURVEYS

Survey is a way to collect and thereafter assess the related data from a set of people. Such set of people is commonly referred to as sample. Selection of sample is also of good strategy part and usually is process of finding the best suitable members for more actual results towards business growth. It may include individuals, a group of related people, employees of a business firm, students of an institution or university and many more such areas which belong to the objectives of the survey. Whatever the set you finalize is the sample and now responsible for giving the correct status of your business sample. Any decisions made by such sample helps in representing the large population for your business. The business enterprise then makes changes in its policies for fulfilling the gaps if any or running smoothly if the respondents are quite satisfied. It may be by default the part of the best practices conducted by any organization towards success.

Based on various requirements the survey types are categorized into various areas and then sub areas of each type. Such as if we consider online surveys it has different requirements as compared with paper-based survey. Based on how we are deploying the surveys, we may categorize the survey types into following categories:

Survey based on the platforms

[1] Online Surveys

It is very often used survey by the companies today. It provides lots of benefits while conducting surveys such as efficiency, speed, transformation, etc. It comprises of variety of survey questions and may be easily send to the targeted respondents using electronic mail or other means of online system. This system requires no physical footfalls at the door of the respondents. Only an internet facility is required to achieve to use this survey. Also, designing the survey question is as simple as to transform from one format to another. There is no hurdle in sending or receiving of survey as it is sent or received based on just a click. As per expenses points of view, online surveys are cheaper as compared to paper based surveys. Even analyzing, summarizing and decision making is faster in such kind of surveys.

[2] Paper Surveys

This practice is becoming obsolete gradually which includes using paper and then marking answers to the questions given on these papers. Even they are quite handy for those who have a phobic to digital-divide which represents a lack of knowledge while using digital or online mode for doing such practices. However, soon the digital divide will be totally resolved as the new generation is very much inclined to use digital media for their any activity such as submitting their fees online, shopping online, etc.

Such paper-based surveys are considered very useful in the areas affected by digital-divide such as remote areas where internet services are non-reliable for business surveys. Another

use of such surveys is at the situation where a business wants to do survey on confidential way and the companies are not able to trust the digital media for confidentiality.

This survey is expensive as it needs paper cost, printing cost, confidentiality cost, footfall cost, travelling and transportation cost and other related costs. Moreover, it includes time and money.

[3] Telephonic Surveys

It is based on telephones and may be recorded for the future records. They are not appreciated by the companies where survey is of important use. The impact of the survey is highly dependent on the receiving of telephone calls and therefore is not trusted to generate the actual picture of the product or the service.

Personal interviews-based surveys

This survey is used to collect information directly from its users or service takers. Though, it is qualitative method to take survey but it requires an aware respondent to answer the questions raised on the survey. In the personal interviews, the further direction and flow of coming questions is highly depending on the answers given by the respondents. If the respondent answers in right direction, then more and more questions may be raised to know the actual quality of the product or the service. While in case when respondents seem of less knowledge about the product or the service the survey may come to end by asking limited and close-ended questions further.

Surveys based on the frequency at which they are administered

[1] Cross-sectional surveys

Cross-sectional surveys are organized over a small sample out of huge population. The time allotted for such surveys is also lesser as compared with other types of surveys. Such surveys summarize the pictures of the product or the service among its users speedily. Most of the times to take survey for some peculiar or irregular circumstance we prefer to conduct cross-sectional survey. To take an example, a hospital may conduct a survey on a particular disease which is spreading and is choosing the relatives of the patients admitted in the hospital. Such survey is a cross-sectional survey.

[2] Longitudinal Surveys

This survey is very helpful for researchers to make a study and gather data for an extended time period. Longitudinal surveys comprise of three types:

(a)Trend Survey

This survey hits the thought process of the respondents for a particular time. It also studies the status of the people about how they change over a time for some particular product. This survey is helpful for such situation where the things are changing at particular time interval.

(b)Panel Survey

It is second type of the longitudinal survey and focuses to a particular and same set of respondents over a period of time. This survey is expensive as it is all about getting the fair inputs from the respondents.

(c)Cohort Survey

As the term means a group or the followers, in this survey respondents are categorized on particular criteria and areas. In this survey all what matters is the similarity and the group is usually meant to take survey on that particular similarity.

[#] Retrospective Surveys

This kind of survey is about collecting the data from the earlier period. It includes the previous knowledge and previous attitude or viewpoint of the respondent about a particular thing such as a product or the service.

17.7   FEEDBACK VS. SURVEY

From a general perspective both the feedback and the survey both approaches seem quite similar. Still there lies a fact that separates feedbacks from that of surveys. Few points are listed below to show characteristics of feedback:

- Feedbacks are more direct as compared with the surveys.

- Feedback process treats customers as individuals.

- Feedback gives a feel to the respondents that the company cares about their precious opinion.

- Based on the feedback results it is very helpful to improve the business policies.

- Feedback provides an accurate examination of the customer's experience.

- Feedback is an ongoing process and is usually taken at every event.

- Feedback may be conducted at various mediums such as over a telephonic phone call, on the event of sale of product or services, at a personal meeting for feedback etc.

- Feedback is a continuous process and is based on latest data which is in the trend of present time.

- In a nut shell, feedback is a process which is ultimate for doing the business in a right direction for successful results.

On the other hand, survey is slightly different from the feedback. A survey has following characteristics:

- Survey exists to obtain the feedback from a single moment in time.

- Survey is rarely applicable in a dynamic state where the things are changing over the time or as per the events.

- If survey is considered from the data collected for feedback, the results will be wrong and business may yield failure over a period of time.

- Survey is static process, so for the business which is dynamic a proper sense must be developed on when to take feedback and when to go for surveys.

In general, response rate of the survey is relatively low as compared with the feedback. So, feedback and surveys must be wisely chosen and must not be swapped casually.

Paper based feedback vs. E-governance feedback-

In the competitive world today, survey or feedback whatever we are going to take from our valuable customers or subscribers as respondents is of high importance for the growth of the company. Modes for the feedback are available in both terms which are paper based and paperless as discussed in the previous sections. None of the mode is in a state that it may be avoided. At some situations paperless medium is appreciated and at some circumstances paper-based feedback is preferred. As an analyst, one must need to get aware of the various pros and cons of using feedbacks. Few disadvantages of using paper-based feedback are listed below:

- **Cost factor**- It may be an expensive process to go for paper-based survey. Paper based survey included paper printing, copying cost which is directly proportional to the no of domains of business.

- **Handwriting and Readability**- May be the writing skills of the respondents are not legitimate enough to include. It may create some level of hurdles while reading from the handwritten feedbacks. Moreover, it may consume more time in understanding the responses sometimes.

- **Reach and Barriers**- Reaching the respondents is a difficult process. Lots of checks need to be established for the employer side to make this practice successful. Physical distribution of the copies of feedback papers is also challenging in some situations.

- **Paper Keeping and Safety**- If papers are not kept in confidential and safe area, it may be turn out towards wrong results which may harm the company one way or the other. Even dropping of the collected feedbacks may results in unnecessary expenses made towards collecting the paper-based feedbacks.

- **Trustworthiness**- Few situations for paper damage may include loss of content due to papers are wet in water due to any reason; few papers are lost from the collection of the paper bundles, etc. If any kind of damage or mishandling with the papers is done while feedback collection then reliability of the survey is hard to achieve.

- **Typographical Mistakes by Data Entry Operators**- When receiving the paper of the survey done, the entries are finally provided in computer system. During this process, there is a scope of typographical errors which may be generated by the data entry operators. This may result in providing wrong information to the company and thereby making wrong decisions for future of the company.

- **Carbon Footprint and Papers**- Saving paper to the extent possible reduces the cutting down of the trees for making papers. This reduces the carbon footprint of both the users and the company. It is really harmful to the nature to use papers unnecessary. Use of papers should be avoided up to the limit possible as it will result in saving trees other ways. This is the reason that this tree saving guideline is now being added to the policies of the office work flow.

There are still more factors that strongly disagrees from the fact of using the paper-based work. Still most of the multi-national companies are updating their guidelines and policies towards going green by transforming their work from paper-based work to paper less work.

From paper-governance to e-Governance to m-governance-

Going paperless gave rise to electronic-Governance (e-Governance) and transforming work culture from desktop to mobile gave rise to mobile-Governance (m-Governance). Digital scenario in all the areas is also getting admired. Moreover, the transformation is not only limited from paper based to paper less but from desktop version of digitalization it is transforming towards mobile based version. This transformation helps not only saving the trees but saves the energy by using less electricity in the form of mobile based processing. So, the task that is processed using desktop or laptop-based files is termed as e-governance and the task accomplished using mobile is termed as m-governance. Mobile governance is highly used these days for all the areas of computing whether it is online shopping, online fee payment, online ticket booking for train, flight, room of a hotel, etc.

Based on the above shortcomings and unfavourable factors, in today's scenario organizations are transforming from paper-based feedbacks to paperless. Moreover, as discussed above, mobile app-based survey and feedback are being preferred by those organizations which support green computing. Green computing is an approach for managing carbon footprint by changing the working culture towards saving environment specially in terms of using small amount of electricity by promoting the task using small devices as such devices use less power as compared with standard systems. This is one of the reasons that most of the

websites are suggesting for not taking the print unless required very urgently. In this direction, IRCTC (Indian Railways Catering and Tourism Corporation) is going to do this task hundred percent on digital basis. If not required, we need not take a single print right from searching the train ticket, analyzing the suitable train, selecting and booking the ticket, boarding and travelling till exiting from the destination railway station. All above steps are not only available paperless but in more convenient way. In the same way, survey and feedback system is also going to change from paper based to the paperless and obviously mobile based are more preferred by both the stakeholders.

17.8   TOOLS AVAILABLE FOR ONLINE SURVEY

Surveys are a medium to interact with your audience on some concern and take their valuable input on improving the existing system. Surveys may be utilized in various ways in the business system such as:

- Taking feedback.

- Conducting market research.

- Getting feedback from customers.

- Employees introspection on some values for organization.

- Other business-related factors.

Various tools are available to take feedback or conducting surveys. Few of them are paid tools and few are free. Below is the listed of both types of tools popular these days.

Paid tools-

Small organizations avoid paid tools, but there are intrinsic benefits on using such paid tools for conducting the surveys using these paid tools. Few such tools are:

- **Survey logic**: This tool creates future questions based on what user has answered on current question. For example: If the question on the survey is like- Do you travel frequently? If the user answers yes, the next question might be asked as what mode of journey you prefer? On the other hand, if the answer to the first question is no then second question will not be asked.

- **Export data:** This tool helps you to export data on payment basis. Such data may be considered as of due interest and due importance as it is paid tool. No garbage will be collected in the database and the result may be the actually functional.

Free tools-

These tools are popular among low-budget organizations for which the budget is not allotted for buying tools or paying for their use. If the tools are free it does not mean that the

developer of such tools is not getting any income. In the age of internet today, advertising is of key use. If any tool is popular on the internet, various advertising will become source of income for them. Few of such popular free tools are:

[1] Google Forms- Google form is one of the popular free tool. It has following features:

Surveys   : Unlimited

Questions   : Unlimited

Respondents   : Unlimited

Custom design options : Yes

Data export options   : Yes

[2] SurveyMonkey- It is another popular free survey tool. If you have proper intuition, you may create survey in a minute. Further it may be shared on social platform to get survey. It has following features:

Surveys   : Unlimited

Questions   : 10

Respondents   : 100

Custom design options : No

Data export options   : No

[3] Typeform- Typeform is another tool that allows taking free survey online. It provides the survey creator to ask broad variety of questions and their categories. It allows using various HTML web components such as dropdown list, calendar control, multiple choices, picture choices, ratings, opinion scales, etc. Note that in a free version this tool has limitation on collecting hundred responses in a month, beyond that it is chargeable. It has following characteristics:

Surveys   : Unlimited

Questions   : Unlimited

Respondents   : 100/month

Custom design options : Yes

Data export options   : Yes

[4] SurveyLegend- It is one of popular as well as advanced survey medium with nice look-and-feel survey forms. It allows you to create mobile friendly, easy-to-use surveys on free basis. It has following characteristics:

Surveys   : 3 per account

Questions   : Unlimited

Respondents   : Unlimited

Custom design options : Yes

Data export options   : No

17.9   *DEMONSTRATION ON USING FREE ONLINE SURVEY*

To give or take online survey or online feedback few points needs to be clear before you progress. For the sake of the survey you need to be vividly clear about few points such as:

- Title of the survey is used appropriately with the relevance of the questions prepared.

- Number of questions should not be as many as it irritates you participant.

- Mode of answers should be user friendly too, otherwise participant may quite in-between. For example, few types of answers which are available to use while creating online surveys are multiple choice, picture choice, like/dislike, rating, ranking, slider, short answer, etc. But make sure the user should not get irritate while answering. Few
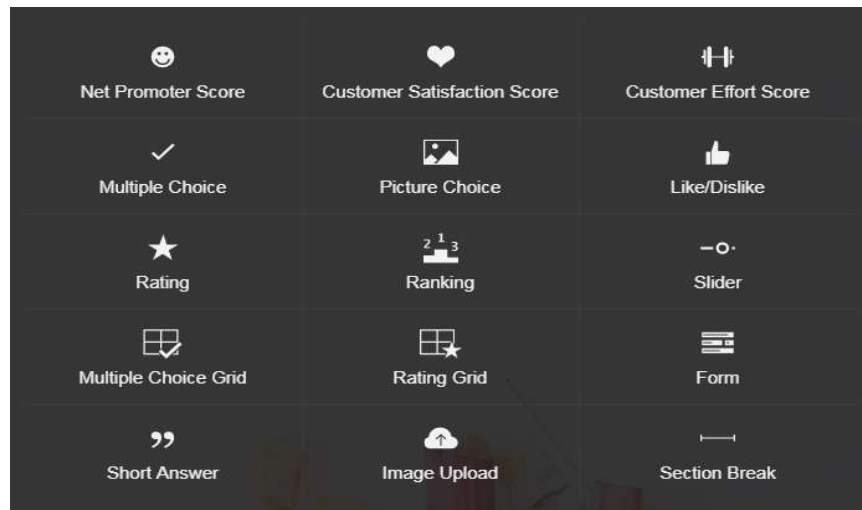
of them these modes of answers are also demonstrated in the diagram below:

Figure-Nature of question-answers used in survey

- The design of the survey should be designed by considering the contrast of colours used in foreground as well as background.

- Online surveys may be created for three computer user interfaces these are tables, interface, mobile interface and desktop interface. Each of them is shown in the diagram below respectively.

Figure- Various user interfaces for taking surveys.

- There must be good pre-planning before launching the survey online, because as start receiving the surveys, you need to analyse, summarize and process the valuable inputs as per given by the user.

Moreover, questions framed for the survey must be discussed with the business experts involved directly and indirectly involved in the promotional strategy for your business enterprise.

SurveyMonkey Online Survey Tool

Let's assume a company would like to take an online survey for checking the satisfaction survey. To demonstrate the free tool let's assume that there is a company which take the customer satisfaction survey online. What could be the questions for taking surveys, what could be the sequence of the questions, what type of questions such as closed ended or open-ended questions to be chosen during survey will actually affect the survey you are considering? In this demonstration, we are assuming that there are total ten questions which customers have to answer according to the choices provided. All these questions are depicted in the form of pictures as given below:

Question1- How likely is it that you would recommend this company to a friend of
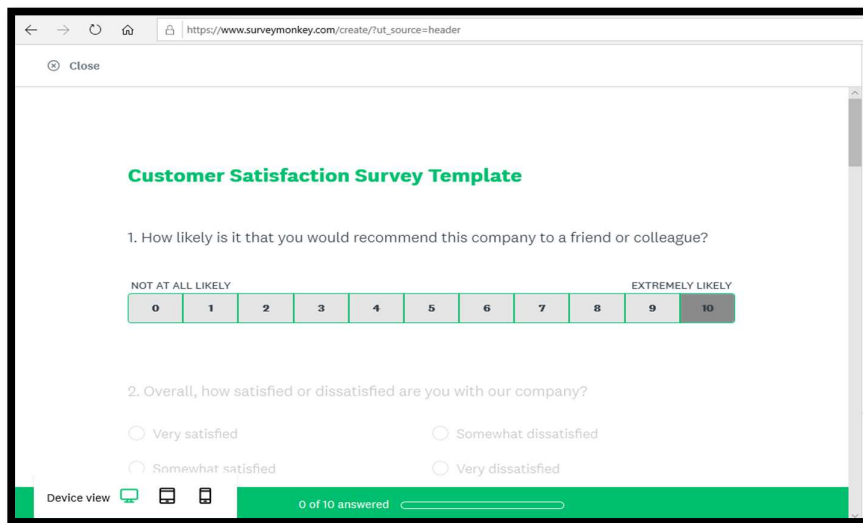
colleague?

Figure- First question asked during online survey

In the question asked in the figure above, we can clearly see that people just need to provide rating from 0 to 10 that how likely is it that they would recommend company to a friend or colleague. One just need to press on one of the totals of eleven tiles according to their specific choice. Another question is given as below:

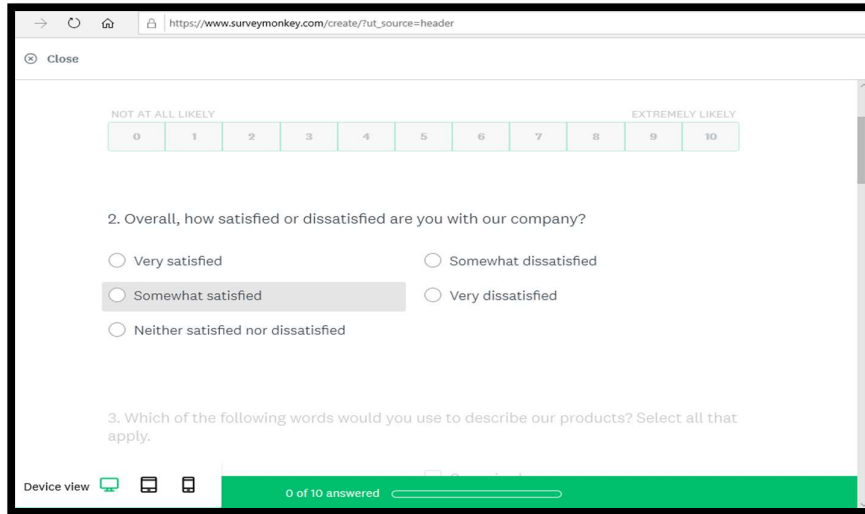**Question 2** Overall, how satisfied or dissatisfied are you with our company?

Figure- Second demonstration question with five options

Answer to this question has only one choice and the user may select only one choice. To provide such questions, we use options or choice boxes. Using this tool only one response may be given.

Question 3 Which of the following words would you use to describe our products? Select all that apply.

To answer this question, more than one answer may be given. For this purpose, we use check boxes where check means yes and unchecked means no. Even you may select all if your answer seems to be alike.
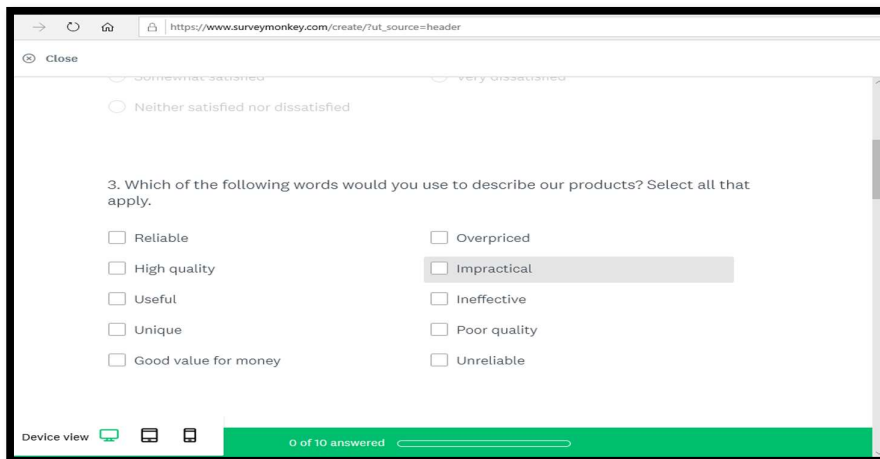

Figure- Third demonstration question using check boxes allows more than one choices

In the series various questions may be asked. Last two questions framed are given below:

Question 9 How likely are you to purchase any of our products again?

Question 10 Do you have any comments, questions, or concerns?

For question number 9, you may provide the options as given in the screenshot below:
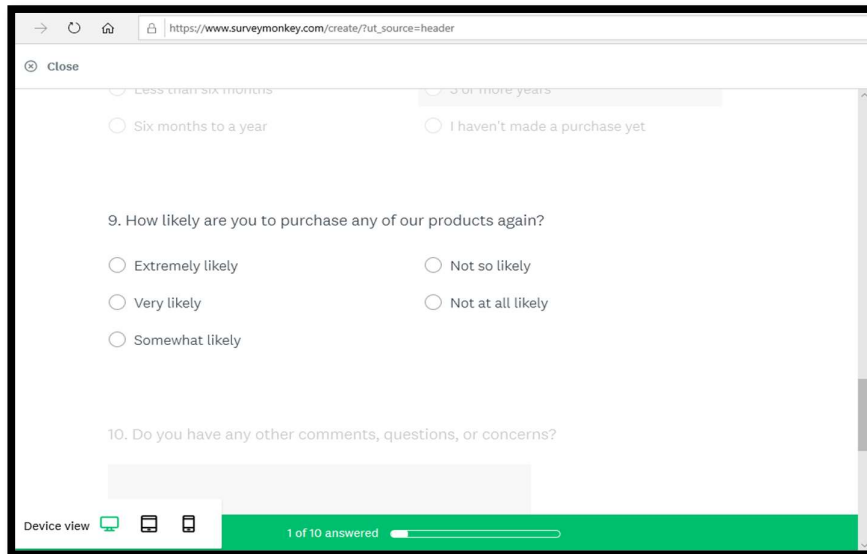

Figure- Ninth demonstration question

And in the final question we need to provide a text area in which the user will supply his answer in the form of a small paragraph. Finally, after giving response to all the questions, user is supposed to submit all his responses to complete the survey. But, how these responses are recorded for future analysis?

To answer it technically, whatever the questions were asked from the user are actually belongs to some database entry and their respective answers are updated on the database. This is achieved by one last interaction which is usually known as submission process. In this
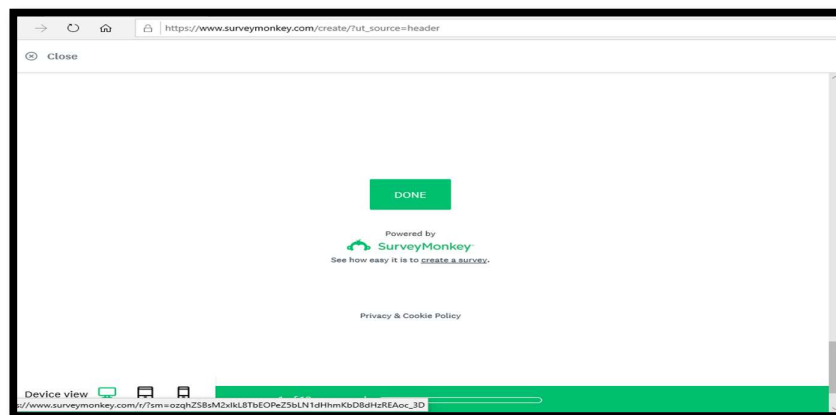
case, it is achieved by using a button named DONE as depicted in the screenshot below.

Figure- Submitting your survey finally

This is one demonstration on how you may think of doing online surveys and in appropriate ways. Similarly, you may try other free on the internet.

Why online survey in spite of paper-based survey?

There may be many answers to this question. As per this case, here the above demonstration may result in variety of ways. Few of these are suggested below:

- You may interact with your customers without physically reaching to them.

- It automatically adds benefits of the computing device such as speed, accuracy, diligence and many more. Even one survey may help in creating various results based on how they are used while processing the survey inputs into the variety of ways.

- Before framing the policies for future, you may ask your employees on various topics which directly or indirectly influence the growth of the organization. If any gap is found it may be rectified before preparing the survey questions.

- Even, the higher management of the organization must also be involved by taking their feedbacks on the framed questions.

And the list of the reasons may be long based on your domain and sub-domain expertise. Ultimately, such online tools will surely become the compulsory tools for survey and paper-based surveys will become obsolete soon.

What is to be done after receiving the survey?

Simply the answer is generalizing the user responses into mutual benefits. This reason implies the happiness of both the producer and the consumers because both of them are mandatory stakeholders for the business. The results may be presented in terms of updated or new policies, modification on the products or the services, etc.

Disadvantages of using digital survey practices

There are various advantages of digital surveys as it adds the power of ICT and the internet. Still, there are few points which must be considered and sometimes may be part of disadvantages. These are:

- Absence of physical interviewer
- Frauds using surveys
- Lack of hitting the actual respondents
- Lack of honesty on answers.

There may be other related disadvantages based on the types of survey you are conducting. Ultimately, the ICT and the inter-networking are driving the business these days. Moreover, artificial intelligence related surveys are under key consideration for conducting future

surveys as they will focus the authenticity, accuracy, avoidance of unreliable inputs and adding cognitive artificial intelligence power while conducting online surveys.

17.10 POINTS TO REMEMBER

- Doing survey gives a way to assess the things done in the past.

- Various mechanisms which may turn-out any kind of interaction with the valued customers is of due importance.

- Feedback is transparent way to assess the status of produced goods from its user's or customer's perspective.

- Conduction of feedback gives the actual picture of the business status and keenly helps the decision makers of the firm.

- Feedback helps progress in the sales of products and services.

- Building another layer of the customers is possible using surveys as it spreads the business through the customers.

- Survey is important for doing market research.

- Cross-sectional surveys are organized over a small sample out of huge population.

- Feedbacks are more direct as compared with the surveys.

- Survey exists to obtain the feedback from a single moment in time.

- Survey is static process, so for the business which is dynamic a proper sense must be developed on when to take feedback and when to go for surveys.

- The role of ICT and inter-networking is giving boost on conducting and utilizing the surveys.

- There are both paid and free tools available for conducting the surveys as well as feedbacks.

17.11 GLOSSARY

- Feedback- This marketing exercise allows customers to provide their views and concerns in a feel free manner about the product they use or the service they make use of. It is transparent way to assess the status of produced goods from its user's or customer's perspective.

- Survey- Survey is a process which gives you values of key importance about the products from its user's perspectives. It usually covers the areas which involve key marketers, feedback about the product, loyalty, customer reaction, buying behaviour, brand awareness, etc.

- Sample- Set of people who provide information about a product or service is commonly referred to as sample.

- Online Surveys- It comprises of variety of survey questions and may be easily send to the targeted respondents using electronic mail or other means of online system.

- Paper Surveys- Include using paper and then marking answers to the questions given on these papers. Such paper-based surveys are considered very useful in the areas which are affected by digital-divide. Such as remote areas where internet services are non-reliable for business surveys.

- Cross-sectional surveys- Cross-sectional surveys are organized over a small sample out of huge population. The time allotted for such surveys is also lesser as compared with other types of surveys. Such surveys summarize the pictures of the product or the service among its users in a speedy manner.

- Longitudinal surveys- This survey is very helpful for researchers to make a study and gather data for an extended time period.

- Trend Survey- This survey hits the thought process of the respondents for a particular time. It also studies the status of the people about how they change over a time for some particular product. This survey is helpful for such situation where the things are changing at particular time interval.

- Panel Survey- It is second type of the longitudinal survey and focuses to a particular and same set of respondents over a period of time. This survey is expensive as it is all about getting the fair inputs from the respondents.

- Cohort Survey- As the term means a group or the followers, in this survey respondents are categorized on particular criteria and areas. In this survey all what matters is the similarity and the group are usually meant to take survey on that particular similarity.

- Retrospective Surveys- This kind of survey is about collecting the data from the earlier period. It includes the previous knowledge and previous attitude or viewpoint of the respondent about a particular thing such as a product or the service.

- Questionnaire- A set of printed or written questions with a choice of answers devised for the purposes of a survey or statistical study.

17.12 CHECK YOUR PROGRESS

Descriptive type questions-

a)   What are the various categories of surveys based on their mode of deployment?

b) "From a general perspective both the feedback and the survey seem quite similar. Still there lies a fact that separates feedbacks from that of surveys." Justify the statement by providing clear points of distinctions between the two.

c) Due to the rapid increase in the IT enabled services a paradigm shift has been observed from paper-oriented work culture to an environment where tasks are computer oriented. Does this fact apply to feedback related practices as well? Elucidate.

d) What are the several tools available that help various product and service-based corporate to gather feedback from their customers to improve their venture performance.

e) Consider a scenario where a company plans to conduct an online survey to gather information about the satisfaction level of its customers for a product or a service that it offers them. What could be the questions and their appropriate sequence so that the survey comes out to be effective and successful?

Objective type questions-

a. SurveyLegent allows you to add ….. questions while preparing your survey.

b. The three computer user interfaces used to take feedbacks are ….. , ….. and ….. .

c. When we allow participants to submit more than one choice, the tool we use is ….. .

d. Few free survey tools are ….. , ….. , and ….. .

e. Few paid survey tools are ….. and ….. .

Answers-[a] Unlimited [b] Tablet, Mobile, Desktop [c] Multiple Choices [d] Google forms, Survey Monkey and Survey Legend [e] Survey Logic and Export Data

17.13 BIBLIOGRAPHY/ REFERENCES

- https://academic.oup.com/jcmc/article/10/3/JCMC1034/4614509, OXFORD Academic, Feb 2020.

- https://www.surveymonkey.com/welcome/sem/?program=7013A000000mweBQAQ&utm_bu=CR&utm_campaign=71700000059864065&utm_adgroup=58700005451367302&utm_content=43700049665608198&utm_medium=cpc&utm_source=adwords&utm_term=p49665608198&utm_kxconfid=s4bvpi0ju&gclid=Cj0KCQiAtOjyBRC0ARIsAIpJyGNMrw8z4uhi_7A1J6DpvUGp7O6uvDFEpC4VgTkTS_7gc0gh8nbHPYcaAgBYEALw_wcB, Survey Monkey, Feb 2020.

- https://www.questionpro.com/blog/what-are-online-surveys/, Question Pro, Dec 2019

- https://www.usability.gov/how-to-and-tools/methods/online-surveys.html, Usability.gov, Jan 2020.

- https://mopinion.com/what-is-an-online-feedback-form/, mOpinion, Jan 2020.

- https://blog.startquestion.com/7-reasons-why-customer-feedback-is-important-to-your-business-28e99c00eba7, Medium.com, Feb 2020.

- https://explorable.com/online-surveys, Explorable, Feb 2020.

- https://www.cfrinc.net/cfrblog/online-surveys-advantages-disadvantages, CFR(Communication for Research), Feb 2020.

17.14 SUGGESTED READINGS

- Employee surveys that make a difference, by Joe Folkman (PhD).
- The ultimate question, by Fred Reichheld.

UNIT- 18

DATABASE CONCEPTS

18.1   INTRODUCTION

A database is a collection of information that is organized so that it can be easily accessed, managed and updated. Computer databases typically contain aggregations of data records or files, containing information about sales transactions or interactions with specific customers. The DBMS is the software which is used to manage database is called Database Management System (DBMS). For Example, MySQL, Oracle etc. are popular commercial DBMS used in different applications. DBMS allows users to perform the following tasks:

- *Data Definition*: It allows us the creation, modification and removal of definitions or structures that defines the organization of data in the database.

- *Data Updation*: It allows us the insertion, modification and deletion of the information/data in the database.

- *Data Retrieval*: It allows us in retrieving/accessing of data from the database which can be used by applications to achieve various objectives.

- *User Administration*: It allows us in registering and monitoring database users, it promotes the enforcement of security of database, monitoring performance is another achievement, maintenance of data integrity, dealing with concurrency control and recovering of data corrupted due to various unexpected failures.

Database Design is a collection of various processes which facilitate the designing, development, implementation and maintenance of database management systems i.e., DBMS. Database designed by using certain rules are quite easy to maintain, it also improves a consistency of the data and are also cost effective in terms of a storage cost. As the user of the database a database designer will suggests us that how the data elements are correlated and what kind of the data is to be stored in the database. The main concerns behind the database designing is to produce the logical and physical design models of the proposed database system.

A logical model of the database focuses on the data requirements and a stored data is always independent of its physical considerations. This model of database makes us not to concern about where and how to store the database physically. Whereas, A physical data design model involves translation of a logical design of the database onto a physical media by using various hardware resources and software systems like as database management systems (DBMS).

18.2   OBJECTIVES

After the successful completion of this unit, you will be able to-

- Understand the role of Database.
- Know about the needs of Database and DBMS system.
- Know about the types and merits of Database and DBMS.
- Know about the process of Normalization.
- Know about ER diagram and its need.
- Know about SQL and its classification.

18.3   DATABASE IN DIGITAL MARKETING

Database concepts can also be use in marketing of various formats. It promotes the collection of customer's data like name of customer, addresses details, emails addresses, contact numbers, various transaction histories, customer support tickets, and so on. The information collected is then analyzed and used for creating a personalized experience for each customer, or to attract potential customers.

Who needs Database for Digital Marketing?

In today's world multiple businesses are using various database techniques for refining their direct marketing strategies, it also includes finance companies, various retailers, companies having technology expertise, internet service companies, insurance companies, and different Business to Business companies.

Usage of Database in marketing is particularly useful for outsized companies, which already have huge customer base, it also generates huge amounts of transactional data. The larger the initially collected data set, the more opportunities are generated for finding groups of customers and/or prospects which can be achieved by making customized communication.

Many of those well-built companies are attending the conferences or exhibitions organized by Direct Marketing Association's annual National Center for Database Marketing, where various companies are making the discussion on how to improve database marketing. In 2011 various Exhibitors like American Express, Experian Marketing, Pitney Bowes, and the SAS Institutes have organized the conferences on database marketing. Some more companies like Microsoft, Farmers Insurance, General Motors, IBM, and the Whirlpool Corporation are recognized for their excellent performance with database marketing.

Benefits of Database Marketing

In today's world consumers are expecting a personalized experience with the brand. To deliver this, a marketing company needs a specified view of each customer across every touchpoint. By making the analysis of the collected data the marketing companies can only understand the customer's journey and keep them in a meaningful way. Use of database for various marketing strategies makes that easier. Database designed for customer can allow us the following:

- Finding the customer groups – from your most dedicated, highly-valued customers to first-time customers and occasional buyers.
- Making of detailed view of customer segments which was based on demographics, behaviours, or even personal interests of the customers.
- Creating of highly personalized messages for both current and forthcoming customers
- Determine the best channel and time for engaging customers
- Improving our marketing efficiency by not wasting much time and money in making campaigns to those who are unlikely to respond as per our requirements.
- Creating and building effective loyalty programs which provides the suitable incentives schemes for repeated sales.

Improving of customer support service by providing support staff with a 24x7 view of the customer's satisfaction with our brand.

18.4 DATA MODELS

Data models defines how the logical structure of a database is created or developed. Data Models are the basic-blocks which introduce the abstraction in a DBMS. Data model defines how the data is connected to each other and how they are processed and stored inside the system.

While creating the database, initially the data model could be flat data-models, where all the data are to be kept in the same area. Previously, data models were not so logical, hence they are prone to introduce lots of redundancy and various anomalies.

Type(s) of Data Model

While talking about data model there are three different kind of data models: i.e., conceptual data models, logical data models, and physical data models, and each one of them have a specific concern. The data models are used to represent the data and how it is stored in the database for setting the relationship between data items.

- **Conceptual Data Model:** This data Model is use to define what the system contains. This model is mostly created and used by Business stakeholders and Data Architects. The function of this model is to organize, scale and define business concepts and rules.

- **Logical Data Model:** This defines how the system should be implemented which is independent of the DBMS (Database Management System). This approach of database is typically created and developed by data architects and business analysts. The objective of this technique is to developed the technical mapping of regulations and data structures associated with database design.

- **Physical Data Model:** This part of data model describes the database; it specifies that how the system would be implemented by using a specific DBMS (Database Management System). This approach is typically developed by database administrator (DBA) and developers. The main objective of this approach is to devlop an actual implementation of the database.
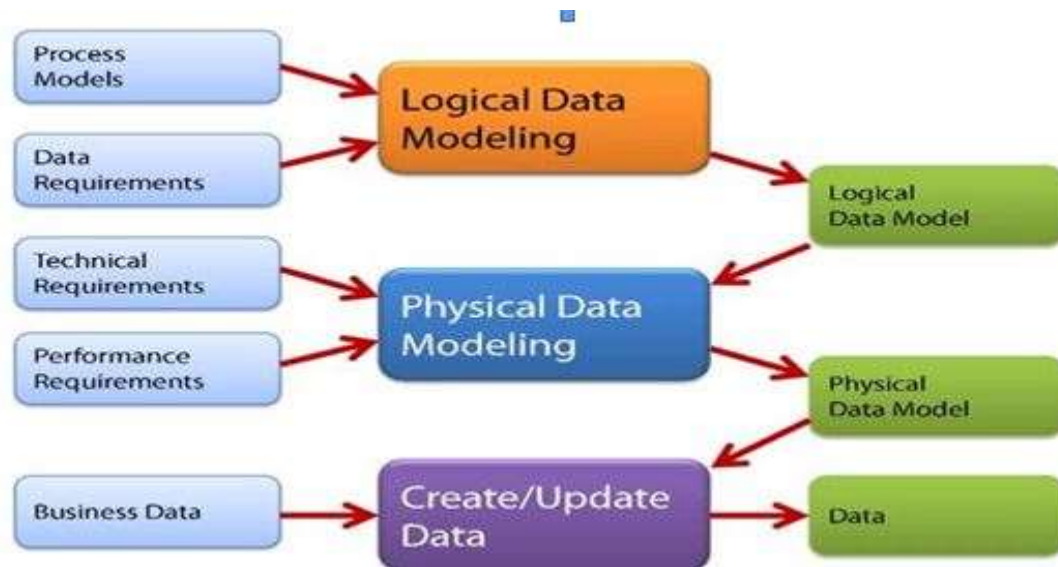
Figure 1: Data Model

18.5   DATABASE DESING & RULES

Normalization is the process of database design which reduces the data repetition and eliminates the unwanted characteristics like Insertion, Update and Deletion Anomalies. The rule of normalization makes the division of larger tables into smaller tables and associate them by using relationships. Normalization is used mostly for the following two purposes:

- Eliminating repeated(useless) data.

- Ensuring the role of data dependencies i.e., data is logically stored.

While we are not using the normalization/design rules anomalies are the main concerns that needs to be resolved with the assistance of different rule(s). Some of the major anomalies we face are discussed below:

Roll_Num	Name	Branch	Head	Contact
1	Anil Kumar	CSE	Dr Ajay Tyagi	676767676
2	Ravi Kumar	CSE	Dr Ajay Tyagi	676767676
3	Neha Sharma	CSE	Dr Ajay Tyagi	676767676
4	Rakesh Saxena	ME	Dr Amrita	767676767
5	Abhinav Kumar	ME	Dr Amrita	767676767

While going through the above table we have identified the following anomalies:

Insert Anomaly

Suppose, if we want to insert the record for a new admission, until and unless a student opts for a branch, the student data cannot be inserted in a table, or else we need to enter NULL as the branch information.

Update Anomaly

This anomaly deals "if Mr. Ravi Kumar (as per the table) leaves the college? or is no longer associated as the HOD of department of computer science? In this situation all the student records named with Mr Ravi Kumar needs to be updated, and if in case if we miss any record of Mr Ravi Kumar, it will lead to a term called data inconsistency". This is known as Updation anomaly.

Delete Anomaly

As per the above **Student** table, we have stored two different kinds of information's i.e. Information related to Student and Branch information of the student. Therefore, while ending of the academic year, if records of student are deleted, we will also lose the information related with their branch. This is known as delete anomaly.

Therefore, for managing the above-mentioned anomalies we need to follow the various rules associated with the database design, which is also known as **Normalization**.

Normalization is the process which divided into the following heads or Normal Form(s):

1. **First Normal Form (1NF)**

   If we need a table to be in 1NF then we need to follow the below mentioned guideline(s).

- A field must be Atomic i.e. It should only have single value.
- Columns are from same domain.
- All columns must be of unique names.
- Order and sorting of data do not matter.

2. **Second Normal Form (2NF)**

If we need a table to be in 2NF then one need to follow the below guideline(s).

- Table should be in the 1NF i.e. First Normal form.
- It also needs to be in Partial Dependency.

3. **Third Normal Form (3NF)**

A table is said to be in 3NF Third Normal Form then we need to follow the guideline(s).

- It must be in 2NF i.e. Second Normal form.
- Removal of Transitive Dependency.

4. **BCNF (Boyce Codd Normal Form)**

Boyce and Codd Normal Form is also known as strict form of 3NF. This form deals with the certain type of anomalies which cannot be handled by 3NF. A table is in BCNF, if it does not allow the overlapping of candidate keys then it is said to be in BCNF. For a table to be in BCNF, following rule(s) must be there

- Table or relation must be in 3rd Normal Form
- For each (FD)functional dependency (X → Y), X should be a super Key.

5.   Fourth Normal Form

For a table to be in 4NF i.e., Fourth Normal Form then,

- It is in the BCNF (Boyce-Codd Normal Form).
- It doesn't have Multi-Valued Dependency (MVD).

6.   Fifth Normal Form

Fifth Normal Form (5NF), also known as Project-Join Normal Form (PJNF),it is a level of normalizing the database designed which is used to reduce repetition in relational databases (RDBMS) by isolating semantically related multiple relationships.

18.6   *ENTITY RELATIONSHIP DIAGRAM (ER-DIAGRAM)*

Entity-Relationship (ERD) Diagram is based on the notation of real-world entities and relationships between them. While describing the real-world scenario into the database model, the ER Diagram creates entity set, relationship set, general attributes and constraints. ER Model is mostly recommended to be used for the conceptual design of the database. ER Model is based on-

- Entities and their attributes.
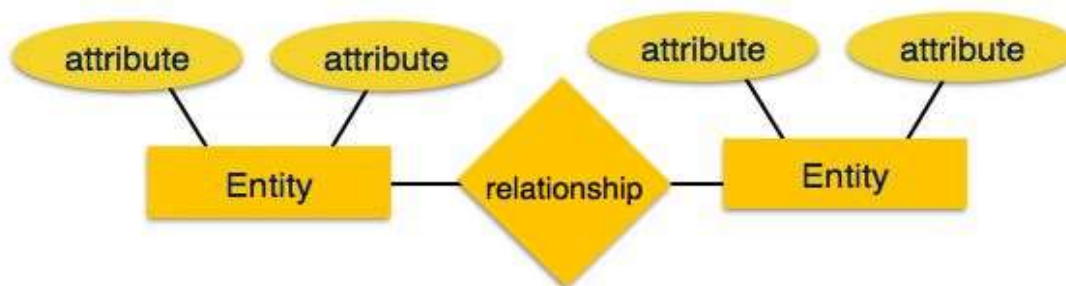- Relationships among various Entities.

Figure 2: ER Model

Entity- An entity is a real-world object having properties known as an attribute. Every attribute is defined by a set of values known as domain. For example, in a college database, a student is considered as an entity. Whereas the student has various attributes like name, age, class, etc.

Relationship- The logical association between entities is known as relationship. Relationships are mapped with entities through various techniques. Mapping of cardinalities is defined as the number of associations between two entities.

Relationship is divided into the following type(s)-

- **One to One:** When we are having relationship between two entities only then it is also known as one-to-one relationship.
- **One to Many:** When a single entity is connected with many entities then it is also known as One-to-Many relationship.
- **Many to One:** When more than one entity is associated with a single entity then it is known as many to one.
- **Many to Many:** When more than one entity is associated with many entities then it is known as many to many.

18.7 INTRODUCTION TO SQL

SQL stands for Structured Query Language. It is designed for the management of data in a relational database management system (RDBMS). It is pronounced as S-Q-L or sometime known as See-Qwell. SQL is a language of database, which is used for creating the database, deleting the database, fetching the records, and modifying the records etc.

The chapter will give you a quick start to SQL (Structured Query Language). It covers most of the contents required for a understanding the basics Structured Query Language and to get an experience of how it works. SQL is used with all the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, Sybase, Informix, Postgres and SQL Server use SQL as their standard database language. Some of the commonly used RDBMS/DBMs are mentioned below: −

- MS SQL Server using T-SQL,
- Oracle using PL/SQL,
- MS Access version of SQL is called JET SQL (native format) etc.

18.8 TYPES OF SQL

The basic SQL commands which is use to interact with relational databases are CREATE, SELECT, INSERT, UPDATE, DELETE and DROP. These commands are classified into the following groups –

Data Definition Language (DDL)

DDL or Data Definition Language consists of the commands that can be used to describe the schema of the database. It simply deals with descriptions of the database schema and is specifically used to create and modify the structure of database objects in the database.

CREATE

Command is use to create the structure of the table/database.

Syntax [For creating the database]

Create database college;

Syntax [For creating the table]

CREATE TABLE table_name(

column1 datatype,

column2 datatype,

column3 datatype,

.....

Column N datatype,

PRIMARY KEY(one or more columns));

Example:

create table student(roll int,name char(20),address char(20))

ALTER

The ALTER TABLE command is used to add, remove, or modify the columns in an existing table.It can also be used to add and drop various constraints (rules) on an existing table.

Syntax:

Use to add column in a table

ALTER TABLE table_name

ADD column_name datatype;

Example:

Alter table student add state char(20);

Use to drop the Column

ALTER TABLE table_name

DROP COLUMN column_name;

Example:

Alter table student drop column state

Use to modify the column

ALTER TABLE table_name

ALTER COLUMN column_name datatype;

Example:

Alter table student

Alter column address char(10)

DROP

The DROP TABLE command is used to drop an existing table including data in a database.

Syntax:

Drop table table_name

Example:

Drop table student

Data Manipulation Language (DML)

The SQL commands that deal with the manipulation of data present in the database belong to DML or Data Manipulation Language and this includes most of the SQL statements.

SELECT

The SELECT command is used to select data from the table.

Syntax:

SELECT column1, column2, ...

FROM table_name;

Example:

Select * From Student;

OR

Select Roll,Name From Student;

INSERT

The INSERT command is used to insert the new records in a table.

Syntax:

INSERT INTO table_name (column1, column2, column3, ...)

VALUES (value1, value2, value3, ...);

Example:

INSERT INTO student(roll,name,address) values(1,'ak','hld');

UPDATE

The UPDATE command is used to modify the existing records/data in a table.

Syntax:

UPDATE table_name

SET column1 = value1, column2 = value2, ...

WHERE condition;

Example:

UPDATE student

SET name="jk"

WHERE name="ak";

DELETE

The DELETE command is used to delete the existing data/record from the table.

Syntax:

DELETE FROM table_name

WHERE condition;

Example:

DELETE FROM student

WHERE name="ak";

Data Control Language (DCL)

DCL includes commands such as GRANT and REVOKE which mainly deals with the rights, permissions and other controls of the database system. Examples of DCL commands: GRANT-gives user's access privileges to database.

GRANT

SQL Grant command is specifically used to provide privileges to database objects for a user. This command also allows users to grant permissions for other users too.

Syntax:

GRANT privilege_name

ON object_name

TO {user_name |PUBLIC |role_name}

[WITH GRANT OPTION];

Example:

Grant create table to SCOTT;

REVOKE

The REVOKE command removes the user access rights or privileges to the database objects.

Syntax:

REVOKE privilege_name

ON object_name

FROM {user_name |PUBLIC |role_name}.

Example:

REVOKE CREATE table from scott;

18.9   POINTS TO REMEMBER

- Database is used to store the contents.
- DBMS is a software which is use to manage the data in a database.
- SQL is a command use to work with a database.
- SQL is further classified as DDL, DML, and DCL.
- Create, alter and drop commands belong to DDL category.
- Select, Insert, Update and Delete commands belong to DML category.
- Grant and Revoke command Belongs to DCL category.
- ORACLE, MSQL and MS-Access are some common RDBMS.
- ERD- Entity Relationship Diagram.
- ER Diagram is use to represent our database logically.
- Normalization is a process use to reduce the redundancy.
- Data Models are used to show the physical representation of our database.

18.10 GLOSSARY

- DBMS: Database Management System.
- RDBMS: Relational Database Management System.
- ER: Entity Relationship Diagram.
- DDL: Data Definition Language.
- DML: Data Manipulation Language.
- DCL: Data Control Language.
- SQL: Structured Query Language.
- PL: Procedural Language.
- NF: Normal Form.
- BCNF: Boyce Codd Normal Form.

18.11 CHECK YOUR PROGRESS

Descriptive type questions-

a) Define Database.

b) Illustrate all the available RDBMS.

c) Compare traditional system with DBMS.

d) Discuss SQL and its classification.

e) Design a table college with following attributes: College_Id, College_Name, College_Address

f) Define Normalization and its types.

Objective type questions-

a) RDBMS allows relationship between tables. [T/F]

b) Normalization is a progressive process. [T/F]

c) BCNF is also known as 3.5 Normal Form. [T/F]

d) One cannot remove repetition through Normalization. [T/F]

e) -------- NF is use to remove transitive dependency.

f) --------- is an open-source RDBMS.

Answer (Objective Type Question)-

[a] True   [b] True   [c] True   [d] False   [e] 3NF   [f]MySQL

18.12 BIBLIOGRAPHY/ REFERENCES

- https://www.w3schools.com/sql/sql_update.asp.
- https://beginner-sql-tutorial.com/sql-grant-revoke-privileges-roles.htm.
- https://www.guru99.com.
- https://www.javatpoint.com/dbms-tutorial.

18.13 SUGGESTED READINGS

- https://examupdates.in/database-management-system/#Database-Management-System-Pdf-Notes.
- https://www.tutorialspoint.com/.
- https://docs.oracle.com/cd/E11882_01/server.112/e40540/intro.htm.