CONTEMPORARY ISSUES IN
DIGITAL MARKETING

Professor Dr. Shaikh Aftab Anwar

Dr. Imran Baig Mirza

Contemporary Issues in Digital Marketing

NEX GEN
PUBLICATIONS

India | UAE | Nigeria | Uzbekistan | Montenegro | Iraq | Egypt | Thailand | Uganda | Philippines | Indonesia
www.nexgenpublication.com

Contemporary Issues in Digital Marketing

Edited By:

Professor Dr. Shaikh Aftab Anwar

Principal, Poona College of Arts, Science and Commerce, Pune

Dr. Imran Baig Mirza

Assistant Professor, Department of BBA (Computer Application),
Poona College of Arts, Science and Commerce, Pune

First Impression: March 2023

Contemporary Issues in Digital Marketing

ISBN: 978-81-961857-6-3

Rs. 1000/- ($80)

DISCLAIMER

PREFACE

Digital marketing has become an indispensable part of the modern business landscape. With the ever-growing popularity of digital technologies, businesses must stay up-to-date with the latest trends in digital marketing to remain competitive in today's market. As a result, the field of digital marketing is continuously evolving, and new challenges and opportunities arise regularly.

This edited book on "Contemporary Issues in Digital Marketing" aims to provide insights into the latest developments in digital marketing and to highlight some of the challenges that businesses face when implementing digital marketing strategies. The book is intended to serve as a comprehensive guide for both academics and practitioners who are interested in understanding the latest trends and best practices in the field.

The book covers the latest trends in digital marketing, including the use of artificial intelligence (AI) and machine learning (ML), social media marketing, influencer marketing, and search engine optimization (SEO). These topics are essential for businesses that want to leverage the latest digital marketing tools to improve their marketing strategies.

The book focuses on the challenges that businesses face when implementing digital marketing strategies.

The book also covers emerging topics in digital marketing, including the use of virtual and augmented reality, voice search, and the role of digital marketing in the era of the Internet of Things (IoT). These topics are becoming increasingly relevant as businesses look for new and innovative ways to engage with their customers in the digital world.

Overall, this edited book provides a comprehensive overview of the contemporary issues in digital marketing. It is a valuable resource for anyone who wants to stay up-to-date with the latest trends and best practices in the field of digital marketing.

ACKNOWLEDGEMENT

TABLE OF CONTENT

DIGITAL MARKETING AUGMENTING TRADITIONAL MARKETING

Dr. Sucheta S. Yambal

Department of Management Science Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra, India

ABSTRACT

With tremendous competition in market, attracting customers is a challenge in itself. Analyzing existing customers along with deciding on the strategies to retain customers and focusing on targets at the same time, is indeed very tough. Traditional marketing where flyers, print media advertisements, billboards, newsletters etc. are used to make the details of a product/ service reach to the customer/ consumer. Whether the marketing done is reaching the targeted audience or not is a different study in its own. Now-a-days, rather than solely relying on traditional ways of marketing, people are opting for digital marketing that has better reach and has proved to be cost effective too.

This study aims to identify ways in which conventional marketing is different from online marketing; also, how traditional marketing is being augmenting digital marketing thus adding to the effectiveness of traditional mode of marketing.

Keywords: digital, virtual, marketing, internet, online marketing

1. INTRODUCTION

1.1 Traditional / Conventional Marketing

According to marketing-schools.org, Traditional marketing has a comprehensive range that includes different forms of advertising and marketing. Conventional marketing is experienced by all and is one of the most encompassing types that is viewed and heard by larger set of customers' day in and day out. Traditional marketing strategies fall under one of four categories: print, broadcast, direct mail, and telephone.

Conventional Marketing Categories

- **Print**
- **Broadcast**
- **Direct mail and**
- **Telemarketing**

Print Marketing is the oldest form of traditional marketing where hard copy or printed paper carrying the advertisement is used to showcase the product for sale. Mostly, print marketing usually refers to advertising space in newspapers, magazines, newsletters, and other printed materials intended for distribution.

Broadcast Marketing is the type of marketing that includes television and radio broadcasts. Advertisements done on radio and television fall under this criteria and covers a large number of users. Radio makes use of audio transmission to market the products or services whereas television uses both audio and video mode of transmission of advertisements for effective communication to its viewers. Radio was used prior to television as a selected mode of advertisement; both these modes started in early 1900's.

Direct Mail Marketing makes use of catalogs, fliers, information brochures, cards that are sent by using postal services that started even prior to broadcast marketing thus has been a popular mode of marketing ever since. This facility makes use of existing postal network that are popularly used to drop mails at doorsteps thus do targeting marketing to ensure advertisements done reaches at the aimed address.

Last but not the least is, **Telephone marketing**, which is more popularly known as telemarketing, is the method of contacting and cajoling customers in buying a product or a service by using telephone as a medium. This mode of communication is very popular and with the mushrooming of call centers, effectiveness of this method can be easily judged. This is one of the aggressive way of pursuing customers in to buying products thus might also cause nuisance in daily lives of general public.

1.2 Digital Marketing

Electronic devices/ gadgets when are used to market product or services constitutes digital marketing along with the internet facility. Here various measures are used to conduct promotional activity that is mostly done online. This type of marketing or ad campaign makes use of various electronic devices to display the advertisement such as laptops, mobile phones, computer desktops, etc. however odd this may sound but using television as a medium to broadcast advertisement falls under traditional mode of marketing and is not considered as online marketing. Digital marketing along with conventional mode of marketing has better reach and reaches every nook and corner with ease. Customers that are covered by both types of marketing make this arena bigger and better.

1.3 What is Digital Marketing?

Digital marketing, which is also called online marketing, is the way of campaigning brands and products to connect with potential customers using the internet and other forms of digital communication. This includes not only email, social media, and web-based advertising, but also text and multimedia messages as a marketing channel.

In other words, if a marketing promotion involves digital communication, it's digital marketing.

According to one of the major survey agency report, more than 5 billion users are accessing internet globally. With this immense stretch one can easily identify the amount of customers accessibility that can be done by using this online mode of

communication. Digitals channels are promoting various products and brands in more than one possible ways. Not only the advertisements that we see while using YouTube, or the audio ads that we listen to while listening to the songs using an app, web-based advertisements or some social media ads are now more or less part-and-parcel of our lives. More focus is laid on targeted marketing and thus low cost makes it even more lucrative for even small businesses.

2. COMPARISON BETWEEN CONVENTIONAL AND DIGITAL MARKETING:

The table given below establishes few differences between the conventional marketing and digital marketing. Definitely, the immense reach and increasing users of internet is an added advantage to online scenario. Conventional ways of marketing has always been around but with ease of use and greater agility, digital marketing is finding its way to urban population for better results.

Table1: Comparison between Conventional/ Traditional and Digital Marketing Forms

Conventional/ Traditional Marketing	Digital Marketing
Doesn't need Internet.	Needs internet to access digital platform.
This is also known as offline or conventional marketing	Another name for Digital marketing is online marketing.
Limited customer/ user reach.	Global customer/ user can be reached.
Relatively expensive when compared with the target it's supposed to achieve. Also needs extensive and elaborate plan.	Cost effective and faster. Simpler to plan.
Difficult to incorporate changes in the already set schedule.	Plan and implementation of the plan can be changed at any moment of time.
Physical stuff like posters, flyers, billboards might be involved.	Most of the work is done with soft copy of the advertisement only.
Static in nature.	Dynamic in nature.
Various time-zones might not be targeted at the same time. Definitely does not provide location and time- independence completely.	Various time-zones can be targeted at the same time. Thus provides location and time- independence.
Cannot be done any time of the day.	Any time of the day can be used to do digital marketing.
Cannot be interactive.	Can be interactive.
Static feedback mechanism	Dynamic feedback mechanism.
Reiteration needs fresh investment of time and money.	Most of the content can be reused with minimal changes in previous plan and cost.

3. MODEL FOR DIGITAL MARKETING

Figure 1: Digital Marketing Model.

Source: www.benjaminslap.be

The STDC model: The model depicted above is derived from benjaminslap.be with courtesy of Avinash Kaushik, Marketing Evangelist for Google and author of several books about web analytics. Here STDC stands for See – Think – Do – Care is self-explanatory to the extent that we understand what it speaks of just by taking a look at it. It basically takes note of the customer's viewpoint than to be focused on company's perception. This very idea makes this model different from various other models that have been brought to the front in past ten years **or so.** Basically, the phases describe four different audience intent clusters. It addresses an ever recurring thing in marketing. It's not only about getting your message to your customers or prospects. It's about getting the right message to the right customer at the right time. This model beautifully simplifies that problem. Avinash offers comprehensive examples how to narrow down audiences in different consideration stages. He points to the fact that a lot of marketing efforts are only addressing people who are about to convert (Do stage). This discards audiences that are reachable while they are still in the early phases of the funnel (which he identifies as See and Think). The Care stage shown here is all about loyalty building, remarketing and return business.

STDC has widely been implemented the last few years. With digital metrics becoming ever more accurate, marketeers are able to map the customer journey in detail. One can implement the model for all the typical online tools that are for content marketing, SEO, SEA, social, display, affiliate, or any other. It makes one understand which tool can be most useful in a particular stage of the customer journey.

4. HOW TRADITIONAL MARKETING AND DIGITAL MARKETING GO HAND IN HAND?

Finding the advantages of both can result in better and result-oriented outcomes with respect to customer acquisition. As traditional marketing is a very old and reliable way of addressing audiences even though with limited reach gives 'active customer acquisition' whereas with advancing technology and global reach, digital or online marketing aims for 'passive customer acquisition' with huge potential audience. Television and Newspaper ads have been around for more than ten decades now and 'e-way' of doing things are need of the hour. Best of both worlds can facilitate helm the rudder in right direction with influential scope and trust.

5. CONCLUSION

In crux we can say that conventional ways of marking that involves 4 P's have evolved and has a mandatory D in it; here 'D' stands for digital. While the entire mankind is moving into digital and virtual era, how can we expect marketing to remain unscratched by this global phenomenon? Many researches and studies have proven effectiveness of digital marketing that is an upcoming concept too. With the volatile thought process of a customer that changes too often, visual impact of a product is a must. With repeated exposure of a same product popping up every 3-4 minutes lures customers in to buying thus is quite reliable. Conventional modes of marketing are not feasible for every product or brand. There are opportunities provided by digital way of marketing such as cost-effectiveness, immense reach, interactive platform that makes this much more palatable in this 'Electronic Market' of recent times. But we are yet to reach a phase where we are relying only on online marketing for campaigning for our products since we also don't want to leave the customers of traditional marketing.

6. REFERENCES AND BIBLIOGRAPHY

[1]   P. Ankita and K. Naveen, "Review of digital marketing with latest tools and its effect on business models," International Journal for Research in Applied Science and Engineering Technology, vol. 8, no. 5, May., pp. 2321-9653, 2020.

[2]   P. C. Chandini, P.S. Divya and D. Dincy, "Digital marketing in the MSME sector of Kerala," Mahatma Gandhi University, Kottayam, 2020.

[3]   P. Kotler and G. Armstrong, "Marketing: an introduction," Upper Saddle River. NJ: Pearson Prentice Hal, 2009.

[4]   P. Kotler, "Marketing management," The Millenium Edition, London: Prentice Hall International Inc., 2000.

[5]   R. D. Todor, "Blending traditional and digital marketing," Bulletin of the Transilvania University of Braşov, Series 5, Economic Sciences, vol. 9, no. 1, pp. 51-56, 2016.

[6]   S. N. Singh, P. Kumar, and A. K. Dubey, "Digital marketing: necessity & key strategies to succeed in current," International Electrotechnical Commission: Geneva, Switzerland, pp. 14–19, 2016. [Abstract]. Available: https://www. iec.edu.in/wp-content/ uploads/ 2016/ 01/ 3_-Dr.S-N-Singh-et-al._DIGITAL-Marketing-p.14-19.pdf. [Accessed September 12, 2020].

[7]   Mr. Deepak Santosh Pawar, Mr. Dilip. A. Patil, Impact of Digital Marketing on Business International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 07 Issue: 02 | Feb 2020 www.irjet.net p-ISSN: 2395-0072,© 2020, IRJET, pp. 697

[8]   Ms. A.Lavanya. ,Mrs.M.Radhikamani., International Journal of Creative Research and Thoughts, Vol 9, Issue 5, May2012, ISSN2320-2882, pp-678-684.

[9]   Arunprakash N#1, Aswin Kanna G.S*2, Aravindh Raj G#3, Dr.Vasudevan R#4, A Comparative Study On Digital Marketing Over Traditional Marketing, Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 6483-64991.

[10] Valentina Simona Pașcalău1, Ramona Mihaela Urziceanu2, Traditional Marketing Versus Digital Marketing, Agora International Journal Of Economical Sciences, Aijes, Issn 2067-3310, E – ISSN 2067 – 7669, VOL. 14 (2020)

A STUDY OF TRADEMARK INFRINGEMENT, DOMAIN NAMES DISPUTE, AND CYBERSQUATTING IN DIGITAL MARKETING

Madhavi Malge

Assistant Professor, Department of Law, Shivaji University, Kolhapur

ABSTRACT

In the modern world digital marketing plays an important role in bringing a product before people. Digital Marketing has become part of marketing strategy. It is the best way of reaching prospective consumers all over the world. It creates awareness regarding companies' brands in very less time. An important part of Digital marketing is developing a website and registering the domain name. For any Company or Brand, its trademark and domain name plays an important role in developing its goodwill. It is to be noted that trademark registration is not the registration of a domain name. These two things are different from each other. It gives cybersquatters an opportunity to do unauthorized registration and use of internet domain names that are identical or similar to popular trademarks, service marks, and companies' names. This chapter deals with the concept of digital marketing, trademark, trademark infringement, cybersquatting, and domain name. The chapter also deals with Domain names dispute, which is an important challenge in digital marketing.

Keywords: Digital marketing, trademark, cybersquatting, domain name, domain name disputes

INTRODUCTION

There are five orientations of any commercial activity viz. production, product, selling marketing, and social marketing. In the modern era, especially after the liberation of the economy, digital marketing has received paramount importance. As to reach prospective consumers all over the world in less time, digital marketing plays an important role. It is a normal tendency of consumers, to try to get the best product at less price. Companies try to make the product available according to the needs of the consumers at comparative prices. After production and deciding its prices, one of the important issues that arise before the companies is to sell the product internationally. Technology, especially digital technology has made this work very easy and effective. Digital technology brings a product before consumers in an effective manner. However, there are certain challenges in digital marketing. People, especially in developing countries, are not or are less aware of the internet, in many remote areas, where electricity can not reach, computers and the internet cannot reach. Fear of using digital technology is also an important challenge. Popular companies face certain other challenges like trademark infringement, domain name disputes, and cybersquatting. [1]

The Concept of Digital Marketing

Digital marketing is online marketing. It consists of the promotion of brands, to connect the consumers, who use the internet and other forms of digital communication. Companies connect online consumers through emails, social media, and web-based advertisements. When any marketing campaign consists of digital communication. It is called digital marketing. [2]

Importance of Digital Marketing

"It is the observation of Infidigit that, nearly 3.2 billion people use and are active on social media platforms every day. It is the analysis of the Global World Index, an individual spends nearly 2 hours and 22 minutes on the internet on average. 98 percent of the sales quota is achieved through using of social media and most importantly 51 percent of the consumers identify the product identify brands using their mobile phones".

There are certain advantages of digital marketing like a better reach to consumers globally within a very less period of time. It results in an increase in sales, companies can reach online customers without or with comparatively fewer sales teams, So, it is cost-effective and faster as compared to traditional marketing. Maintaining good consumer relations is one of the important advantages of digital marketing. [3]

Challenges in Digital Marketing

1. Consumer choices always change, and it is not easy for companies or brands to cope immediately with their choices.

2. Companies need always bring innovations presenting their products before the consumers in an attractive manner. Every time bringing new innovations in content presentation is a tedious and time-consuming task.

3. Digital marketing is under constant fear of complying with the laws related to the country, in which they carry out digital marketing.

4. It is the need of every commercial undertaking to develop an attractive website, and register its trademark and domain name, which represents the company in a global market. [4]

5. Digital marketing faces huge challenges from trademark infringement and domain name disputes and cybersquatters.

The Concept and Importance of Trademark

A trademark is the intellectual property right of a company. It is termed industrial property. During the selling of a particular product, it needs some identification. E.g. even though soaps are made by many companies, the soap of one company should look distinct from other companies, in respect of its packaging, appearance, etc. Even in the case of the bottles, there is a certain oil bottle that can be recognized immediately e.g.

Parachute. As its appearance is unique and distinct. The manufacturer wants such goods to look distinct from others. For that purpose, he attaches certain marks on it, wrapped in unique packaging, having different colors, and shape. In short, he packs the goods in such a way that they will look distinct from others. It is called Trademarks.

A trademark is a visual symbol in the form of a word, a device, or a label applied to the articles of commerce to indicate to the purchasing person or a particular organization as distinguished from similar goods produced or dealt with by others. A trademark is a visual representation attached to goods to indicate their trade origin e.g. trademark of APPLE, Fevicol, DELL Computers, etc. One can easily understand the product due to Trademark. When the trademark is used in connection with a particular service it is called a Service mark. E.g. Tour Services, Airlines, etc.

Trade mark creates goodwill and reputation in the mind of a person. Consumers are very loyal to certain products. E.g. in the case of toothpaste, certain brands are popular. E.g Colgate, Pepsodant etc. These companies have earned goodwill by providing quality products consistently. So, their goodwill and reputation are attached to their trade name. Where someone tries to copy it by making their trade name deceptively similar, in the form of brand name, packaging, and pronunciation. It is called a trademark violation. [5]

Infringement or Violation of Trademark is

- "Using a registered trademark unauthorizedly in the course of trade the mark is identical or defectively similar to the registered trademark is likely to confuse.

- Unauthorizedly using a mark that is either, Identical or Similar or Confusing the public showing association with the registered trademark, and taking undue advantage detrimental to the registered trademark.

- Using unauthorizedly the registered mark as one's trademark or a business concern

- **Using the mark in either of the following ways**

o Affixing it to the goods

o Affixing it to the package

o Exposition of the goods for sale with such a mark

o Importing the goods

o Exporting the goods

o Using the mark in business paper or advertising" [6]

Trademark infringement, infringement of domain names, and cybersquatting are threats to Digital Marketing.

The Concept of Domain Names Cybersquatting and its effect on Digital Marketing

The domain name is the web address. A domain name is typed into a search engine, to find out the particular website. E.g, if a person wants to find out the website of BATA, he will type in the search engine www. BATA.COM. Without a domain name, the computer would have no idea where to look for a web page and email servers would not be able to send an email. A domain name is associated with a particular product or service. When a person wants to search for a particular product, that belongs to a particular service, he will type the name of the company and product name or enter its trademark in the search engine. Because he will surely remember the trademark of that particular company.

Basically, the domain names may be divided into categories like Top Level Domain Name and Second Level Domain Name. The Top-Level Domain Name appears after the last dot ('.'). E. g. In the domain name, "Bata.Com", the Top-level domain name is .COM. It indicates that a domain name is a commercial entity. There are certain other common domain names include.ORG indicates Organization, .EDU indicates Educational institutions, and . GOV is a government agency. In addition to these common domain names, each country is given a unique domain name. For example, .CA indicates a domain in Canada, and . IE indicates an Irish background.

Domain names Disputes arise over 'Second Level Domain Name'. The Second Level name is at the left-hand domain name in an Internet address. For example, at "www.BATA.com", the Second Level Domain Name is ". BATA "Whenever "Two identical Second Level Domain Names" cannot coexist under the same Top-Level Domain. For example, although Delta Faucet Company and Delta Airlines may prefer the domain name "delta.com", only one Delta company may get the Domain Name, Delta.com. Because of a such domain name, Delta. Com is allowed to two companies; it may cause confusion in the minds of consumers.

In the modern world, the internet has become popular in the business world. Business houses have realized that, if they have a domain name similar to their company's name or the trademark, their product can be easily searched by consumers online. Here one important thing we need to note is that registering a trademark does not mean registering Domain Name. Companies need to register both, trademark and domain name separately.

For registration of a Domain Name, the company needs to apply to the appropriate agency. Before doing so, a search is made to see if their desired domain name has been taken. Where a company discovers that a domain name matches a company name or a trademark of another person, the company may choose a different name or claim to obtain a domain name from its current owners. Where there is a similarity in the domain names of one company and the trademark of another company, a dispute may arise. [7]

Cybersquatting is an important issue in the registration of domain names. The term Cybersquatting is the breaching of a person's registered trademark, by registration of a second-level name, that violates pre-registered trademark, with the intention of diverting the user's traffic over the internet, which actually searches the genuine trademark holders' goods to the actual domain name registered company, who has actually registered the domain name with the intention of gaining wrongful profit from the favored brands.

Relationship between the Domain Name and Cybersquatting

It is very easy to register a domain name online. Domain names are provided by the domain name companies on a first come first serve basis. Sometimes cybersquatters with the intention of gaining the wrongfully register domain name of a popular company. Because of it when the original company or brand tries to register its domain name, similar to its trademarks. They don't get it, as already the domain name looks to be registered by another person or company which is similar to the company or the brand's trademark. Because of this companies suffer. Due to it domain disputes occur between the registered trademark owner and the domain name owner. Cybersquatters can severally damage the brand of a trademark owner, simply by preventing them from using the domain name corresponding to their brand.

Remedies to Deal with Cybersquatting

"In America, the Anticybersquatting Consumer Protection Act has provided remedies against cybersquatting. Those remedies are…

1. Trademark owner must prove the unlawful intention to earn a wrongful gain of the cybersquatter.

2. The trademark of its owner was unique prior to the domain name being registered by the cybersquatter.

3. The domain name registered by the cybersquatter is either identical or confusingly similar to the trademark.

4. The Trademark owner was the first to use the distinctive trademark". [8]

Cybersquatting Position in India

India has not yet enacted a "Domain Name Protection Law". Cybersquatting cases are tried under the Trademark Act, 1999. Satyam Infoway Ltd v. Sifynet Solutions Pvt. Limited [9] is a landmark case of cybersquatting. In this case, Supreme Court has observed that…

"As far as India is concerned, there is no legislation, which explicitly refers to dispute resolution in connection with the domain name. But although the operation of the Trademark Act, 1999 itself is not extraterritorial and may not allow for adequate

protection of domain names, this does not mean that domain names are not to be legally protected to the extent possible under the laws relating to passing off"

Suggestions to Deal with Cybersquatting in India

1. **Cease-and-Desist letter can be sent to cybersquatters:** "The Cease-and-Desist letter is a written notice asking the cybersquatters to immediately stop illegal activities. For this purpose, the case can be filed in civil court for an injunction". [10]

2. **Arbitration proceedings can be instituted under the ICANN's Rules:** ICNNA is Internet Corporation for Assigned Names and Numbers. It fulfills the responsibility of "coordinating the management of the technical elements of the DNS to ensure universal resolvability so that all users of the internet can find all valid addresses" [11]

3. **Litigation can be filed in civil court:** Plaintiff can file civil litigation in Civil Court for an injunction, and damages.

CONCLUSION

In this way even though, digital marketing or online marketing is an effective way of marketing, companies face challenges in the form of trademark infringement, domain name disputes, and cybersquatting. In India, those issues get more severe, as there is no law, that specifically deals with cybersquatting. Consumers try to find the web address with the help of a trademark, putting it in search engines. However, if the domain name of the brand is already registered with wrongful intention by a cybersquatter. It may create confusion among consumers. Many times, it disreputes the company's brands. It may result in huge financial losses. The only solution to deal with the problem of cybersquatting and domain name disputes is , State should take the issue of cybersquatting seriously and enact a specific law to deal with it.

REFERENCES

1. Kotler, Philip. (2000) Marketing Management. Upper Saddle River, New Jersey: Prentice Hall, Available at www2.nau.edu

2. Intuit MailChimp, Marketing Library, available at mailchip.com

3. Infidigit, available at infidigit.com

4. DMCG Global News and incites, Digital marketing challenges to consider, available at dmcgglobal.com

5. Malge Madhavi, Law of Industrial and Intellectual Property Rights, Society for Legal Education, Training and Research, Satara, p.27

6. Section 29, The Trademark Act, 1999

7. Dr. Pawar Sujata & Malge Madhavi, Law of Information Technology, Society for Legal Education, Training and Research, Satara, p.141

8. IGRENT Trademarks, what is Cybersquatting and how can it affect a trademark, available at igrent.com

9. 2004 SC 3540

10. Cease and Desist Letter: Definition, What it does, and examples, available on Investopedia.com

11. ICNNA, What does ICNNA do?, available at icnna.org

BIG DATA AND MARKETING ANALYTICS

Inam Ul Haq, Mamta and Inzimam Ul Hassan

Department of CSE, Chandigarh University, Mohali, India

ABSTRACT

Big data and marketing analytics are increasingly becoming vital tools for organizations in order to understand and engage with their customers. The volume, velocity, and variety of data generated from customers and their interactions with organizations have led to theneed for innovative techniques to process and analyze this data. In this chapter, we examine the impact of big data on marketing analytics and how organizations can leverage these technologiesto gain insights into their customers and drive business growth. We first explore the definition and characteristics of big data, highlighting the need for organizations to store, process, and analyze large and complex datasets in real-time. The chapter also discusses the various applications of big data and marketing analytics, including customer segmentation, predictive modeling, and personalized marketing. Finally, we explore the challenges and opportunities organizations face when implementing big data and marketing analytics initiatives. We discuss the importance of data privacy and security, as well as the need for organizations to have the necessary skills and infrastructure to effectively leverage these technologies. Big data and marketing analytics are critical components of modern marketing strategy, and organizations that embrace these technologies will be better equipped to understand and engage with their customers. This chapterprovides a comprehensive overview of the impact of big data on marketing analytics and how organizations can use these technologies to drive business growth.

Keywords: Big Data, Marketing Analytics, Artificial Intelligence, Machine learning, Credit, social media

1: INTRODUCTION TO BIG DATA AND MARKET ANALYTICS

Big data refers to the massive volume of structured and unstructured data that is generated and collected every day from various sources such as social media, e-commerce websites, sensors, and devices. The rise of big data has been fueled by the exponential growth of internet usage, mobile devices, and cloud computing. The sheer volume of data, combined with advances in data storageand processing technology, has made it possible to collect, store, and analyze data on a massive scale. Big Data refers to extremely large and complex datasets that are generated from various sources and processed in real-time for insights, trends and decision-making. The traditional methods of storing and processing data are inadequate when it comes to handling Big Data due toits sheer volume, velocity and variety.Big Data can come from a variety of sources such as socialmedia platforms, sensors, mobile devices, transactional systems, and cloud applications, and can be structured, semi-structured, or unstructured. The

variety of Big Data requires a range of technologies and methodologies to process and analyze it, such as Hadoop, Spark, NoSQL databases, and cloud computing.

The rise of Big Data has revolutionized the way organizations do business by providing valuable insights that were previously not possible. For example, it can be used to personalize customer experiences, optimize supply chains, detect fraud, and improve healthcare outcomes. However, the collection and storage of Big Data also raise privacy and security concerns, and organizations must take care to ensure that their handling of Big Data is compliant with data protection regulations and ethical guidelines. Overall, Big Data is a rapidly growing field with tremendous potential for businesses and organizations to transform the way they operate and make informed decisions.

Figure 1: shows the importance of Big Data Analytics

Figure 1: Big Data Analytics

Market analytics refers to the use of data and statistical methods to study market trends and make informed business decisions. In the age of big data, market analytics has become increasingly important, as organizations seek to leverage data to gain insights into customer behavior, market trends, and competitor activity.[1]

The combination of big data and market analytics has opened up new opportunities for organizations to gain a competitive advantage. For example, by analyzing large volumes of customer data, organizations can better understand customer needs and preferences, and develop targeted marketing strategies that drive sales and increase customer loyalty. Similarly, by analyzing market trends and competitor activity,

organizations can make informed decisions about product development, pricing, and distribution.

Big data analytics is a complex and multidisciplinary field that requires the use of specialized tools and techniques, such as machine learning algorithms, statistical models, and data visualization tools. The process of analyzing big data typically involves several stages, including data collection, data cleaning and preprocessing, data analysis, and data interpretation.[2]

One of the challenges of big data analytics is the sheer volume of data that must be processed and analyzed. To overcome this challenge, organizations often use distributed processing frameworks, such as Hadoop, that allow data to be processed in parallel across multiple nodes in a cluster. Another challenge is data quality, as big data sources are often highly variable and may contain errors or outliers that can affect the accuracy of the results. To address this, organizations use data cleaning and preprocessing techniques to ensure that the data is of high quality and suitable for analysis.[3]

Despite the challenges, the use of big data and market analytics has the potential to transform the way that organizations operate and compete. For example, by analyzing customer data, organizations can gain insights into customer behavior and preferences, and develop targeted marketing strategies that drive sales and increase customer loyalty. Similarly, by analyzing market trends and competitor activity, organizations can make informed decisions about product development, pricing, and distribution.[4]

In conclusion, big data and market analytics are increasingly important in today's data-driven world, as organizations seek to leverage data to gain a competitive advantage. The combination of big data and market analytics has opened up new opportunities for organizations to gain insights into customer behavior, market trends, and competitor activity, and make informed business decisions. However, big data analytics is a complex and multidisciplinary field that requires specialized tools and techniques, and addressing the challenges of data volume and quality is critical to ensuring the accuracy and reliability of the results.

2: The Importance of Big Data in Market Analytics

Big data has become an integral part of modern business and market analysis, providing organizations with valuable insights into consumer behavior, market trends, and purchasing patterns. With the exponential growth of data generated from various sources such as social media, e-commerce platforms, and mobile devices, organizations are now able to collect vast amounts of data that can be analyzed to make informed business decisions.

One of the key benefits of big data in market analytics is its ability to predict future trends and patterns. By analyzing historical data, businesses can gain a better

understanding of what their customers are looking for and what drives their behavior. This information can then be used to develop more effective marketing strategies and improve customer engagement.[5] For example, by analyzing customer reviews and social media posts, businesses can identify common pain points and respond proactively, leading to increased customer satisfaction and loyalty.

Big data analytics also allows businesses to gain a competitive advantage by providing them with a more detailed understanding of the market and their competitors. By analyzing data from multiple sources, organizations can gain a comprehensive view of market trends and identify areas of opportunity for growth. For instance, by tracking competitor prices, businesses can ensure that they remain competitive in the market and respond promptly to changes in the market environment. Another important benefit of big data in market analytics is the ability to improve operational efficiency. By analyzing data from various business processes, organizations can identify inefficiencies and opportunities for improvement. For example, by analyzing data from supply chain management systems, businesses can optimize their operations and reduce costs by identifying bottlenecks and improving processes.[6]

Big data analytics also plays a key role in enhancing the customer experience. By analyzing customer data, businesses can better understand their needs and preferences, and provide personalized and relevant experiences. For example, by analyzing customer purchasing patterns, businesses can make recommendations and offer personalized promotions, leading to increased customer satisfaction and loyalty.[7]

In conclusion, big data is a crucial tool in market analytics that provides businesses with valuable insights into customer behavior, market trends, and purchasing patterns. By utilizing big data analytics, organizations can gain a competitive advantage, enhance their customer experience, and drive growth. With the increasing volume of data generated from various sources, big data analytics is only going to become more important in the future, and businesses that embrace this technology will be better equipped to succeed in today's fast-paced and highly competitive market environment.

3: **Big Data Analytics Techniques in Market Analytics**
Big Data Analytics Techniques in Market Analytics can be broadly categorized into the followingcategories:

Figure 2: Big Data Analytics Techniques in Market Analytics

Predictive Analytics: It involves using data mining, machine learning algorithms, and statistical techniques to analyze current and historical data to make predictions about future trends and patterns. This can help organizations understand the potential impact of future events and make informed business decisions.

Sentiment Analysis: It involves analyzing customer opinions, feedback, and emotions expressed in customer reviews, social media posts, and surveys. This can help organizations understand customer preferences and improve their marketing strategies.

Customer Segmentation: It involves dividing a market into different groups of customers with similar characteristics. This can help organizations target specific groups with personalized marketing messages and improve their overall marketing effectiveness.

Churn Analysis: It involves analyzing customer behavior data to identify customers who are likelyto leave or discontinue their relationship with the company. This can help organizations identify at-risk customers and implement retention strategies to reduce customer churn.

Social Media Analytics: It involves analyzing customer interactions on social media platforms to understand customer preferences, behaviors, and opinions. This can help organizations improve their social media marketing strategies and engage with customers more effectively.

Text Mining and Natural Language Processing (NLP): It involves analyzing large amounts of unstructured text data to extract insights and patterns. This can be used in market research to analyze customer feedback, reviews, and social media posts to understand customer preferences and opinions.

Predictive Maintenance: It involves using data analytics to predict when equipment is likely to fail,so that organizations can proactively maintain it and minimize downtime.

These are just a few examples of Big Data Analytics Techniques in Market Analytics. The right technique(s) will depend on the specific requirements and goals of an organization.

4: Applications of Big Data in Market Analytics

Big Data refers to the vast amount of structured and unstructured data that is generated by businesses, governments, and individuals every day. In recent years, big data has become increasingly important in market analytics, as companies look to harness the power of big data to gain insights into their target market, understand customer behavior, and make better business decisions.

One of the key applications of big data in market analytics is customer segmentation. Customer segmentation involves grouping customers into specific categories based on their characteristics, such as demographics, behaviors, and purchasing patterns. This information is then used to develop targeted marketing campaigns and understand which products and services are most likelyto appeal to each customer segment.[8]

Another important application of big data in market analytics is predictive modeling. Predictive modeling uses machine learning algorithms to analyze data and make predictions about future market trends and customer behavior. For example, predictive models can be used to determine the likelihood of a customer making a purchase, the probability of churn, or the likelihood of a customer responding to a marketing campaign.[9]

Big data can also be used to monitor and track market trends and competition. Companies can use big data to analyze the behavior of competitors and track market trends, such as product sales and pricing, in real-time. This information can then be used to make informed decisions about product development, pricing strategies, and marketing campaigns.[10]

Big data can also help companies optimize their marketing efforts by providing insights into which marketing channels are most effective. By analyzing customer data, companies can determine which channels are most likely to generate conversions and which channels are the most cost- effective. This information can then be used to allocate marketing budget more effectively and optimize marketing strategies.

One of the most important applications of big data in market analytics is customer experience management. Customer experience management involves understanding how customers interact with a company, from the initial touchpoints to post-purchase behavior. Companies can use big data to analyze customer interactions across multiple channels, such as websites, mobile apps, andsocial media, to gain a complete picture of the customer journey. This information can then be used to identify pain points in the

customer experience and make improvements to increase customer satisfaction and loyalty.[11]

Finally, big data can be used to improve supply chain management. Companies can use big data to monitor and analyze their supply chain operations, from raw material sourcing to product delivery, to identify bottlenecks and optimize processes. This information can also be used to improve forecasting and inventory management, reducing waste and increasing efficiency.[12]

In conclusion, big data has revolutionized market analytics by providing companies with the ability to gain deeper insights into their target market, understand customer behavior, and make better business decisions. From customer segmentation and predictive modeling to customer experience management and supply chain optimization, the applications of big data in market analytics are numerous and continue to grow. Companies that embrace big data and leverage its power will have a significant advantage over those that do not, as they will be better equipped to stay ahead of the competition and thrive in today's rapidly changing business environment.

5: Challenges in Big Data and Market Analytics

Data Volume: The sheer amount of data generated every day makes it a challenge to store, process, and analyze big data.

Data Variety: Big data can come from a variety of sources such as social media, sensor data, transactional data, etc., which makes it challenging to integrate and analyze data from different sources.

Data Velocity: The speed at which data is generated, collected and processed can be overwhelming, making it difficult to keep up with real-time analysis.

Data Veracity: Ensuring the accuracy and reliability of big data can be difficult, as it often includes missing, inconsistent or irrelevant information.

Data Privacy and Security: Storing and processing large amounts of personal information poses significant privacy and security risks, and requires robust security measures.

Technology Scalability: Big data processing requires technology that can handle large volumes of data and scale to meet increasing demands.

Complex Data Analytics: Analyzing big data requires advanced statistical and machine learning techniques, and a deep understanding of the data being analyzed.

Integration with Business Systems: Integrating big data analytics with existing business systems can be challenging and requires careful planning and execution.

Cost: The cost of storing, processing and analyzing big data can be high, and requires organizations to balance their investment with the potential benefits.

Market Analytics: The dynamic and ever-changing market landscape requires organizations to continuously monitor, analyze and respond to market trends and customer behavior, which can bechallenging.

6: CONCLUSION

In conclusion, Big Data and market analytics are critical components of modern business. By leveraging advanced analytics techniques, businesses can gain valuable insights into consumer behavior and market trends, which can be used to drive growth and make informed decisions. However, businesses must also be aware of the challenges associated with Big Data and market analytics and take steps to overcome them.

REFERENCES

[1] G. F. M. Sekli and I. De La Vega, "Adoption of big data analytics and its impact on organizational performance in higher education mediated by knowledge management," J.

Open Innov. Technol. Mark. Complex., vol. 7, no. 4, 2021, doi: 10.3390/ joitmc7040221.

[2] S. F. Wamba and M. M. Queiroz, "A Framework Based on Blockchain, Artificial Intelligence, and Big Data Analytics to Leverage Supply Chain Resilience considering theCOVID-19," IFAC-PapersOnLine, vol. 55, no. 10, pp. 2396–2401, 2022, doi: 10.1016/j.ifacol.2022.10.067.

[3] S. Lokesh, S. Chakraborty, R. Pulugu, S. Mittal, D. Pulugu, and R. Muruganantham, "AI- based big data analytics model for medical applications," Meas. Sensors, vol. 24, no. August, p. 100534, 2022, doi: 10.1016/ j.measen.2022.100534.

[4] J. Li, "Preliminarily Explore the Steps of Financial Big Data Analytics," Procedia Comput.Sci., vol. 208, pp. 471–477, 2022, doi: 10.1016/j.procs.2022.10.065.

[5] H. Hampton and A. Foley, "A review of current analytical methods, modelling tools and development frameworks applicable for future retail electricity market design," Energy, vol. 260, no. January, p. 124861, 2022, doi: 10.1016/ j.energy.2022.124861.

[6] C. P. Holland, S. C. Thornton, and P. Naudé, "B2B analytics in the airline market: Harnessing the power of consumer big data," Ind. Mark. Manag., vol. 86, no. June 2018, pp. 52–64, 2020, doi: 10.1016/j.indmarman.2019.11.002.

[7] F. Aslam and Y. Yue, "Big data analytics and COVID-19 vaccine," Comput. Methods Programs Biomed. Updat., vol. 2, no. June, p. 100062, 2022, doi: 10.1016/ j.cmpbup. 2022. 100062.

[8] S. Dehbi, H. C. Lamrani, T. Belgnaoui, and T. Lafou, "Big Data Analytics and Management control," Procedia Comput. Sci., vol. 203, pp. 438–443, 2022, doi: 10.1016/ j.procs. 2022.07.058.

[9] C. A. Ardagna, V. Bellandi, E. Damiani, M. Bezzi, and C. Hebert, "Big Data Analytics-as- a-Service: Bridging the gap between security experts and data scientists," Comput. Electr. Eng., vol. 93, no. July 2020, p. 107215, 2021, doi: 10.1016/ j.compeleceng. 2021.107215.

[10] I. W. R. Martin and S. Nagel, "Market efficiency in the age of big data," J. financ. econ., vol. 145, no. 1, pp. 154–177, 2022, doi: 10.1016/j.jfineco.2021.10.006.

[11] Z. Xie, J. Wang, and L. Miao, "Big data and emerging market firms' innovation in an open economy: The diversification strategy perspective," Technol. Forecast. Soc. Change, vol. 173, p. 121091, 2021, doi: 10.1016/j.techfore.2021.121091.

[12] A. Lutfi et al., "Drivers and impact of big data analytic adoption in the retail industry: A quantitative investigation applying structural equation modeling," J. Retail. Consum. Serv.,vol. 70, no. September 2022, p. 103129, 2023, doi: 10.1016/ j.jretconser. 2022. 103129.

CONTROVERSIAL ISSUES AND DIGITAL MARKETING

Hilal Ahmad Shah, Inzimam Ul Hassan and Inam Ul Haq
Assistant Professor, Chandigarh University, Mohali, India

ABSTRACT

Controversial issues are increasingly prevalent in digital marketing and can have a significant impact on brand reputation. With the rise of social media, it has become easier for companies to spread their messages to a large audience, but also easier for these messages to be scrutinized and potentially cause backlash. Some common controversial issues that companies must navigate include political and social activism, privacy and data protection, and diversity and inclusion. Another area of controversy in digital marketing is privacy and data protection. Companies are collecting and using vast amounts of personal data, which has led to concerns about privacy violations and data breaches. To mitigate these risks, companies must have robust data privacy policies in place and be transparent about how they use customer data. Finally, diversity and inclusion are also increasingly important in digital marketing, as companies look to create messages that are inclusive and representative of all groups. However, there is often a fine line between promoting diversity and appearing to be exploitative or insensitive. In conclusion, controversial issues in digital marketing can have far-reaching effects and companies must be mindful of how they navigate these issues. By having strong policies in place and being transparent about their practices, companies can minimize the risks associated with controversial issues and build trust with their customers.

Keywords: Big Data, Marketing, Machine Learning, Digital Marketing, Ethical Controversies

INTRODUCTION

Introduction Controversial issues are a reality today, and with the rise of digital marketing, they have become increasingly prevalent in the marketing world as well. Companies must navigate the fine line between promoting their brand and avoiding backlash from consumers [1]. Digital marketing has made it easier for companies to reach their target audience, but it has also made it easier for consumers to voice their opinions, both positive and negative, on social media platforms.

1. Political Controversies and Marketing Political controversies can have a significant impact on a company's reputation. For example, companies that are associated with a particular political party or ideology may alienate a portion of their target audience. Companies must be careful not to take sides in political debates and to maintain a neutral stance [2]. Some companies have faced backlash for appearing to support a particular political agenda. For example, companies

that publicly supported LGBTQ+ rights faced criticism from conservative groups, and vice versa. The impact of digital media on political controversies can be both positive and negative [3]. On the positive side, digital media has given more people a platform to express their opinions and participate in political discourse. It has also made it easier for individuals and organizations to share information and mobilize for political causes [4].

However, digital media has also had a negative impact on political controversies by enabling the spread of misinformation and propaganda. The anonymity and speed of digital communication makes it easy for false information to be spread quickly and widely, and it can be difficult to counter these narratives once they have taken hold[5].

Political controversies can arise in the context of digital marketing, particularly when it comes to the use of personal data, targeted advertising, and political advertising on social media. For example, there have been concerns about the spread of false information and propaganda through targeted advertising, as well as the manipulation of public opinion using algorithms and big data. Companies and governments are grappling with how to balance the benefits of digital marketing with the need to protect the privacy and information of consumers and citizens.

There have been many political controversies involving digital media in recent years. Some examples include:

Social media platforms like Facebook and Twitter being used to spread false information and conspiracy theories, particularly during elections. The use of micro targeting and algorithmic amplification to spread political propaganda and manipulate public opinion [6].

The use of digital media to conduct election interference, such as hacking into political campaigns and manipulating voting systems.

The spread of misinformation and hate speech on social media, leading to real-world violence and conflicts. The role of digital media in amplifying political polarization and echo chambers, where individuals are exposed only to viewpoints that align with their own [7].

These controversies have led to calls for greater regulation of digital media, increased transparency in political advertising, and more robust efforts to combat the spread of misinformation. The algorithms used by social media platforms can amplify and promote certain political perspectives, creating filter bubbles and echo chambers. This can further polarize society and make it harder to find common ground on political issues. Overall, the impact of digital media on political controversies highlights the need for media literacy, critical thinking, and responsible use of technology. It also underscores the importance of regulating digital media to ensure that it is used in a way that benefits society [8].

2. Ethical Controversies and Marketing Ethical controversies in the marketing world often arise from the use of unethical practices such as false advertising, manipulative marketing, and exploitation of vulnerable groups. Companies must ensure that their marketing practices align with their values and principles, and that they are not exploiting their customers. They must also be transparent about their products and services, avoiding any false claims or misleading information [9].

There are many ethical controversies in marketing that have arisen with the increased use of digital media. Some examples include:

- **Privacy Concerns:** Marketing Companies Collect Vast Amounts of Personal Data, Raising Questions about how this information is used and who has access to it.

- **Manipulative Advertising:** Digital marketing techniques, such as behavioral targeting and micro targeting, can be used to manipulate consumer behavior and emotions, leading to concerns about ethical manipulation.

- **Deceptive Practices:** The ease of creating and disseminating false information online has led to a rise in deceptive marketing practices, such as fake reviews, misleading product claims, and fake news.

- **Discrimination:** Algorithms used in digital marketing can perpetuate existing biases and discriminatory practices, leading to unequal treatment of different groups.

- **Addiction and Exploitation:** Some digital marketing tactics, such as gamification and continuous scrolling, can create addictive behaviors and exploit vulnerabilities, raising questions about ethical marketing practices.

Marketing ethics involve considering the impact of marketing practices on all stakeholders, including consumers, employees, and society. It is important for companies to consider the ethical implications of their marketing strategies and to adopt best practices to ensure that their actions are in line with their values and obligations [10].

The impacts of ethical controversies in marketing can be far-reaching and damaging. Some of the key impacts include:

- **Reputation Damage:** Companies that engage in unethical marketing practices can suffer significant harm to their reputation, which can result in loss of customers, reduced profits,and decreased investor confidence.

- **Decreased Trust:** Ethical controversies can erode consumer trust in the company and the wider marketing industry, making it more difficult for companies to achieve their marketing goals.

- **Legal Consequences:** Unethical marketing practices can result in lawsuits, fines, and otherlegal consequences, which can be costly for companies and damaging to their reputation.

- **Loss of Competitive Advantage:** Companies that prioritize ethical marketing practices can gain a competitive advantage over those that engage in unethical behavior, as consumers become increasingly concerned about the impact of marketing practices on their lives.

- **Negative Impact on Society:** Ethical controversies in marketing can contribute to wider social and economic problems, such as increased polarization, declining public trust, and the spread of misinformation.

The impacts of ethical controversies in marketing emphasize the importance of adopting and promoting best practices in marketing ethics, to protect the interests of all stakeholders and maintain a healthy and sustainable marketing industry[11].

3. Social Controversies and Marketing Social controversies are often linked to societal issues such as race, gender, and sexuality. Companies must be mindful of the impact their marketing campaigns may have on different communities. For example, advertisements that perpetuate stereotypes or discriminate against certain groups can lead to significant backlash and harm the company's reputation[12]. Companies must strive to create inclusive and diverse campaigns that celebrate all members of society.

Social controversies refer to public debates or disagreements over issues that are considered to becontroversial or divisive in nature. They often involve moral, political, or social values and beliefs that are in opposition to one another. Examples of social controversies include issues related to abortion, immigration, gun control, and LGBTQ rights [13].

Marketing and advertising can be impacted by social controversies, as companies may find themselves in the middle of a controversy if they take a stance on a social issue or use a controversial issue in their advertising campaigns. This can result in both positive and negative consequences, such as increased public support or consumer boycotts [14]. It's important for companies to consider the potential impact of their marketing and advertising strategies on various social and cultural groups, and to be mindful of the values and beliefs of their target audience.

Social marketing controversies can arise due to a variety of reasons, including:

- **Target Audience:** The target audience for social marketing campaigns can be sensitive to certain issues and may object to the way these issues are being presented.

- **Misrepresentation:** Social marketing campaigns can sometimes be misleading or misrepresent the facts, leading to controversy.

- **Cultural Insensitivity:** Social marketing campaigns may be insensitive to cultural differences, offending certain communities and causing controversy.

- **Controversial Topics:** Some social marketing campaigns address controversial topics such as politics, religion, or sexuality, which can be divisive and generate heated debates.

- **Objectification:** Some social marketing campaigns can objectify individuals or groups, leading to accusations of sexism, racism, or other forms of discrimination.

- **Privacy Concerns:** Social marketing campaigns can sometimes raise privacy concerns, such as when they use personal data without consent or in ways that are perceived as intrusive.

- **Corporate Motives:** The underlying motivations of corporations or organizations behind social marketing campaigns can also be a source of controversy, especially when they areperceived as profit-driven rather

Impacts of Social Marketing Controversies

The impacts of social marketing controversies can be significant and far-reaching, affecting boththe companies or organizations involved and the wider public. Some of the impacts include:

- **Reputation Damage:** Social marketing controversies can harm the reputation of the companies or organizations involved, damaging their image, and affecting their bottom line.

- **Decreased Trust:** Social marketing controversies can also reduce trust in the companies or organizations involved, as well as in the wider industry or sector.

- **Loss of Customers:** Controversial social marketing campaigns can alienate existing customers and prevent new customers from choosing the company or organization involved.

- **Negative Publicity:** Social marketing controversies can generate negative publicity, whichcan spread quickly through social media and traditional media.

- **Legal Consequences:** In some cases, controversial social marketing campaigns can result in legal action, such as lawsuits or regulatory fines.

- **Stifling of Free Speech:** Social marketing controversies can sometimes lead to calls for greater regulation of advertising and marketing, stifling the freedom of speech and expression.

- **Reduced Funding:** Controversial social marketing campaigns can also result in reduced funding for organizations involved in social marketing and cause harm to important causes.

4. Environmental Controversies and Marketing Environmental controversies can arise from the production and distribution of products and services. Companies must be transparent about their environmental impact and make a concerted effort to reduce their carbon footprint. They must also be mindful of the materials they use in their products and ensure that they are not contributing to environmental degradation[15]. For example, companies that produce single-use plastics have faced criticism for their environmental impact.

Some common causes of environmental controversies in marketing include:

- **Greenwashing:** Companies or organizations making false or exaggerated environmental claims, also known as greenwashing, can result in controversy and damage to their reputation.

- **Resource Depletion:** Companies or organizations that extract or consume natural resources in an unsustainable manner can cause environmental controversies, particularly when they are seen as contributing to resource depletion and environmental degradation.

- **Pollution:** Companies or organizations that emit pollutants into the environment can cause controversy, especially if the pollutants are harmful to human health or the environment.

- **Waste:** Companies or organizations that generate large amounts of waste can also cause environmental controversies, particularly if the waste is not disposed of in a safe and responsible manner [16].

The impacts of environmental controversies in marketing can be significant and far-reaching, affecting both the companies or organizations involved and the wider public. Some of the impacts include:

- **Reputation Damage:** Environmental controversies can harm the reputation of the companies or organizations involved, damaging their image, and affecting their bottom line.

- **Decreased Trust:** Environmental controversies can also reduce trust in the companies ororganizations involved, as well as in the wider industry or sector.

- **Legal Consequences:** In some cases, environmental controversies can result in legalaction, such as lawsuits or regulatory fines.

- **Consumer Backlash:** Environmental controversies can also result in consumer backlash, as consumers become more aware of and concerned about environmental issues.

- **Reduced Sales:** Companies or organizations involved in environmental controversies can experience reduced sales and loss of market share.

CONCLUSION

In conclusion, companies must navigate the complex world of controversial issues in digital marketing with caution. They must be aware of the impact their marketing practices may have on different communities and be transparent about their products and services. Companies must also be mindful of ethical, political, social, and environmental controversies and strive to create inclusive, diverse, and sustainable marketing campaigns. Companies that are successful in navigating controversial issues will be able to maintain a positive reputation and build strong relationships with their target audience.

REFERENCES

[1]   S. Ammerman and M. L. Smith, "Vegetarianism in the pandemic era: Using digital media to assess the cultural politics of meat avoidance during COVID-19," Digit. Geogr. Soc., vol. 4, no. March 2022, p. 100049, 2023, doi: 10.1016/ j.diggeo. 2023. 100049.

[2]   R. Wang et al., "Transparency in persuasive technology, immersive technology, and online marketing: Facilitating users' informed decision making and practical implications," Comput. Human Behav., vol. 139, no. October 2022, p. 107545, 2023, doi: 10.1016/j.chb.2022.107545.

[3]   J. C. Hoekstra and P. S. H. Leeflang, "Thriving through turbulence: Lessons from marketing academia and marketing practice," Eur. Manag. J., no. April, 2022, doi: 10.1016/j.emj.2022.04.007.

[4]   S. Luo, M. L. Shyu, A. dayarana k. Silalahi, and I. T. Shih, "A business model predicting the impact of live-stream marketing on firms' stock price - An event study," Heliyon, vol. 8, no. 12, p. e12522, 2022, doi: 10.1016/ j.heliyon.2022.e12522.

[5]   I. Guandalini, "Sustainability through digital transformation: A systematic literature review for research guidance," J. Bus. Res., vol. 148, pp. 456–471, 2022, doi: 10.1016/j.jbusres.2022.05.003.

[6]   M. Bettiol, M. Capestro, E. Di Maria, and S. Micelli, "Overcoming pandemic challenges through product innovation: The role of digital technologies and servitization," Eur. Manag. J., vol. 40, no. 5, pp. 707–717, 2022, doi: 10.1016/j.emj.2022.05.003.

[7]   C. Mihart (Kailani), "Modelling the Influence of Integrated Marketing Communication on Consumer Behaviour: An Approach based on Hierarchy of Effects Concept," Procedia - Soc. Behav. Sci., vol. 62, pp. 975–980, 2012, doi: 10.1016/j.sbspro.2012.09.166.

[8]   É. Schnebelin, "Linking the diversity of ecologisation models to farmers' digital use profiles," Ecol. Econ., vol. 196, no. April, pp. 1–11, 2022, doi: 10.1016/j.ecolecon.2022.107422.

[9]   H. Treiblmaier and E. Petrozhitskaya, "Is it time for marketing to reappraise B2C relationship management? The emergence of a new loyalty paradigm through blockchain technology," J. Bus. Res., vol. 159, no. January, p. 113725, 2023, doi: 10.1016/j.jbusres.2023.113725.

[10]   J. R. Saura, D. Ribeiro-Soriano, and P. Zegarra Saldaña, "Exploring the challenges of remote work on Twitter users' sentiments: From digital technology development to a post-pandemic era," J. Bus. Res., vol. 142, no. December 2021, pp. 242–254, 2022, doi:10.1016/j.jbusres.2021.12.052.

[11]   S. Akter, Y. K. Dwivedi, S. Sajib, K. Biswas, R. J. Bandara, and K. Michael, "Algorithmic bias in machine learning-based marketing models," J. Bus. Res., vol. 144,no. March 2021, pp. 201–216, 2022, doi: 10.1016/j.jbusres.2022.01.083.

[12]   T. Neuhaus, J. A. Millemann, and E. Nijssen, "Bridging the gap between B2B and B2C: Thought leadership in industrial marketing – A systematic literature review and propositions," Ind. Mark. Manag., vol. 106, no. August, pp. 99–111, 2022, doi: 10.1016/j.indmarman.2022.08.006.

[13]   P. Ochoa Pacheco and D. Coello-Montecel, "Does psychological empowerment mediate the relationship between digital competencies and job performance?," Comput. Human Behav., vol. 140, no. November 2022, p. 107575, 2023, doi: 10.1016/j.chb.2022.107575.

[14]   H. Hall and L. Witek, "Conditions, Contemporary Importance and Prospects of Higher Education Marketing on the Example of Polish Universities," Procedia Econ. Financ., vol. 39, no. November 2015, pp. 206–211, 2016, doi: 10.1016/s2212-5671(16)30314-8.

[15]   G. Li, X. Li, and L. Huo, "Digital economy, spatial spillover and industrial green innovation efficiency: Empirical evidence from China," Heliyon, vol. 9, no. 1, p. e12875, 2023, doi: 10.1016/j.heliyon.2023.e12875.

[16]   W. Chmielarz, A. Fandrejewska, M. Zborowski, and R. Nowacki, "Determinants of Internet use regarding shopping preferences, COVID-19 pandemic occurrence, perception of security and Internet marketing - a case study of Poland," Procedia Comput. Sci., vol. 207, pp. 4463–4476, 2022, doi: 10.1016/j.procs.2022.09.510.

BIG DATA AND MARKETING ANALYTICS

Dr. Khan Mohd Imran

Assistant Professor, I/c Head of the Department, Management Science & Computer Studies. Maulana Azad College of Arts, Science & Commerce, Rouza Baugh, Aurangabad-431001

ABSTRACT

- Big data analytics means examining and analyzing data on a larger scale. Nowadays, organizations need to understand the patterns in their customers' behaviour, and big data analytics is making it easier for them to do the same.

- These analyses help them uncover hidden patterns and correlations and also give insights to make better business decisions.

- A question that may arise is why do organizations need to rely on big data analytics? The answer is that organizations have understood the need to evolve from a knowledge organization into a learning organization.

- Moreover, they want to be more objective and data driven and so they use the best gift of the human mind - technology.

- Data analytics helps them anticipate any change in consumer behaviour, and these analytics also enhance accuracy.

- Big data analytics is performed using advanced software systems that are more efficient and faster.

- Meanwhile, companies enjoy lower costs by using big data analytics software. Big data is used in almost every sector be it the food industry, content marketing or even elections.

- The process of analyzing large amounts of diverse data sets, using advanced analytical techniques, is referred to as big data analytics.

- These diverse datasets include structured, semi-structured, and unstructured data, from various sources, and in various sizes from terabytes to zettabytes. We also consider it big data.

- Big data is a term used for data sets whose size or type exceeds the ability to capture, manage, and manipulate traditional databases. The database required to process big data must have low latency which is not available in traditional databases.

- There were even lockers for storing very important documents. Likewise, we now maintain our data digitally. We also have digital lockers.

- This is data management at the micro level, that is, for individuals. When looking at the macro level, i.e. for larger companies, it requires a huge setup to store such a massive amount of data and process it when needed.

INTRODUCTION

1. Define Data Analytics

In simple language, data analytics is the science of evaluating raw data to produce results from the data. Data analysis techniques help you sift through raw data and find patterns to extract useful insights from. Nowadays, data experts use data analytics in their basic research. Many companies also use data analytics to make informed decisions. Data analytics is a broad term that includes many diverse types of data analysis. Any kind of data can be exposed to data analysis strategies to gain an understanding that can be used to improve things. For example, gaming companies use data analytics to set prize schedules for players that keep the most players dynamic in the game. Similarly, there are other types of companies that use data analytics according to their needs.

1.1 Data Analysis Procedures and Steps

1. The first step is to determine the information requirements or how the information will be collected. Information may be segregated by age, gender, or income. Data values may be mathematical or isolated by category.

2. The second step in data analytics is the path towards its collection. This should be possible through a variety of sources, for example, computers, online sources, cameras or through the workforce.

3. When information is collected, it must be formatted so that it is examined. The association may occur on an accounting page or any other type of programming that can take statistical data.

4. The data is then arranged prior to examination. This means that it has been checked and checked to ensure that there is no duplication or error, and that it is not defective. This progress handles any errors before it goes to the information expert to be dissected.

"Without big data analytics, companies are blind and deaf, wandering out onto the web like deer on a freeway"- Geoffrey Moore

2. What are Data Analytics Techniques?

Today, the evolving volume of data and accessible high-level analytics technologies mean that you can gain a lot of additional information experiences more quickly. The insights that make big data and current developments possible are more accurate and detailed visualization. So, here we are going to read about some of the technologies that make new data analytics so powerful;

1. Machine Learning

Artificial intelligence, machine learning, and deep learning are some of the buzzwords in the industries. Machine learning is a subset of artificial intelligence that is critical to data analytics and includes algorithms that can memorize on their own.

It is what makes it easier for applications to collect and analyze data by predicting results without someone explicitly programming the system to get that result.

2. Data Mining

Data mining means that it is the process of simplifying big data to define structures and find connections between data points. It offers you to filter through huge datasets and sort what is applicable. You will then be able to use this data to guide analyzes and illuminate your choices. Existing data mining techniques allow you to complete these tasks incredibly quickly.

3. Data Management

If you want to analyze data, the first step is to understand the flow of data in and out of your system. Next, you have to keep this data organized and also check the quality of the data and collect it in a safe place. Therefore, organizing a data management software can ensure that your company is on the same page as to how data is controlled and handled.

CONCLUSION

Data is very important to any business and helps them understand their customers, enhance their advertising campaigns and expand their bottom lines. Data analysis tools and processes are extremely important because there are many advantages to data but without these tools, you cannot access these advantages.

https://www.analyticssteps.com/blogs/what-data-analytics-and-its-types

Raw data has a range of capabilities, but you need data analytics to unlock the potential to grow your company. Thus, we can say that data analytics is very important for the development of any business as data analytics supports the company in improving its performance. In an era when technology has reached the peak of its usage and has completely taken over our lives, the amount of data being exchanged is massive. Large amounts of data sets, which a traditional computing tool cannot process, are collected daily. We refer to these large amounts of data as big data. Companies nowadays rely heavily on big data to gain better knowledge about their customers. Extracting meaningful insights from such raw big data counts as big data analytics. Since traditional computing technologies cannot process such huge data, many tools are taken advantage of. The tools used for big data analytics have seen increasing use in the recent past. Big data analytics has found several applications in different industries. It has allowed companies to know their customers better than they know themselves which proves the technology to be very beneficial. Through this blog, we will explore big data

analytics, its different types, advantages of big data analytics and its industrial applications.

4. What is Big Data Analytics?

"Big data is high-volume, high-velocity, and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation." - Gartner, Research and Advisory Company https://www.gartner.com/en

4.1 Four Types of Big Data Analytics

Big data analytics is categorized into four subcategories:

1. Descriptive analytics

2. Diagnostic analytics

3. Predictive analytics

4. Perspective analyses

1. **Descriptive Analytics:** Prescriptive analytics is a useful technique for detecting patterns within a specific customer segment. Simplifies data and summarizes historical data in a readable form. Prescriptive analytics provide insights into what happened in the past as well as directions to look into for more detail. This helps to generate reports like company revenue, profit, sales, etc. Examples of descriptive analyzes include summary statistics, aggregation, and correlation rules used in market basket analysis.

Transforming raw data into a form that is easy to understand and interpret, i.e. rearranging, arranging, and manipulating the data to provide insights into the data presented.

Descriptive analysis is the type of data analysis that helps describe, show, or summarize data points in a constructive way so that patterns appear that satisfy each condition of the data.

It is one of the most important steps to perform statistical data analysis. It gives you an inference of the distribution of your data, helps you spot typos and outliers, and enables you to identify similarities between variables, getting you ready for further statistical analyses. https://www. analyticssteps.com/blogs/overview-descriptive-analysis An example of using descriptive analytics is the Dow Chemical Company. The company used its previous data to increase its use of its facilities through its offices and laboratories.

2. **Diagnostic Analytics:** Diagnostic analytics, as the name implies, gives a diagnosis of a problem. It gives a detailed and in-depth look at the root cause of the problem. Data scientists turn to these eager analyzes of the cause behind a particular occurrence. Techniques such as search, data mining, data recovery, disturbance analysis, and customer health score analysis are all examples of diagnostic analytics. From a business

standpoint, diagnostic analytics is useful when you are looking for reasons that lead to indicators of change and usage trends among your most loyal customers. A diagnostic analytics use case could be an e-commerce company. Due to the situation the company's sales are down despite customers adding products to their carts. Possible reasons behind this issue can be: form not loading properly, shipping fee is high, not enough payment methods available. With the help of diagnostic analytics, the company comes up with a specific cause and then works on it to solve the problem.

E-commerce: If we follow the basic definition of e-commerce, it means buying or selling products and services electronically from online or online services. The technical definition states that e-commerce is a business model that allows businesses and individuals to buy and sell goods online. Therefore, shopping for clothes and buying other goods is not limited to e-commerce, but includes a whole range of services and products ranging from clothes to online tickets. As India is moving towards a completely digital economy with each passing day, the reliance on such platforms is getting more and more. The emergence of electronic commerce If we look at India, a large part of the country is rural India, so reaching out to a larger population is a challenge for e-commerce solutions companies. However, the coronavirus lockdown has presented a very different picture. Companies tried to reach a wider range of customers in earlier times but somehow failed, but this period has brought consumers themselves to these e-commerce platforms. E-commerce has become a necessity, not an option. Big companies like Amazon and Flipkart try to include all services and goods that are required on a daily basis.

CONCLUSION

Reliance on digital platforms to get our work done has increased in the recent past. We expect it to grow even larger, as the stats show. The role of e-commerce has been huge during this lockdown period. When people are not sure about the hygiene and cleanliness of the products, e-commerce websites provide a guarantee to their customers. Judging from the current scenario, it will not be long before the e-commerce business expands and reaches every part of the country. Rural India is now ready for online shopping and trading. At the same time, these platforms will also benefit local and small businesses in their growth. https:// www. analyticssteps.com/blogs/rise-e-commerce-amid-lockdown

3. Predictive Analytics: Predictive analytics, as it can be distinguished from its namesake, is concerned with predicting future incidents. These future occurrences can be market trends, consumer trends, and various market related events. This type of analytics uses historical and current data to predict future events. This is the most widely used form of business-to-business analytics. Predictive analytics works not only with service providers, but also with consumers. It tracks and builds on our past activities, predicting what we might do next. "The purpose of predictive analytics is

NOT to tell you what will happen in the future. It cannot do that. In fact, no analytics can do that. Predictive analytics can only forecast what might happen in the future, because all predictive analytics are Probabilistic In Nature." - Dr. Michael Wu, Chief Ai Strategist, Pros

https://www.linkedin.com/public- profile/ in/Michael wuphd? ChallengeId= AQFOf6xfq   V7Xr   QAAAXcFgJPwTxTm6TwzgS0Hro-Ise2FTLRGbktbeKFOoVNAdUUncTMOtNABY-HgR   hb   LDT CpD2BqnTgxHg5jw&submissionId=2a0c921b-b55f-5a16-7457-c21fa3ab443f

Conceptual analytics uses models such as data mining, artificial intelligence, and machine learning to analyze existing data and predict what might happen in specific scenarios. Examples of predictive analytics include next best offers, outage risk, and renewal risk analysis. We can take the example of PayPal (Stripe vs PayPal) to understand how companies use predictive analytics. The company outlines the steps it needs to take to protect its customers' fraudulent transactions. It uses all past payment data and user behaviour data to predict fraudulent activities. Stripe and PayPal are the two terms that come to mind when it comes to choosing a payment gateway for your business. The two are always confused because both offer identical benefits and have comparable charges. To collect money from your visitors through your website, your business requires a payment gateway provider, and these are two very popular payment solutions that allow you to receive money online. PayPal is a very close competitor to Stripe. So, which would be a good idea to use? The best way to deal with this inquiry is to check your own needs in the categories of interest and then make a choice. Each company prides itself on its uniqueness but there are some basics that must be followed. PayPal and Stripe are both payment gateways, so they have the same functionality. However, the difference is all about a better interface, reach, and some additions in core functionality and customer base. "With PayPal, you have to send people over to their website... whereas, with Stripe, we offer a way to integrate payments into the website, on the website or into a mobile app. That is what all the best businesses care about, so we make it very easy, very fast, very simple, and very cheap to do this"- John Collison, Co-founder of Stripe https://en.m.wikipedia.org/wiki/John_Collison

What do Stripe and PayPal do?

PayPal was founded in December 1998 and Stripe was founded in 2010. Since PayPal was founded earlier, that's why people know more about PayPal than Stripe. PayPal is a very well-known digital payment platform that helps its users to send and receive payments online. Nowadays almost everyone has a PayPal account and PayPal claims to have more than two hundred and sixty seven million customer accounts. In the e-commerce sector, PayPal is among the most popular names. Now, speaking of Stripe, it is an online payment method that allows individuals to accept and send money over the web. Its popularity fills the world of e-commerce. Stripe is particularly enjoyed by

individuals or groups who are smart in code with in-house software engineers because of its advanced adaptable hardware. It's a popular choice for independent projects but is also used by organizations like Pinterest, Lyft, TaskRabbit, and Blue Apron.

CONCLUSION

So, it's time to sum up the blog by saying that payment gateways are one of the most important choices you will make as an online business owner. PayPal and Stripe are the greatest competitors for search services. In terms of exchange expenses, PayPal is Stripe's best for small transactions, while "normal" exchanges discover entries fairly curated. However, Stripe begins to lead the pack in global exchanges, incurring the cost of a limited victory in this metric. Thus, Stripe and PayPal both offer extraordinary features and great adaptability. Ultimately, the payment gateway you choose depends on your specific business needs. I hope your doubts about selecting the right payment processor for your online business are now cleared.

https://www.analyticssteps.com/blogs/stripe-paypal-right-payment-platform-online-business

4. Prescriptive Analyses: Prescriptive analytics is the most valuable but underutilized form of analytics. It is the next step in predictive analytics. Descriptive analysis explores many possible actions and suggests actions based on the results of descriptive and predictive analyzes of a given dataset. Descriptive analytics is a combination of different data and business rules. Meta analytics data can be internal (organizational inputs) and external (social media insights). Prescriptive analytics allows companies to determine the best possible solution to a problem. When combined with predictive analytics, it adds the benefit of manipulating a future event such as mitigating future risk. Examples of prescriptive customer retention analytics are next best action and next best offer analysis. A prescriptive analytics use case could be the Aurora Health Care system. He saved $6 million by cutting readmission rates by 10%. Prescriptive analytics has a good use in the healthcare industry. It can be used to advance the drug development process, find suitable patients for clinical trials, and so on. Big Data is transforming the globe to the next level. Yes it is true! Big data is transforming many industries. Let us read in detail about one of the industries which is "Healthcare Industry".

If you think of the perfect example of this expansion, the answer is "the role of big data in the healthcare industry".

What is Big Data in the Healthcare Industry?

The application of big data survey in healthcare has many positive and most life-saving outcomes. Everything is developing very quickly and in the future, we will be able to fully discern the modern world. Nowadays, they are mostly data-driven. Healthcare experts try to use the data to learn about the symptoms of any serious disease. This way

the treatment will be more effective. The cost of treatment and medical insurance will also be reduced.

How is Big Data used in Healthcare?

An organization called the Mayo Clinic is using big data analytics to help monitor patients with many disorders. IoT or Internet of Things, you must have heard of this term, so examples of IoT devices are Apple Watch and Fitbit which are very useful and track your physical actions and enhance your health. It even sends the data to your doctor so they can track your improvement. Big data and logical departments make it easier for specialists and clinical analysts to better infer diseases and treat them. The general benefit of using big data in healthcare is that it will absolutely enhance patient outcomes. https://www.mayoclinic.org/

Some examples of big data analytics in healthcare

1. Electronic health records (EHRs)

Electronic health records refer to the digital documents of patients, which include all medical details and current status. This is a very effective treatment method. Many private hospitals have implemented EHR systems. Records can be modified. This means that if a doctor changes records, it will reflect the change everywhere. Also, these records will tell the patient when to take the test or see the doctor.

2. Reduce Fraud and Enhance Security: Someone's personal data can be stolen and used for

many criminal activities. Therefore, this data is at risk because it has a high rate on the black market. To prevent this data theft, Analytics provides firewall and antivirus security. This software can detect any unwanted activity in the database, which will prevent black hat hackers from getting their hands on anyone's personal data.

3. Real Time Alert: CDS (Clinical Decision Support) software provides clinicians with real- time support to make critical decisions. Another benefit of this is that patients can wear smart devices, which will send real-time data to doctors. Isn't it interesting? Even if any emergency occurs, the doctor will be notified and the patients can be saved with quick treatment. Accordingly, doctors want patients to avoid emergency clinics to maintain a strategic distance from expensive treatments.

4. Using Health Data for Informed Strategic Planning

Now, speaking of another example, the data collected from different patients can be organized.

This will help the concerned authorities to identify the areas where healthcare services are most needed. In this way, health care services can be increased in the required areas.

5. Patients' Expectations for Improvement in Recruitment

Data from past records is used to determine how many patients are likely to show up in an hour or day. In this way, the number of working staff will be sufficient. If more employees are put into service, it will increase labour costs. If it was lower, hospitals would not be able to handle patients. This is why the right number of employees is so important.

CONCLUSION

At the end of the blog, it can be concluded that the rise of big data not only benefits individual patients, but also the entire healthcare industry. The demand for the use of big data in the healthcare industry is increasing day by day. Compiling and examining workforce data enables hospitals, pharmaceutical organizations, and other medical services associations to support employer productivity.

Thus, the use of big data in the healthcare industry is very important because it helps doctors treat their patients better because they have the right information.

https://www.analyticssteps.com/blogs/what-role-big-data-healthcare-industry

4.2 Advantages of Big Data Analytics

Big data analytics has proven to be beneficial for businesses. They use big data analytics in different ways. The advantages it offers have made it one of the most sought after modern technologies.

1. Risk Management

Big Data Analytics provides critical insights into consumer behavior and market trends that help companies assess their status and progress. They are also able to anticipate any upcoming risks with the help of predictive analytics, and mitigate those risks supported by descriptive analytics, and other types of statistical analysis techniques.

2. Product Development and Innovations

Customer feedback on a product is part of big data. This data is then leveraged by companies to evaluate the performance of their products and from now on decide whether to continue or discontinue.

3. Make Faster and Better Decision

Reducing response time also increased efficiency. Now, companies do not have to suffer huge losses if their product or service is not liked by the customers as they can reformulate their business model, making use of this technology.

4. Improving Customer Experience

When companies can analyze customer behavior a lot, Diagnostic analytics can be used to find solutions to customer problems. This will result in a better personal experience ultimately reading for an improved customer experience. By going through the

advantages offered by big data analytics, you may be able to discern how important it has become for businesses. It offers a solution to every business problem that may arise.

Different types of big data analytics enable companies to process and make use of the raw data set they collect daily.

https://www.analyticssteps.com/blogs/what-big-data-analytics-definition-advantages-and-types

Big Data and Marketing Analytics

Speaking of innovations, the ideas collected are key to the innovations. They can be used to modify business strategies, marketing techniques, and much more. In today's world, where humans rely on machines to get their work done, it becomes imperative to manage them well. Machines are made intelligent by mounting artificial intelligence in them. Tools are interconnected across the internet to serve us better. Every tech geek should be aware of the importance of data, and why only tech geeks know what data is. To make the above things possible, machines require a lot of data. The question now is where do they get this big data from and how exactly do they get the required data. The answer is very simple, from a place where all this data is stored.

What does big data marketing analytics mean and why is it important?

1. Using Big Data Analytics to Enhance Customer Acquisition and Retention
The use of big data allows companies to observe different patterns and trends regarding customers. Monitoring customer behaviour is important to drive loyalty. We, humans, have our own traits and characteristics, and we are identified by those traits. Companies also understand this and try to collect as much data as possible. They also use this data to adjust their approach to their customers.

When we talk about customers, it covers both existing and potential customers. Big data analytics has made it easier for businesses to have a lot of information about their customers that companies use to increase customer acquisition as well as retain existing customers. Understanding customer insights will allow companies to be able to deliver what customers want from them. This is the essential step to achieving a high customer retention rate.

2. Companies Use Big Data to Solve Problems for Advertisers
These days, companies use big data to tailor their campaigns. Market insights include monitoring online activity, monitoring point-of-sale transactions, and ensuring rapid detection of dynamic changes in customer trends. These are then used to define the target group, which is the most important thing to consider while designing a campaign.

Large campaigns can be designed based not only on guesswork, but on accurate data retrieved from big data analytics. Examples of this are before us every day. We search

for a product on any random platform and then our screen is flooded with ads for that product. This shows how important the role big data analytics has been.

3. Big Data Analytics for Risk Management

Big data analytics has helped manage risk in a way that has greatly contributed to the development of risk management solutions. It has been said that "prevention is better than cure and is valid for every case. Why wait for the knife to be put to the throat if it can be avoided."

Risk management requires concrete strategy and to come up with a better disease, companies use big data analytics. They try to understand the potential risks and form a strategy accordingly. Interestingly, both are done from the big data collected.

4. Big Data Analytics as a Driver of Innovation and Product Development

For any business to develop a new product, it requires them to understand the requirements. Every design process must start with identifying exactly what works for clients. There are many channels through which an organization can study customer needs. Then the company can determine the best approach to take advantage of this need based on big data analytics.

Using Big Data Analytics in Supply Chain Management

When we look at its definition, "Supply chain management is the management of the flow of goods and services and includes all the processes that convert raw materials into finished products. To better manage the supply chain, companies need accurate and clear market insights and this is taken from big data analytics. Through this, companies can achieve contextual intelligence across the supply chain. The release of goods and services will be monitored based on data retrieval from big data and in this way companies/companies can avoid incurring huge losses.

5. Big Data Analytics Helps Discover the Ideal Demographics

The competitor's audience can also be screened and be very productive publicly available. By adopting analytics for audience analysis, companies derive actionable and useful data Tools like Google Analytics make collecting data about users efficient. Analytics plug-ins can also be added on the Sites to understand user behaviour.

Based on defining the ideal demographic, customized content and solutions can be provided. As a result, the analysis can lead to more conversions.

6. Big Data Helps Create Mass Personalization

Tools can be set to expertly customize your email marketing content. Content can be customized to target a larger segment of the audience while creating personalisation. A business's reach can be boosted which in turn leads to higher conversions.

CONCLUSION

Big data analytics is a gift and companies can invest in this area to improve as well as retain their market position. Implementing big data analytics helps companies achieve competitive advantage, reduce operating cost, and also retain customers. The five ways in which a business can benefit from big data analytics also makes implementing it understandable.

Every aspect needs attention to succeed, and in this technology rich world why not use it to take care of those aspects. The whole game now depends on better data analytics for any kind of success in any sector. Big data analytics is the best thing to use.

https://www.analyticssteps.com/blogs/5-ways-which-big-data-analytics-helping-businesses

REFERENCES

1. Riya Kumari Jan 08, 2021 https://www.analyticssteps.com/blogs/what-data-analytics-and-its-types

2. Ayush Sing Rawat March 31, 2021 https://www.analyticssteps.com/blogs/overview-descriptive-analysis Ritesh Pathak August, 29 2020 https:// www. analyticssteps. com/ blogs/rise-e-commerce-amid-lockdown

3. Riya Kumari Nov 02, 2020 https://www.analyticssteps.com/blogs/stripe-paypal-right-payment-platform-online-business

4. Riya Kumari Oct 06, 2020 https://www.analyticssteps.com/blogs/what-role-big-data-healthcare-industry

5. Ritesh Pathak January 23, 2021 https://www.analyticssteps.com/blogs/what-big-data-analytics-definition-advantages-and-types

6. Ritesh Pathak May 26, 2021

LEGAL ISSUES IN DIGITAL MARKETING

Dr. Deepa P. Patil
I/C Principal, Ismailsaheb Mulla Law College, Satara

ABSTRACT

Digital technologies are becoming more popular and vital in almost every sector of industry and companies are moving towards digital marketing. The digital technologies offer organizations substantial advantages to customers such as greater access to information and convenience which also creates complications for the organizations in the marketing processes such as loss of transparency, privacy and intellectual property issues. There are many difficulties in applying the laws in customary routes to broaden legal control over global marketing activities due to the worldwide use of the Internet. Digital media has made a significant difference in our lives. In the world of digital media, there is a plethora of content that may or may not have been protected by the copyright of its owner. Privacy is one of the most valuable aspects of the online world.

INTRODUCTION

It's the Internet age, and India has seen a boom in Internet users. GSMA Intelligence's number indicate that mobile connections in India were equivalent to 81.3% of total population in Jan 2022. Kepios analysis indicates that Internet users in India have grown from 34 million between 2021 to 2022 and 47 percent of population are online at the beginning of the year 2022. A very informal but perfect example for this is that it was a herculean task to gain views on YouTube videos a few years ago but right now, it is just the matter of uploading a video and there are millions of viewers waiting to watch it and make the view count reach new records. Just as the internet/tech-savvy population has grown in India, legal issues related to the internet have also grown at an alarming pace. Social media users increased by 19 million between 2021 and 2022. Almost every day we receive news about online data breaches, copyright issues, data loss, a threat to the privacy of users, and so on.

Digital Media: Meaning and concept

Digital media is information shared through a digital device or screen. Essentially, it's any form of media that relies on an electronic device for its creation, distribution, viewing, and storage. Digital media is not only conventional media that integrate newspapers, radio programs, magazines and television. It involves advanced digital aspects like videos, audio, images, texts, graphics, etc. Digital media is deeply involved in our daily lives, for example, whenever we use mobiles, computers, or any applications we are using digital media, it can be disguised in the shape of music, podcasts, audiobooks, videos, advertisements, digital art or even in the form of an article.

Digital media has made a significant difference in our lives. When you take part in an event on your mobile, computing or OTT platforms like Netflix and Prime, it is said that you consume digital media. It is safe to say that digital media are with us from the moment we wake up until we return to sleep.

It is difficult to define clearly what a digital media is, as it is constantly evolving and taking on new forms in step with technological developments. However, we are not saying that digital media will only grow in the future, because we are increasingly dependent on technology for just about everything. Embracing technology in the right way can bring diverse benefits to humanity, and digital media is an example.

Legal Issues in Digital Marketing

Digital media is a dynamic and evolving concept that involves a variety of situations where individuals, companies, designers and others are exposed to many risks, often leading to legal disputes. Researchers has explained the challenges and laws associated with digital media as follows.

1. Intellectual Property Rights and Digital Media

Marketers sometimes use another content creator's property to assist in their advertising. This includes using copyrighted material such as artwork, photographs, music, and even video footage from other creators without obtaining permission or a license to do so.

For instance, some marketers just take a random image generated from a Google search and use it in their own branding. However, most images available on Google are not "free to use". You need the permission of the licensed owner before integrating them into your own work.

The same holds for music and video clips. If you want to include any media in your advertisement, you need to get your consent, depending on how you want to use it. Making changes in others' content will also not prevent copyright infringement. In fact, this may lead to further problems in the event that the perpetrator decides to file a complaint to tamper with the material without their consent.

2. Copyrights and Digital Media

As per the copyright law in India, governed by the Copyright Act of 1957, the creators who produce musical, dramatic, artistic or literary works and the producers of sound recordings or cinemas have an exclusive right to protect their work known as copyrights. These rights may include the right to adapt, reproduce, communicate to the public and translate the work of such a creator/producer. All these rights taken together take the form of copyright, however, the degree to which these rights will apply depends on the work of the creator/producer. In the world of digital media, there is a plethora of content that may or may not have been protected by the copyright of its owner. The concern here is that, irrespective of whether certain works are copyrighted or not, people still tend to raise the work of others. However, such copying or the simple act of

making a few modifications to an owner's original work to make it an original creator does not mean that copyright infringement can be avoided.

In the case of R.G Anand v M/S. Delux Films & Ors it was held that if a person produces literal imitation of the copyrighted work of some other person by merely adding few variations here and there as his own original work, it would amount to copyright infringement.

3. **Privacy Law**

Privacy is one of the most valuable aspects of the online world. Nobody wants their private affairs to be considered ridiculous or judgmental. There is a limit to what a person wants to share about herself with others and such a limit is unique to every person. No one may be obligated to share information against his or her consent. We often see ads related to the things we seek on the Internet. That happens because of cookies and IP addresses. Cookies are text files that track and store information that a person has accessed on their device and an IP address provides the location of a person.

Most on-line advertisers tactfully receive information about people via cookies and IP addresses. Many digital media platforms attempt to gather user data without user consent for their benefit. This is called the invasion of one's privacy, in simple words, it is taking away one's personal information (which they would prefer not to share) without his consent and using it for business or other such purposes. In some cases, this information is also used to target a person for illicit benefits.

The Supreme Court of India has held that the right to privacy is a fundamental right and an integral part of article 21 of the Indian Constitution. Therefore, any privacy breach that is caused to an individual can be challenged in court. Digital media should not be seen as a means of invading people's privacy and illegally gathering information in databases.

In February 2021, WhatsApp updated its privacy policy and asked its users to agree to the updated policy in order to continue using the application. He stated that the said update is aimed at improving data security and privacy. Although WhatsApp has been sharing user data with its parent company i.e, Facebook for a long time, it recently accepted this fact openly resulting in a massive backlash from its users. Many users have even shifted from WhatsApp to competing messaging platforms like Telegram and Signal. WhatsApp quickly responded to the concerns of its users by stating that the said update does not increase its ability to share data with Facebook and that WhatsApp does not have the access to see the shared location of its users. It also made it clear that no contact of its users is shared with Facebook. It has extended the deadline for accepting the update until May 15, 2021, after which its users will lose access to the app.

4. **Trademarks and Digital Media**

Due to the massive competition on digital media, different companies are creating brands for themselves in the online world. Digital media is seen as a platform rich in customers and, therefore, marketing agencies thrive to reach the right customer at the right time through online media. While it is important to grow your business, it is equally important to protect it and one way is to create a trademark for it. The brand not only protects your company, it also boosts brand recognition and goodwill. Digital media marketing though virtual comes very close to the customers which in turn increases the sales and profits of a company so it is important to be present on digital media to withstand the competition in the market.

5. **Legal Issues in Website**

Website needs to be protected from the following issues those are the unique underlying design of a Web page and its contents List of Web sites compiled by an individual or organization and all other unique elements that make up the original nature of the material. The domain name represents the Internet address. Competition which happens for the domain name, it may lead to other legal problems. With respect to the Terms of Use and Condition, most online protection approaches are offered by private organizations to individual organizations. Governments are creating legislation to strengthen safety assurance for many organizations. The laws protecting their host country have an impact on foreign organisations. Each association should be exceptionally cautious in the application of the terms and conditions for electronic exchange for Internet clients.

6. **Patents and Digital Media**

A patent is an exclusive right conferred on an individual in connection with the invention. Such an invention usually refers to a product or process that facilitates a new method of doing something or resolving a problem in technical terms. A patent protects the patentee for a period of 20 years. Indian patents are subject to the Patent Act of 1970. Digital patents refer to parents dealing with inventions related to computing, mainly concerning the methods involved in the use of software. Where a person exercises the exclusive rights of the proprietor of the patent without the prior authorization of the proprietor of the patent, he shall be held responsible for the infringement of the patent. Patent infringement is dealt with by sections 104 to 114 of the Patent Act, 1970.

7. **Hate Speech**

Like every coin has its two sides, digital media also has its pros and cons. Digital media allows freedom of expression, but they also pose certain risks, such as the spread of hatred. Hate speech refers to those words, either spoken or written, gestures or other such visible representations expressed with the intent to incite violence or cause fear amongst other people in the surrounding. This also includes discrimination based on

gender, caste, religion, etc. Hate speech can be in the form of offensive or derogatory comments/messages, videos and images depicting reaction-provoking violence, online trolling, threats and so on.

8. Defamation

Digital media offers various platforms for an individual to express their opinions openly on the Internet. However, this medium is also used for the purpose of transmitting defamatory statements against a person who causes damage to his reputation. As per Section 499 of the Indian Penal Code, 1860, the act of a person who by words either spoken or written or by signs or any other visual representations states or publishes any matter regarding any person with an intention to injure, or knowing or having a reason to believe that such statement or publication will injure the reputation of such person is said to commit the offence of defamation against such a person. A statement must be false and reputational to be considered a defamatory statement.

Due to the abundant and easy availability of information on digital media, it becomes easy to fabricate and create fake facts about certain people, not to forget the massive creation of fake accounts for the purpose of passing defamatory statements. As a result, it becomes even harder to track every offender in this case. For the purpose of gaining high TRPs, even the media encourages such baseless assumptions and opinions which does not harm the offenders but affects the lives of the targeted persons significantly. Thus, defamation had become a vital issue.

Suggestions to Overcome the Legal Issues

1. Intellectual property refers to the ownership of intangible goods. This property includes symbols, drawings, writings, thoughts and creations. Therefore, it also addresses digital media because it contains audio and video elements that can be downloaded from the Internet. The following are a few of the IP rights that deal with digital media.

- Use original and personalized multimedia.

- Read the license details for the content carefully.

- Use Creative Commons hardware for free public use.

- Obtain permission from the Content Designer.

- Only buy licensed photographs.

- Do not use images that contain identifiable characteristics of a person, trademark, logo, landmark or private property.

- While not required by law, assign merit or attribution to the original author as an act of appreciation.

- If you work with third parties who provide marketing content for you, make sure their work is free from plagiarism.

2. Most countries around the world have privacy laws that require marketers to notify consumers prior to collecting their personal information. Privacy policy should contain instructions for unsubscribing from data collection. For instance, if you plan to send promotional material through different mediums (email, SMS, postal mail, etc.), obtain customer permission for each. Whether your business page collects personal information or not, it's best to have a privacy policy on your page to rule out potential litigation. Ideally, you should consult a lawyer who drafts a privacy policy based on the nature of your business/website in accordance with the region you operate from. You may also make use of privacy policy generators that offer core policies free of charge. Be sure to link your privacy policy or terms in the box you are asking for consent or collect data. For example, add a click box to "I agree" in the section where you subscribe to a newsletter or make a purchase. Keep a separate policy for "Cookies" that you use to monitor consumer behaviour on your website. It is also necessary to have adequate cyber security measures in place and to inform customers that you are protecting their personal data.

- State the protection mechanism you have in place as well as the privacy policy.

- Enable SSL encryption to ensure secure connectivity between your website and the visitor's website.

- Secure the information gathered with a trusted and reputable cloud storage provider.

Lastly, regulators prohibit the sending of spam, so make sure you have the recipient's consent before sending marketing material.

3. A trademark is created for the business, if one intend to protect it's brand value and goodwill from unauthorized persons. Trademark law in India is regulated under the Trademarks Act 1999. In the case of Hearst Corporation v. Dalal Street Communication Ltd., it was held that a trademark is said to be infringed when a person for the purpose of his business uses a mark that is deceptively similar or identical to the trademark of another company's registered trademark. In the case of Zara Food v. Zara Fashion, a restaurant in Delhi was named after the renowned fashion brand. It was held by the court that any person would easily assume that the restaurant is a part of the Zara

4. Fashion brand. As a result, the restaurant had to change its name from Zara food to Tapas Bar. Similarly, in digital media, it is easy to lift domain names by making slight changes using certain characters. In order to avoid such trademark infringement on digital platforms, it is important to have a registered trademark.

5. Due to such a wide presence of digital media, anyone just by merely having access to the internet can post such hate speech or spread hatred in any manner and on any platform. While at times these hateful remarks are subtle, they also have the potential to take a wrong turn toward serious legal problems. An example is the culture of endless trolling on social media. However, most digital media platforms can now report such hate speech.

This assists in reducing the rate of online abuse and trolling. While reporting a problem may seem insignificant in the beginning, it's the key to stopping online abuse of any kind. Hate speeches are not protected under Article 19(1)(a) that talks about freedom of speech and expression. However, these hate speeches are penalized under the Indian Penal Code, 1860 and the Information Technology Act, 2000. Stringent laws must be enacted to stop the spread of hatred but it must also be ensured that democracy does not turn into a dictatorship.

6. Defamation is a serious legal issue related to digital media. The penalty for defamation under section 500 of the Indian Penal Code of 1860 is a simple prison term of up to two years or a fine or both. In the case of Rajiv Dinesh Gadkari v. Smt. Nilangi Rajiv Gadkari, the respondent filed a suit against her husband after receiving a divorce letter from him for repeatedly harassing and defaming her through obscene photographs. The offence of defamation has been registered accordingly.

CONCLUSION

Marketers are often not familiar with the legislation. But as digital marketing increases, the risks of litigation also increase. That's why, with "potential legal issues" in mind, you'll ensure that you don't have any problems and that you can leverage the world of digital marketing seamlessly.

Legal challenges in relation to digital media are not limited to those mentioned above. Every other day, a new form of invasion of privacy is caused by the evolution and dynamics of the nature of digital media. In today's world, it is virtually impossible to stay away from digital media because they are widespread across the Internet. Therefore, digital media laws must be up-to-date so that they are able to identify legal issues and able to provide solutions accordingly.

REFERENCES

1. Digital Marketing: Seema Gupta, Mc Grow Hill publication , Third Edition, 2022

2. IntellectualPropertyRightsinDigitalEnvironment_17.pdf by Swagata Chattopadhaya

3. Dahl, J. Y., & A.R. Saetnan, 2009, "It all happened so slowly: On controlling function creep in forensic DNA databases", International journal of law, crime and justice, 37(3): 83–103

4. Judy Strass et.al 2007, e-marketing, Pearson, New Jersey

5. Yang, G. and K. E. Maskus (2001b), "Intellectual Property Rights and Licensing: An Econometric Investigation", WeltwirtschaftlichesArchiv, pp. 137, 58-79.

6. http://thecdm.ca/program/digital-mediaretrieved on 3-3-23.

7. https://legislative.gov.in/sites/default/files/A1860-45.pdf retrieved on 3-3-23.

8. https://www.indiacode.nic.in/bitstream/123456789/1999/3/A2000-21.pdf retrieved on 3-3-23.

9. http://www.dmlp.org/legal-guide/legal-issues-consider-when-getting-onlineretrieved on 3-3-23

10. https://business.clickdo.co.uk/legal-issues-in-digital-marketing/ retrieved on 3-3-23.

11. https://datareportal.com/reports/digital-2022-india retrieved on 8-03-23

12. Ibid

13. 1978 AIR 1613, 1979 SCR (1) 218

14. (1995) 2 CALLT 346 HC

15. https://www.dotnice.com/zara-vs-zara-a-trademark-tale/ retrieved on 08-03-2023

16. https://indiankanoon.org/doc/1759047/ retrieved on 08-03-23

EFFECTIVE ANALYSIS ON INTERPERSONAL RELATIONSHIPS AND WORK EFFICIENCY: EVIDENCE FROM AN IMPACT OF MOBILE USAGE

Dr. Rakesh D

Associate Professor, JSS– Centre for Management Studies, JSS Science and Technology University, Mysuru, India

ABSTRACT

Nowadays, it's rare to meet someone without a smartphone, and if they did, their fingers would likely be occupied sending online texts to the people at the opposite end. Social media networking sites are undeniably attractive into a credible, trustworthy, and popular mode of communication. The use of SNSs has significantly expanded in the present, and this has a significant impact on the users in many possible terms, especially on the dependent parameters and their connections. Smartphone use for personal, professional, and government purposes has grown in popularity. This study examines the effects of SNS on cops', employees', friends', and neighbours' interpersonal interactions as well as the impact on their ability to complete their jobs effectively. Use of smartphones at work, including whether they are used to help or interfere with work, and their effects on workers' performance.

Keywords: Usage of Cell phones, Interactive Interactions, Work Productivity.

Design/Methodology/Approach: In the present study, a prominent graduates and postgraduates from various colleges located in Karnataka, India is considered for analysis. The approaches considered here are to identify the impact of mobile usage by the employees in an organization and how it affects their work efficiency and interpersonal relationship.

Findings: The cost and energy consumption analysis before and after the application of these methods will give a strong image of how energy and money can be saved and is useful for society. The initial investment may slightly be high but the payback period is quite early. Results of the study indicate that the payback period for solar panel installation and replacement of existing electrical fixtures by LED fixtures for interiors and corridors is approximately 12years, 10months, and 7months respectively. This is proved worthwhile by various investment criteria used in the project.

INTRODUCTION

The development of the advanced gadget industry, itself began about twenty years ago, has had a significant impact on communication. Smartphone development has been moving quite quickly, and they are becoming more and more integrated into people's lives. Advanced gadget use at workplace can have optimistic and pessimistic effects, which can affect an organization's productivity [1].

Social networking websites have become incredibly popular among users worldwide. SNS use is now widespread and an essential component of how people communicate on a daily basis. The internet has become a cutting-edge means for both employees at work and personal life to interact and keep connected with one another as a result of recent advancements in technology. Individuals utilise open media sites like Facebook, Twitter, and Snapchat to establish and maintain relationships with others. People can grow their friendships and even make new pals thanks to SNSs. SNS are used by people to communicate with friends, family, and even complete strangers. The majority of internet usage today is for social media interaction. Users chat, message, exchange photographs and videos, and keep in touch with friends and family around the world. Users of SNSs can connect with people in their network as well as the general public to exchange thoughts, photos, postings, activities, events, and hobbies [2].

LITERATURE REVIEW

In order to develop a shared understanding, participants in a communication process create and exchange information with one another. A revolution in communication has occurred as a result of the technological advancements of the time and rising Internet usage in recent years. The way people connect with one another has altered as a result of the communication revolution [3].

Smartphones have facilitated better communication between co-workers and employers [4]. Employees may manage and organise their work with a smartphone. Additionally, it allows them greater freedom to plan their work and meetings in a creative and effective way. Additionally, it allows for the individualization of labour and offers physical flexibility of mobility while working [1]. Smartphone use at work can be beneficial because it improves relations between supervisors and subordinates. It also enhances their ability to share knowledge. Additionally, these elements raise job satisfaction among employees, which boosts workplace effectiveness and productivity [5].

Additionally, using smartphones at work reduces productivity, disengages employees from reality, and raises stress levels. Employees may become distracted from their task and participate in dishonest and immoral activities including internet bargain hunting, bulletin, harmony, passing time, and entertainment at workplace. Individuals use of smartphones during meetings causes them to lose focus and irritates others [6].

A smartphone is a high-potential tool that uses the internet to link people together. CEOs or managers should seize this chance to make use of the smartphones of their staff members as engagement tools [7].

People can quickly share their knowledge and information with others thanks to the combination of social network and smartphone applications. Internal social networks have become more and more popular, giving staff members and management a way to share knowledge and work together virtually. Cloud computing is one of the most

effective, dependable, and well-liked platforms for knowledge exchange. Because smartphone users may want to interact and extract the data at all the places with any point of time, the combination of smartphones with cloud computing has the potential to advance knowledge more quickly and effectively. It will be a terrific opportunity for corporate leaders to potentially develop their firm if they handle it properly. Business owners and managers can take use of the benefits of smartphones by incorporating their use into daily tasks. This will boost productivity and enable organisations to grow.

Social media has significantly increased in popularity as one of the major form of entertaining media. The advantages of this gadget include fast and portable communication with anyone, anywhere in the globe, and simple accessibility. More people can exchange and circulate messages than ever before. The world appears to be getting smaller as communication speeds up.

The way we engage and the amount of individuals we may interact with as a result of social media networks has undergone one of the largest favourable transformations. This would never be feasible without SNS. SNS give us the chance to express our thoughts to a larger audience. Prior to social media, our ability to communicate with others and engage in social media [8].

The interactive mode of communication is being modified nowadays due to the influence of social media. Thus the skills of communication have been coming towards diminishing stage and also the individuals have lost their capabilities in communicating each other in the professional way. Additionally, this has caused people to shun in-person interactions (Subramanian, 2017). Smart gadgets have been more used and also effective in communicating in upper styles and lack of time. [9].

Loss of privacy is another growing issue. Everyone knows everything about everyone else thanks to social media, which makes privacy impossible. This is a risky situation that can result in a herd mentality and make a person lose his or her sense of choice [10].

RESEARCH OBJECTIVES

This research articles persists the objectives as:

- Analyse the connection between the respondent's educational backgrounds and the significance of SNS at their workplace.

- Explore the connection between the respondent's mobile connection type and how it affects the interpersonal interactions between co-workers.

- Research the connection between how much time men and women spend each day on social media and why they use it.

RESEARCH DATA AND METHODOLOGY

The data was gathered from the Mysore region using the convenience sample sampling technique.

55 people made up the sample size for this study. Out of these, 63.63% were men and 36.36% were women.

On the other side, replies from survey participants aged 20 to 57 were gathered.

Google Forms was used to collect responses to a structured questionnaire created for this study's purposes.

DATA ANALYSIS AND INTERPRETATIONS

H0: The respondents' age and the fact that they choose SNS to keep up with friends and family is not significantly correlated.

Hence the chi-square test is being used to understand and find out the significant interrelationship with the defendants using various type of mobile connections and their effect on the relationships with the colleagues at the workplace.

And also we found the relevant evidence to reject the given null hypothesis as the value obtained is 0.172 which is much higher than the level of significance as 5%. Hence both the relationships don't hold good and hence no relations between each other.

H0: There is no connection between how much time men and women spend using social media sites daily and why they do so.

We did the ANOVA one-way test to detect the various and relevant relation between time spent by male n female on entertainment media and the priorities behind them.

We couldn't evident any such case of null hypothesis between the gender values as the significance we got as 0.487, which is evidently higher than the significance level of 0.05%. Hence we conclude these qualities are not important to consider.

This suggests that there is no connection between respondents' gender and how frequently they use SNS each day. However, there is a substantial correlation between respondents' daily frequency of SNS use and their intended use of SNS.

CONCLUSION

The current study of our selected individuals and employees who are using advanced gadgets have evident that it has been affected adversely on their academic relationships with colleagues. And also has been identifies that there is no significant linkage with the various types of mobile connections and their impact on the interpersonal relationships within the colleagues at the workplace. All of our respondents agree that social media is important and helpful for their academic careers. However, no conclusive link between the respondents' educational backgrounds and the significance of social media sites at workplace can be established.

The use of social networking sites for sustaining personal connections can be considered as a result of more contact, improved communication, and a desire to stay in touch. According to the study, there is a substantial correlation between respondents' ages and the reason they used SNS for keeping personal connections. Social media has ingrained itself firmly into our daily lives. People are inevitably going to advance along with technology.

RECOMMENDATIONS

Overuse of mobile devices is detrimental to our mental and even visual health. Using mobile devices excessively on a regular basis makes anxiety worse. Additionally, it fosters a sense of isolation and lowers self-esteem. Our social media platforms facilitate all of this. Social media portrays a life that is very different from reality. People tend to compare these illusory realities to their own lives because that is just how they are. Because of this comparison, life becomes more stressful and people develop fears of failing and missing out. One should practice mindfulness meditation; the possibilities are unlimited. In order to live a quality life one that emphasizes enjoying the moment rather than squandering time on social media and running from reality a person must become aware of this for themselves and fight to change it. Making sure that their children are not constantly addicted to their smartphones is a responsibility for parents. They must make sure that what they are doing is beneficial, worthwhile, and adds to their knowledge and quality of life.

The use of mobile devices at work is decreasing employee productivity. Although a workplace free of gadgets could be the ideal scenario, this is not a reasonable expectancy. It is preferable to acknowledge that advanced gadgets are part of contemporary workplace balance and create regulations to limit their use. The better usage and restrictions and in some cases, outright bans. Reduce interruptions by speaking quietly, keeping calls brief, abstaining from foul language, and making personal calls in private while keeping phones on silent mode. The allowable times to avail advanced smart gadgets, such as leisure times, as well as the number and duration of calls allowed at workplace events, should all be included in the policy. It should be put in writing to guarantee that everyone is aware of and abides by the rules for proper mobile phone behaviour. Explain the terms in plain, unambiguous language and explain why they are important, such as to maintain production or assure safety. Include the sanctions that will be taken if the policy is broken. Keep an eye out for policy violators and enforce the regulation evenly and rigorously.

Litheness in the workstation enables both owners and individual employees to determine the work ethics that are most comfortable for them. This promotes a better work environment for employees and possible to assist owners increase their company's production and efficiency. Mobile phone usage policies that permit it should be put into practise.

Highlights of the Chapter

1. This research evident social media has ingrained itself firmly into our daily lives and is inevitably going to advance along with technology.

2. The study evident adverse effect on their academic relationships with colleagues.

3. Effect of mobile usage on socio inter relationship and their work efficiency.

4. This study shows that the social media usage is one of the impacting factor at workplace.

REFERENCES

1. Alzwamri, A.A.F., & Hussain, N. (2017). The impact of smartphones on work productivity as perceived by employees at a government department in Salalah, Oman. Journal of Islamic Social Sciences and Humanities, 20(10), 20-24.

2. Parvez, M.S., Rahaman, M.A., Fatema, K., & Mondal, D.R. (2019). Impact of Social Networking Sites on Interpersonal Relationship among Teenager: A Sociological Analysis in the District of Bagerhat. British J. of Arts and Humanities, 1 (5), 14-27.

3. Mittal, P. (2020). A multi-criterion decision analysis based on PCA for analyzing the digital technology skills in the effectiveness of government services. In 2020 International Conference on Decision Aid Sciences and Application (DASA) (pp. 490–494). IEEE.

4. https://doi.org/10.1109/DASA51403.2020.9317241

5. Pitichat, T. (2013). Smartphones in the workplace: Changing organizational behavior, transforming the future. LUX: A Journal of Transdisciplinary Writing and Research from Claremont Graduate University, 3(1), 13.

6. Ferreira, A., & Du Plessis, T. (2009). Effect of online social networking on employee productivity. South African Journal of Information Management, 11(1), 1-11.

7. Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M.D. (2017). Problematic Social Media Use: Results from a Large-Scale Nationally Representative Adolescent Sample. PLoS ONE, 12(1): e0169839.

8. HaeJung, K. (2012). The dimensionality of fashion-brand experience. Journal of Fashion Marketing andManagement, 16(4), 418-441.

9. Bhowmick, T., & Madhu, S. (2020). Social media and its influence on social skills, International Research Journal of Modernization in Engineering Technology and Science

10. Betul, K., Niall, McCrae. & Annmarie, G. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents, International Journal of Adolescence and Youth, 25:1, 79-93

11. Rideout, V., & Robb, M. B. (2018). Social media, social life: Teens reveal their experiences. San Francisco, CA:Common Sense Media.

12. Alalawi, A., Kukreja, G., & Gupta, K. (2016). Free Cash Flow as a Determinant of Performance and Stock Price Movement in Multinational Energy Companies. Journal of Business Management and Information Systems, 3(1), 11–29. https://doi.org/10.48001/jbmis.2016.0301002

13. Arora, A., Chakraborty, P., Bhatia, M. P. S., & Mittal, P. (2020). Role of Emotion in Excessive Use of Twitter During COVID-19 Imposed Lockdown in India. Journal of Technology in Behavioral Science. https://doi.org/10.1007/s41347-020-00174-3

14. Azimee, S., & Akhter, J. (2018). Financial Inclusion in India – Major Issues. Journal of Business Management and Information Systems, 5(1), 16–24. https://doi.org/10.48001/jbmis.2018.0501003

15. Bhatia, A., & Mittal, P. (2019). Big Data Driven Healthcare Supply Chain: Understanding Potentials and Capabilities. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3464217

16. Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. Personality and Individual Differences, 116, 69-72.

17. Chakraborty, P., Mittal, P., Gupta, M. S., Yadav, S., & Arora, A. (2020). Opinion of students on online education during the COVID-19 pandemic. Human Behavior and Emerging Technologies, 66, 37–39. https://doi.org/10.1002/hbe2.240

18. Gupta, M. (2020). Abuse of Dominant Position by Google LLC – A Case Analysis. Journal of Business Management and Information Systems, 7(1), 11–21. https://doi.org/ 10.48001/jbmis.2020.0701002

19. Gupta, S. (2015). Warding off the Ponzi Trap: Eschewing the Quick Buck Promise that can Dupe You. Journal of Business Management and Information Systems, 2(2), 19–21. https://doi.org/10.48001/jbmis.2015.0202002

20. Ivanova, A., Gorbaniuk, O., Błachnio, A., Przepiórka, A., Mraka, N., Polishchuk, V., & Gorbaniuk, J. (2020). Mobile phone addiction, phubbing, and depression among men and women: A moderated mediation analysis. Psychiatric Quarterly, 1-14.

21. Kaur, A. (2017). Does Taxation Effect FDI in India? An Empirical Study of Hartman Model. Journal of Business Management and Information Systems, 4(1), 29–42. https://doi.org/10.48001/jbmis.2017.0401004

22. Kumar, A. (2020). Disruptive Technologies and Impact on Industry- An Exploration. Journal of Business Management and Information Systems, 7(1), 1–10. https://doi.org/10.48001/jbmis.2020.0701001

23. Matthes, J., Karsay, K., Schmuck, D., & Stevic, A. (2020). "Too much to handle": Impact of mobile social networking sites on information overload, depressive symptoms, and well-being. Computers in Human Behavior, 105, 106217.

24. Mittal, P. (2017). Time Series Analysis Using ARCH Models: A Case Analysis of Australian Stock Index. VEETHIKA-An International Interdisciplinary Research Journal, 3(1), 74–80. https://doi.org/10.48001/veethika.2017.03.01.007

25. Mittal, P. (2019). Impact of Auto-regressive (AR) Process in Bullwhip Analysis in a Multi-Location Supply Chain Network. Journal of Business Management and Information Systems, 6(1), 19–26. https://doi.org/10.48001/jbmis.2019.0601002

26. Mittal, P. (2020). Big data and analytics: a data management perspective in public administration. International Journal of Big Data Management, 1(1), 1. https://doi.org/10.1504/ijbdm.2020.10032871

27. Mittal, P. (2020). Impact of Digital Capabilities and Technology Skills on Effectiveness of Government in Public Services. In 2020 International Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy (ICDABI) (pp. 1–5). IEEE. https://doi.org/10.1109/ICDABI51230.2020.9325647

28. Parashar, A. (2018). Factors Affecting Retirement Planning Behavior of Working Individuals: A Case Study in Lucknow. Journal of Business Management and Information Systems, 5(1), 25–34.

29. Schivinski, B., Dąbrowski, D. (2016). "The effect of social media communication on consumer perceptions of brands". Journal of Marketing Communications, 22(2): 189–214.

30. Shabnoor, S., & Tajinder, S., "Social Media its Impact with Positive and Negative Aspects",

31. Siddiqui, T. H., & Yadav, R. K. (2019). A Study of Marketing Strategies of Pharmaceutical Industry in India.

32. Journal of Business Management and Information Systems, 6(1), 27–37.

33. Subramanian, K. R. (2017). Influence of social media in interpersonal communication. International Journal of Scientific Progress and Research, 38(2), 70-75.

34. Uma, Maheswari. S., & Vasanthanayaki. C. (2017). Performance Analysis of Compressing Sensing Framework On Interactive Media Content, International Journal of Pure and Applied Mathematics, Vol. 116, No. 11, Pp. 241-250.

35. Varadharajulu, P., & Meenakumari, S. (2017). The Implication of Internal Social Media on Employee Engagement in IT Companies. Journal of Business Management and Information Systems, 4(1), 43–52. https://doi.org/10.48001/jbmis.2017.0401005

36. Velga, V., "Impact of Social Media on Interpersonal Communication Patterns", Socialinių Mokslų Studijos Societal Studies, 7(1), 2015, 124-138.

37. Verma, C. P., Bansal, R., & Mittal, P. (2020). Control of COVID-19: A Counter Factual Analysis. Administrative Development, Journal of HIPA, Shimla, 7(1), 1–24.

38. Yadav, S., Chakraborty, P., Mittal, P., & Arora, U. (2018). Children aged 6-24 months like to watch YouTube videos but could not learn anything from them. Acta Paediatrica, 107(8), 1461–1466. https://doi.org/10.1111/apa.14291

39. Zhao, P., Yaobin, L.U., Bin, Wang., & Patrick, Y.K., Chau. (2017). Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage, Journal of Management Information Systems, 34:1, 71-101

LIST OF TABLES

Table-1: Gender

		Frequency	Percent (%)
	Female	20	36.36
Valid	Male	35	63.63
	Total	55	100.0

Table-2: Descriptive statistics of Age
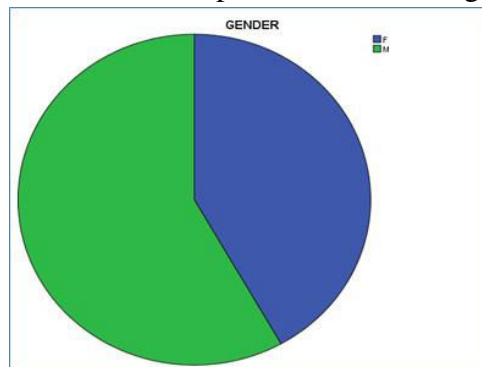
Table-3: Academic Qualification vs their priorities at workplace

			Priorities @	Workplace	Total
			Important	Its Useful	
Educational Qualification	Graduate	Count	20	19	39
		% of Total	36.4%	34.5%	70.9%
	Post Graduate	Count	9	7	16
		% of Total	16.4%	12.7%	29.1%
Total		Count	29	26	55
		% of Total	52.7%	47.3%	100.0%

Table-4: Chi-Square Tests

	Value	df	Sig. (2-sided)
Pearson Chi-Square	.112[a]	0.9	.689
Continuity Correction[b]	.0015	0.9	.913
Likelihood Ratio	.111	0.9	.697
Fisher's Exact Test			
Linear-by-Linear Association	.109	0.9	.698
N of Valid Cases	55		

Table-5: Various mobile connections and its relationship among the individual colleagues

			Impact of mobile connections on relationships of Individual colleagues			Total
			STRONGLY AGREE	AGREE	DISAGREE	
Type of Connection	Prepaid	Number	10	22	8	40
		Total %	18.18 %	40 %	14.54 %	72.72 %
	Post Paid	Number	2	3	10	15
		Total %	3.6 %	5.45 %	18.18 %	27.23 %
Total		Number	12	25	18	55
		Total %	21.81 %	45.45 %	32.72 %	100.0%

Table-6: Chi-Square Tests

	Value	df	Sig. (2-sided)
Pearson Chi-Square	3.471[a]	2	.172
Likelihood Ratio	3.404	2	.179
Linear-by-Linear Association	.019	1	.808
N of Valid Cases	55		
[a] 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.27.			

Table-7: Frequency of Usage

				Purpose of using sns			
				Just for fun	Keeping in touch with family	Keeping in touch with friends	To meet new people
				Count	Count	Count	Count
GENDER	M	Freq of Usage Of Sns Per Day	1/2 -1 HR.	2	3	0	0
			1-3 HRS.	9	1	1	2
			MORE THAN 3 HRS.	3	0	7	4
	F	Freq Of Usage Of Sns Per Day	1/2 -1 HR.	1	1	0	0
			1-3 HRS.	6	3	4	0
			MORE THAN 3 HRS.	3	0	2	3

Table-8: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	.359	2	.179	.720	.487
	Within Groups	12.919	53	.249		
	Total	13.278	55			
Purpose of Using Sns	Between Groups	13.759	2	7.288	6.521	.002
	Within Groups	57.123	53	1.008		
	Total	70.882	55			

NEW INNOVATIONS IN E-TOURISM AND HOW THEY IMPACT THE TOURISM SECTOR

Mr. Mayur Dattatray Mali

Sr. Faculty IT, INurture Adypu, Pune

ABSTRACT

E-tourism is the use of information technology to improve the processes involved in the tourism industry, consequently increasing effectiveness and efficiency and promoting the industry. Internet has transformed flexibility in both consumer and producer processes for choice and service delivery. Consumers have raised their standards of life and become much more intelligent and discriminating as a result of receiving high-quality service.

Because of this, tourists are now more picky, demanding high-quality goods and appreciating their time and money. Yet, many sectors of the tourism industry continue to use outdated practises that deter both domestic and foreign tourists. This essay will concentrate on current E-tourism trends and their effects on the travel and tourist industry. The process in the tourism industry has changed as a result of this development, which has also altered the commercial environment.

Customers can access various sorts of tourism through various channels and distribution systems.

Keywords: Information and Communications Technology (ICT), Touris,Tourists' satisfaction, E- tourism.

I. INTRODUCTION

The largest economic activity in the world is tourism, which also tops the list of e-commerce categories in terms of the volume of transactions. Currently, around 1 billion individuals use information and communication technologies worldwide. Hence, the tourism business has experienced exceptional dynamism as a result of rising tourism and Internet advances. E- tourism adoption is still crucial to the development and success of the tourism sector.

Information and communication technologies (ICT) have been adopted during the past 40 years as a result of the internationalisation of the tourism industry (Benckendorff & Pierre, 2001).

In this regard, the industry's participants should be aware of and use growing tourism trends as a catalyst for the industry's performance.

However, because its products are complicated and intangible, each visitor's experience with them will be different at different times.

E-tourism is a phenomena where the application of information and communication technology (ICT) by the travel and tourism sector affects the value chains and processes (Auturo & Mantejo, 2016). E-tourism is essentially the digitalization of the whole travel and tourism sector, including all of its processes, value chains, infrastructure, services, and related activities.In order to increase their effectiveness and efficiency, areas including transit, dining establishments, lodging, and entertainment venues. ICT not only gives customers the ability to find, customise, and purchase tourism-related goods, but it also supports the industry's internationalisation (Aref & Zahid, 2016). Before travelling, ICT gives information about the tourist attractions in various locations, which may increase travellers' satisfaction.

Today's consumers, or tourists, have direct access to reliable information, may communicate with suppliers, and can finally negotiate the best price. Due to the openness, speed, flexibility, and range of options brought about by the Internet's rise, the tourism sectors are now more competitive than ever before (Auturo & Mantejo, 2016). Before travelling, ICT gives information about the tourist attractions in various locations, which may increase travellers' satisfaction. Today's consumers, or tourists, have direct access to reliable information, may communicate with suppliers, and can finally negotiate the best price. The introduction of the Internet has enhanced competition among the travel and tourism sectors by bringing transparency, speed, flexibility, and a wide range of options (Auturo & Mantejo, 2016)

According to Arturo and Otium (2011), the growth of ICT has had a significant impact on andchange of the tourism industry. In order to eliminate ambiguity during service contacts, the sector must also coordinate a variety of services and give comprehensive information, which demands significant work. To increase sales and profits, its businesses must move quickly to sell unsold inventory. Tourism requires ICT support because it is an information-intensive industry, and the two are interconnected (Benckendorff & Pierre, 2014).

The growth of search engines, the capacity of transportation, and the speed of networks have all had an impact on how many travellers there are who use technology to plan and record their journeys (Costea, 2014). By boosting the standard of life, fostering employment, increasing investments, and thereby bolstering the economy, all these industries help make travelling enjoyable (Brodie & Winklhofer, 2013). Reduced seasonality, effective consumer communication, an increase in reservations and overall sales are some benefits of e-tourism (Bai & Wen, 2012). The structure and guiding principles of the tourism sector have been permanently altered by the usage of ICT. Consumer-tourists can now choose their destination with ease by comparing pricing and controlling their financial transactions.

One of the largest sectors in the world, tourism, uses the internet to disseminate information inthe most effective way possible (Grun, et al., 2008; Marcussen, 2008).

The influence of developing ICT, according to Bai and Wen (2012), has an effect on how marketing models for the present and the future manage consumer behaviour.

ICT not only gives consumers the ability to find, customise, and purchase tourism-related goods, but it also supports the globalisation of the sector by giving travel professionals effective tools to create and market their services internationally (Cunliffe, 2015). ICT is a key component of a new strategy for driving up demand in the travel and tourism sector, which, inturn, attracts more travellers and boosts revenue in addition to driving up the sector's growth.

Operational and strategic methods in the tourist industry have seen a significant transformationas a result of the introduction of Computer Reservation Systems (CRSs) in the 1970s, Global Distribution Systems (GDSs) in the late 1980s, and the Internet in the late 1990s (Cunliffe, 2015). According to (Porter, 2014), cutting out middlemen shortens the distance between the client and the provider. As a result, users can easily access the offers made by the travel and tourist sector. Information and communication technologies (ICT) have made the global tourism sector possible since the 1980s (Benckendorff & Pierre, 2014). ICTs are now important on all operational, structural, strategic, and marketing levels to support cross-border interactions between suppliers, intermediaries, and customers (Costea, 2014). The effectiveness of several parts of this service, like reservations and booking, has quickly improved thanks to ICT.

In the near future, countries without ICT infrastructures won't be able to match the rate of tourist growth of other nations that play key roles in ICT infrastructure, according to information released by the World Tourism Organization (2017).

While the primary goals of ICTs for tourism providers are to boost operational effectiveness, generate cost savings, and increase sales, the abundance of tourism-related products on the market has increased product and price transparency, which has improved service quality for visitors (Ilo, 2010). E-tourism uses a variety of technology typologies. As a result, sub-areas have developed, including operational tools and systems used by tourism, hospitality businesses, or organisations to boost efficiency and competitiveness; consumer platforms adopted by travellers to conduct information searches, plan trips, make purchases, and share experiences; and distribution, commerce tools that provide distribution channels and mediate the interactions between visitors and businesses.

II. CASE STUDIES

2.1 India

The country's tourism sector is currently growing and has a great deal of potential to expand and become well-equipped with a variety of tourist attractions to draw both domestic and foreign tourists. Following the advent of low cost air travel, India's tourist industry has greater growth potential. Unfortunately, due to a lack of IT

integration, the level of service delivery is constrained (Benckendorff & Pierre, 2014). In terms of competitiveness, the United World Tourism Organization (UNWTO) placed India's tourism sector at number 61 in 2018. In 2012, there were one billion foreign visitors. As a result, Indian tourism has a lot of space to grow and draw in as many domestic and foreign visitors as possible (Porter, 2014).

In India, achieving this goal will be greatly aided by increased investment and the integration of IT into the tourism industry.

2.2 Iran

Iran is a tourism hotspot with a wealth of cultural, ecological, and historical attractions thanks to its long history and rich civilisation (Costea, 2014). Iran hasn't yet done a good job of using ICT resources to advertise its attractions to foreign tourists, claims World Tourism. Consequently, e-ticketing, e-reservations, online payments, multilingual and current information websites are crucial planning techniques in the field of e-tourism. For the nation to be able to take use of the tourism industry's benefits on a worldwide scale, their tourism authorities must develop the e-tourism infrastructures in order to stay up with the competitiveness of this field (Saddad, 2010).

2.3 New Developments in E-Tourism

Tourist information websites, especially those that also let users make reservations for lodging or transportation, are becoming popular with travellers (Kanellopulos, 2010).

These services are offered in the new e-tourism trends. Therefore, informational substance, security, speed of operation, and customisation. Hotels must periodically review their websites to make sure they are effective and helpful to visitors. Also, various studies indicate that a lean hotel website design might result in a 50% reduction in sales potential (Cantoni & Lorenzo, 2013). Developing e-tourism trends include:

2.3.1 Internet Resource

Through online platforms, travellers share their experiences, and their viewpoints are becoming more trusted than conventional marketing messaging. For instance, TripAdvisor.com shifted the balance of power from customers to companies. As a result, both parties are becoming more transparent and more knowledgeable (Buhalis & Dimitrios, 2017).

2.3.2 E-Trip Advisor

One of the most popular social networks in the travel industry is E-TripAdvisor (www.tripadvisor.com). It makes it easier to rate hotels worldwide and brings together individuals from the forums (Costea, 2014). Tourism organisations can gain a better understanding of their customers' requirements and behaviour through the analysis of virtual communities, and they can also improve their offerings. Online communities allow them to spread the word about their business (Hapenciuc, 2014).

2.3.3 Big Data

Big data in hospitality and tourism refers to the flood of information produced by pervasive computing devices that customers and businesses use. Specialized software is employed to mine patterns and correlations because the data is becoming too large and unstructured for regular database systems to handle (Rob & Laws, 2010). Any business that knows how to use the rich data effectively could gain a competitive advantage. For instance, recent studies have shown the effectiveness of leveraging search engine searches or local destination marketing needs to reevaluate their core principles and discover particular target niches that they can meet in the future

2.3.4 E-Hospitality

E-hospitality goes beyond only distributing and providing services.

For the tourism industry, it supports tried-and-true hospitality and technology products. In addition, e-Hospitality provides support and services beyond those of a front desk system vendor. According to Buhalis and Dimitrios (2017), it is positioned to help properties with all facets of the front desk and related guest amenities, including the phone system and voice mail, Pay per View (PPV) movies, secure high speed in rooms, lobby kiosks, and even guest printing/faxing from the guest rooms.

III. CONCLUSION

E-tourism benefits the travel and tourist sector. E-tourism is a combination of several travel components that are packaged and priced in real time in response to customer or booking agent demands. This reduces the actions of the intermediaries, saving both time and money. Planning methods are crucial in the field of e-tourism, especially in areas like e-ticketing, e-reservations, online payments, and multilingual and current information websites. Also, additional online services that prioritise saving time, money, and getting feedback are required for travellers who want to visit the city that has captured their attention.

To be competitive in the future, cities with tourist attractions must build out their e-tourism infrastructures. the purposes of tourism. ICTs have quickly impacted the hospitality industry, integrating hotel operations, changing the marketing role, boosting overall effectiveness, giving tools for marketing research and partnership development, expanding client services, and creating strategic prospects. Also, customers are beginning to demand ICT amenities in their rooms. The information and communications technologies employed in E-Tourism nowadays need to be updated often in order to increase the efficiency of the tourism industry. Both service providers and clients would profit from ICT integration in the tourism industry, as well as other stakeholders who would be brought together on a single platform.

It is critical to align customer expectations with service dimensions by choosing the appropriate ICT instrument. Technology must spread throughout all tourism

distribution channels, and professionals must use new tools to find information, choose items that are right for customers,and make reservations. Integration of ICTs is a potent tool that benefits marketing and bolstering the travel and tourism sector. The websites for businesses need to be renovated andupdated with the newest technologies in order to increase their potential for success.

IV. REFERENCES

[1]. Arturo, & Otium. (2011). A web based planner for toursim sector. Revista De Turism, 60-65.

[2]. Kanellopulos. (2010). E-tourism Services and Technologies:Current Issues and Trends. Current Issues and Trends, 3-17.

[3]. Luo. (2016). Information search behaviour and tourist charctersitics: The Internet Vis-a- Vis other Information sources. Journal of Travel & Tourism Marketing, 15-25

[4]. Steinbaueur, & Werthner. (2016). Consumer behaviour in e-tourism. Springer: Verlag.

STATUTORY PROVISIONS RELATING TO DIGITAL MARKETING IN INDIA

Dr. Dipali A. Purohit

Assistant Professor, M. S. Bhagat and C. S. Sonawala Law College, Nadiad

ABSTRACT

Digital Marketing stands for Online Marketing or Internet Marketing. Advertising of products through the Internet on Facebook, YouTube, e-mail, Instagram, Twitter and many other places is known as digital marketing. The marketing of products or services using digital channels to reach consumers. In digital marketing there are mainly three legal issues attracted: Data Privacy, Intellectual Property Rights and Advertisement. There is no any specific definition of digital marketing or online marketing or internet marketing. However, any specific statutes or body have not been enacted for the control and regulation of digital marketing. Here in this chapter the author has discussed the various statutory provisions relating to the digital marketing namely personal data protection, intellectual property rights and digital marketing i.e. online advertisement the Information Technology Act, 2000, the consumer protection act,2019, The Consumer Protection (E-Commerce) Rules, 2020, Advertising Standards Council of India, The Cable Television Network (Regulation) Act, 1995 (Amended 2020), The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003, The Food Safety Standards Act, 2006, The Young Persons (Harmful Publications) Act 1956.

Keywords: Digital Marketing, Statutory Provisions, Data Privacy, Intellectual Property Rights, Online Advertisement

INTRODUCTION

Digital Marketing stands for Online Marketing or Internet Marketing. Advertising of products through the Internet on Facebook, YouTube, e-mail, Instagram, Twitter and many other places is known as digital marketing.   The marketing of products or services using digital channels to reach consumers. The key objective is to promote brands through various forms of digital media. Digital marketing extends beyond internet marketing to include channels that do not require the use of the internet. It includes mobile phones (both SMS and MMS), social media marketing, display advertising, search engine marketing, and any other form of digital media. It requires a new approach to marketing and a new understanding of customer behaviour. For example, it requires companies to analyses and quantify the value of downloads of apps on mobile devices, tweets on Twitter, likes on Facebook and so on.

According to the Philip Kotler – Digital Marketing promotes brand visibility and awareness and grows, but can be used for multiple purposes through numerous online

marketing techniques. i.e. marketing online. The concept of digital marketing is not new. It was first used in the 1990s with effect of beginning of the internet. But now wide spread of technology and digitalization digital marketing increases. Digital marketing is often referred to as 'online marketing', 'internet marketing' or 'web marketing'. The term digital marketing has grown in popularity over time, particularly in certain countries. In the USA online marketing is still prevalent, in Italy is referred as web marketing but, in the UK, and worldwide, digital marketing has become the most common term, especially after the year 2013.

Generally digital marketing is more benefited like it is global reach means customers are easily available from all over the world. Cost of advertisement is also low. Even seller can create trackable for the customer. Digital ads are advertising numerous types of websites and services and due to this the competition in the market is increasing. In order to face this competition, they often make false advertising to take advantage of the consumers' sensitivity and also deceive the consumers. Today modern time digital marketing increases day by day and the customers easily get choices due to this it is become very easy for them. It is become very essential to control and regulate this.

OBJECTIVES

- To study the statutory provisions relating to the digital marketing in India.

- The main purpose is to examine statutory provisions are effective for controlling digital marketing in India.

Statutory Provisions Relating to Digital Marketing

In digital marketing there are mainly three legal issues attracted: Data Privacy, Intellectual Property Rights and Advertisement. There is no any specific definition of digital marketing or online marketing or internet marketing. However, any specific statutes or body have not been enacted for the control and regulation of digital marketing. Below mentioned the list which are dealing with the digital marketing.

1. Data Privacy Laws

There is no comprehensive law on data privacy in India. Marketers use personal information for their business purposes. When someone searches for something online, they keep this information and when you search for something else, that product is often shown by online marketing. That means they violate the right to privacy. Through the Information Technology Act, 2000 and The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 enacted some provisions for the protection of the personal data.

In the Constitution of India Art. 21 deal with right to privacy is the fundamental rights of the Indian Constitution. **Ram Jethmalani v. Union of India**, the Supreme Court held that right to privacy is the integral part of the right to life cover under the Art. 21 of the Constitution.

Further in **Justice K. S. Puttaswamy (Retd.) and Another v. Union of India**, The Supreme court held that the right to privacy is inextricably bound up with all exercises of human liberty – both as it is specifically enumerated across Part III, and as it is guaranteed in the residue under Article 21. It is distributed across the various articles in Part III and, mutatis mutandis, takes the form of whichever of their enjoyment its violation curtails.

Information Technology Act, 2000 has recognizes as well as validate the contracts which are concluded through the computers or electronics means. The Act imposes duties on corporate sectors to hold, deal and handle customer data and to maintain privacy safeguards to protect it. Further, compensation i.e. civil liability as well as penalties i.e. criminal liability for breach of the confidentiality and privacy, disclosure of information of the persons without their consent. In addition to this, in this act insert the provisions of liability of the intermediaries who receive, store, or transmit electronic records. For the protection of personal data in India in November 2022 put the draft Digital Personal Data Protection Bill, 2022.

2. Intellectual Property Rights

Intellectual property rights are very important in digital marketing it includes marks, symbols, designs, and ideas. Creation and writings. Digital marketing includes media, audio, and video. Intellectual property rights protect the intellectual of the advertising.

The Copyright Act, of 1957 is enacted for the protection of the creative content of digital marketing which includes written content, graphics, art, picture, audio, video, and every type of visual art.

The Trademark Act, of 1999 protects the marks or symbols of the business. This Act provides provisions for the protection of product slogans, sounds, logos, business names, product names, or any other signs used in digital marketing.

Whitehat Education Technology Private Limited v. Vinay Kumar Singh

The Delhi High Court has restrained a digital marketing service provider from using the mark 'Whitehat Sr' after Byju's-owned WhiteHat Jr accused it of infringement of trademarks and passing off.

Industrial design also covers digital marketing like the use of graphic users in screen displays and even web pages.

3. Digital Marketing i.e. Advertisement

Digital marketing means advertising products and services on the internet and online. Consumers buy goods or services through digital marketing. Several laws have been enacted to protect the rights and interests of consumers which are discussed below.

➢ The Consumer Protection Act, 2019

The main object of the Act is to protect the customers' rights and interest from any unfair trade practice. The Consumer Protection Act, 2019 replaced with old the Consumer Protection Act, 1986. The main object of the Act is to protect the customers' rights and interest from any unfair trade practice. The Consumer Protection Act, 2019 replaced with old the Consumer Protection Act, 1986. In this Act, the definition of e-commerce and e-business have given.

"e-commerce" means buying or selling of goods or services including digital products over digital or electronic network;

"Electronic service provider" means a person who provides technologies or processes to enable a product seller to engage in advertising or selling goods or services to a consumer and includes any online market place or online auction sites. According to this act, there is a penalty for making a misleading advertisement to the manufacturer or endorser which can also lead to imprisonment. Further, it has broadened the definition of unfair trade practices which are also prohibited and punishable. If anyone doing misleading digital marketing are breach of the Act and liable for the punishment.

➢ The Consumer Protection (E-Commerce) Rules, 2020

In the Consumer Protection Act, 2019 there are specific provisions not available for the dealing with digital marketing. In exercise of the powers conferred by sub-clause (zg) of sub-section (1) of section 101 of the Consumer Protection Act, 2019 the Central Government hereby makes the rules, the Consumer Protection (E-Commerce) Rules, 2020.

The rules provide definition "e-commerce entity" means any person who owns, operates or manages digital or electronic facility or platform for electronic commerce, but does not include a seller offering his goods or services for sale on a marketplace e-commerce entity. The "inventory e-commerce entity‖ means an e-commerce entity which owns the inventory of goods or services and sells such goods or services directly to the consumers and shall include single brand retailers and multi-channel single brand retailers. The "marketplace e-commerce entity" means an e-commerce entity which provides an information technology platform on a digital or electronic network to facilitate transactions between buyers and sellers. With the meaning of this term in this Rules also provide liabilities and duties towards customer and if they breach these rules they are liable for punishment.

E-Commerce Portal Liable if Seller Does Not Mention "Country of Origin" of Product:

In this National Commission had explained the vicarious liability of the E-Commerce entity. As per the Rules, Seller have duty to disclose the product's country of origin in the online market place. The online seller must sure to information displayed on website because the customer relied on seller. Further Court held that "E-Commerce

rules categorically spell out the vicarious liability of the E-Commerce entities including online platforms. By presenting themselves as mere intermediaries and claiming liability exemption under section 79 of the IT Act is not applicable in the instant case as all E-Commerce entities will have to mention the country of origin for all products, more so, when imported from other countries that are offered for sale. The order further stated with increasing popularity of E-commerce websites, E-commerce business in India has ushered a significant change in shopping habits of consumers. When consumers decide to buy a product, they primarily rely on the information provided by companies in their product advertisement. However, this race to be on top has led to an increase in malpractices of false claims and concealing and misleading information. In the instant case, the act of not mentioning the country of origin on the product is nothing but the contravention of the relevant E-commerce rules. The Commission also directed the opposite parties to pay compensation of Rs. 15,000 for deficiency of service and adoption of unfair trade practice.

➢ **Advertising Standards Council of India**

Under the Section 25 of the Company Act the Advertising Standards Council of India a non-profit company was registered and established in 1985. It is self-regulating advertising agency and for the protection of the interest of the consumers. The ASCI was established for secure that advertisement should be legal, honest, decent and truthful and not harmful and wrongfully observing fairness in competition. The sponsors of ASCI, who are its principal members, are firms of considerable repute within the industry in India, and comprise of Advertisers, Media, Advertising Agencies and other Professional/Ancillary services connected with advertising practices. ASCI is not a Government body, nor does it formulate rules for the public or the relevant industries. At present the digital advertising increasing in both rural as well as urban areas. The content and advertising of digital media are ambiguous. Though ASCI guidelines ensure the protection of the consumers from misleading brands, content and their creators.

The guidelines and rules adopted under ASCI are at the discretion of the advertisers as they lack statutory force. But recognized under certain laws and judicial authority.

➢ **The Cable Television Network (Regulation) Act, 1995 (Amended 2020)**

The main aim of this act is to controlling and regulating the cable broadcast operators. It provides responsibilities to the cable operators in broadcasting content and images for the national interest. As per section 6 no person shall transmit or re-transmit through a cable service any advertisement unless such advertisement is in conformity with the prescribed advertisement code.

Section 7 stated about the maintenance of register, "Every cable operator shall maintain a register in the prescribed form indicating therein in brief the programmes transmitted or re-transmitted through the cable service during a month and such register shall be

maintained by the cable operator for a period of one year after the actual transmission or re-transmission of the said programmes. Further whoever contravenes the provisions of the said act is liable for fine as well as punishment of imprisonment.

➢ **The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003**

An Act to prohibit the advertisement of, and to provide for the regulation of trade and commerce in, and production, supply and distribution of, cigarettes and other tobacco products and for matters connected therewith or incidental thereto.

➢ **The Food Safety Standards Act, 2006**

An Act to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto.

Section 24(1) provides restrictions of advertisement and prohibition as to unfair trade practices. -No advertisement shall be made of any food which is misleading or deceiving or contravenes the provisions of this Act, the rules and regulations made thereunder.

➢ **The Young Persons (Harmful Publications) Act 1956**

This act is enacted to prevent dissemination of harmful publications because it adversely affects the mind of the young persons.

CONCLUSIONS

All over the world digital marketing is increasing. But India has not any specific legislation for the regulation and control of digital marketing. Various others statutes have been enacted for the protection of consumers from unfair trade practices of advertisement. But these statutes are not efficient too as much as today's needs. The government has set up new guidelines to prevent misleading digital marketing through the Advertisement Standard Council of India but this council has lack statutory force. Digital marketing also violated the right to privacy of the person. The Constitution of India and the Information of Technology Act, 2000 have provisions for the protection of the privacy of persons but still like other countries we require one specific act for the protection of personal data act. The Personal Data Protection Bill is pending in parliament for many years. But as the prevalence of digital marketing is increasing, there is a need to formulate a specific law only then we will be successful in controlling and regulating digital marketing

REFERENCES

- Financial Times. (n.d.). Overview. Retrieved from web.archieve.org: https:// web.archive.org/web/ 20171129124232/http://lexicon.ft.com/Term?term=digital-marketing

- India, T. A. (n.d.). wp-content. Retrieved from https://iprmentlaw.com: https:// iprmentlaw.com/wp-content/uploads/2018/03/ASCI-Code.pdf

- legalupnishad. (2022, June 20). Legal Article. Retrieved from legalupnishad: https:// legalupanishad.com/online-advertising-laws-in-india/#: ~:text= Currently%2 C%20in%20 India%2C %20there%20is, to%20regulate%20online%20advertisements%20also.

- News Updates. (2022, October 3). News Upadates. Retrieved from LiveLaw.in: https://www.livelaw.in/news-updates/e-commerce-portal-liable-if-seller-does-not-mention-country-of-origin-of-product-consumer-forum-210823

- Prakash, U. (2021, August 21). Home - Advertisment. Retrieved from blog. ipleaders: https://blog.ipleaders.in/advertising-law-walking-fine-line-law-online-advertising/

- Sathya, P. (2017). A Study on Digital Marketing and its impact. International Journal of Science and Research, 866.

- Supreme Court of India. (2018, September 26). Supreme Court. Retrieved from Supreme Court of India: https:// main.sci.gov.in/ supremecourt/ 2012/35071/ 35071_ 2012_ Judgement_26-Sep-2018.pdf

- Thapliyal, N. (2022, December 16). News Updates. Retrieved from LiveLaw.in: https:// www.livelaw. in/news-updates/whitehat-jr-whitehat-sr-delhi-high-court-interim-injunction- trademark-infringement-suit-216948

FOOT NOTES

1. Dr. Dipali A. Purohit, Assistant Professor, M. S. Bhagat and C. S. Sonawala Law College, Nadiad.

2. inancial Times. (n.d.). Overview. Retrieved from web.archieve.org: https:// web.archive. org/web/ 20171129124232/http://lexicon.ft.com/Term?term=digital-marketing

3. Sathya, P. (2017). A Study on Digital Marketing and its impact. International Journal of Science and Research , 866.

4. (2011) 8 SCC 1.

5. Supreme Court of India. (2018, September 26). Supreme Court. Retrieved from Supreme Court of India: https://main.sci.gov.in/ supremecourt/2012/ 35071/35071_ 2012_ Judgement_26-Sep-2018.pdf

6. News Updates. (2022, October 3). News Upadates. Retrieved from LiveLaw.in: https:// www.livelaw.in/ news-updates/e-commerce-portal-liable-if-seller-does-not-mention-country-of-origin-of-product-consumer-forum-210823

7. The Consumer Protection Act, 2019 (Act 35 of 2019), preamble

8. The Consumer Protection Act, 2019 (Act 35 of 2019), s. 2(16)

9. The Consumer Protection Act, 2019 (Act 35 of 2019), s. 2(17)

10. The Consumer Protection (E-Commerce) Rules, 2020, s. 1(b)

11. The Consumer Protection (E-Commerce) Rules, 2020, s. 1(f)

12. The Consumer Protection (E-Commerce) Rules, 2020, s. 1(g)

13. News Updates. (2022, October 3). News Upadates. Retrieved from LiveLaw.in: https://www.livelaw.in/news-updates/e-commerce-portal-liable-if-seller-does-not-mention-country-of-origin-of-product-consumer-forum-210823

14. India, T. A. (n.d.). wp-content. Retrieved from https://iprmentlaw.com: https://iprment law.com/ wp-content/uploads/2018/03/ASCI-Code.pdf

15. The Cable Television Network Regulation Act, 1995 (Act 7 of 1995), s. 6 (Amended 2020)

16. The Cable Television Network Regulation Act, 1995 (Act 7 of 1995), s. 7 (Amended 2020)

17. The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (Act 34 of 2003), preamble

18. The Food Safety and Standards Act, 2006 (Act 34 of 2006), preamble

19. The Food Safety and Standards Act, 2006 (Act 34 of 2006), s. 24(1)

THE ROLE OF SUPPLY CHAIN MANAGEMENT IN GROWTH OF A BUSINESS

Dr. Saumyabrata Nath

Assistant Professor and Research Scholar, Vivekananda Global University – Jaipur, India

ABSTRACT

Supply chain management (SCM) uses their supply chain to compete and gain market share, spending and activity in this area are notably on the upswing. Technology and process upgrades at forward-thinking companies clearly show that supply chain excellence is more widely accepted as an element of overall business strategy and that increasing value to customers is not just management's, but everyone's business. The shift in companies views their supply chain and capacity strengths of supply chain commonly known and understood by leadership of the company. The impact factor, growth, profitability and customer service is very important. The consulting works closely with leading manufacturing and distribution companies and helps the companies address their business challenges. The experience working with key companies in consumer products high tech and industrial manufacturing there are key trends causing significant impact and change to supply chain design and performance.

Key words: Business, Growth, customers, Planning, Demand, Excellence

INTRODUCTION

As sources and capacities for manufacturing have increased, more companies have moved away from focusing efforts on plant-level production planning and are adopting more of a demand-driven focus of trying to influence and manage demand more efficiently. Rationalizing in selling, making and delivering and aligning the sales force with that mindset is critical to adopting a demand-driven model. The demand-driven approach can help a company create a more customer-focused mindset, without sacrificing operational efficiency. Ultimately a demand-focused approach to planning can significantly improve demand planning and management efforts and help overall costs and customer service efforts. Advanced demand planning systems and proper strategies can also help uncover data and identify trends buried in a company's information systems. Companies better to conduct an enterprise-wide internal demand review to gather information from all aspects of the organization.

DEMAND PLANNING

Goals are then set to gain consensus on what will be sold each month for each product line or category and the resulting revenue. Of course, the driver of the demand review process is continuous improvement of forecast accuracy. Critical to the success of any demand plan is having all stakeholders, including sales, marketing, finance, product

development and supply chain agree upon a consensus demand plan. It is important for all participants to discuss factors affecting customer demand patterns, such as new or deleted products, competitors or market conditions, the aggregate demand plans and associated revenue plans. Once all demand for products and services is recognized, the information is consolidated into one demand plan. Demand planning is a key input to the larger sales and operations planning process and can have a significant positive impact on new product introductions, inventory planning and management, customer service, supply planning efficiency and sourcing strategies. With our clients, we have often seen that demand planning success is often tied to organizational structure. We have found that companies with dedicated resources focused around demand planning and forecasting yield stronger results and drive more value to their company. Organizations that focus part time on demand planning and forecasting efforts yield substandard results. With the strategic importance of demand planning, companies need to be committed to this from both a resource and technology perspective..

GLOBALIZATION

The business landscape is rapidly becoming more global. Largely due to improvements in communications, globalization is dramatically impacting the way business is managed and transacted, even on the most local levels. No area of a business is affected more by the trend to a global business environment than the supply chain. Manufacturing, distribution, sourcing of materials, invoicing and returns have all been significantly impacted by the increased integration of a global customer and supplier base, and many companies find that existing processes and technology are not flexible enough for this new business environment.

Clearance times and access to increased transportation capacity, however there can be a negative impact a well. Better understanding the total landed cost and service implications of alternate ports of entry can help improve supply chain costs and performance. The right supply chain design is critical to managing the changes brought about by rapid globalization. A well thought-out supply chain network design can optimize the network and the flow of materials through the network. In doing so, network design captures the costs of the supply chain with a "total landed cost" perspective, and applies advanced mathematical technology to determine optimal answers to both strategic and tactical questions.

COMPETITION AND PRICE PRESSURES

Historically, price, product features and brand recognition were enough to differentiate many products in the marketplace. With the continued commoditization of many products, companies need better ways to distinguish themselves. In one case, a large global consumer goods manufacturer saw prices around some of its commodity products drop as much as 60-80 percent. Product innovation and brand equity no longer were allowing them to command a higher price in the market. In order to continue to

compete with that commoditized product they made significant cost improvements with supply chain re-design and technology. Companies are looking to their supply chains in two ways to help offset this trend. First, they are looking at ways to do reduce cost and are creating a more efficient value chain to remain cost competitive. Second, companies are looking at ways they can provide value-added services to meet the demands of more sophisticated customers. Cost improvements around inventory management, logistics operations, material management and manufacturing costs, including raw material and component acquisition can be found.

Companies should not only look to their supply chain to drive cost improvement, but should increase capabilities as a means for staying competitive. Streamlining processes with better design, better collaboration across networks and new services will help your company stay competitive and strengthen relationships with your customers.

TREND IN OUTSOURCING
As many companies step back and examine their core competencies, some realize that outsourcing parts or all of a supply chain can be advantageous. With marketplace improvements around (1) information media and systems (2) cost and quality of global manufacturing and distribution, and (3) product design capabilities, companies are gaining additional synergies by outsourcing all or parts of their supply chain.

There can be significant economic benefits from outsourcing all or part of your supply chain operation, but without the right systems, processes, or organizational management structure the risk to success can increase to frightening levels. In an outsource-heavy environment companies need to put more controls and systems in place to compensate for the fact that their supply chain capabilities no longer reside onsite. In an outsourced supply chain environment the need for information, controls and excellence from the "information worker" becomes a high priority.

SHORTENED PRODUCT LIFE CYCLES
Today many clients are under pressure to develop innovative products and bring them to market more rapidly, while minimizing cannibalization of existing products, which are still in high demand. In order to meet the needs of both customers and consumers, companies need more efficient product lifecycle management processes. This includes heavy emphasis on managing new product introduction, product discontinuation, design for manufacturability and leveraging across their entire product and infrastructure characteristics. Chief benefit of processes and technology is helping companies design products that can share common operations, components or materials with other products, thereby reducing risks of obsolescence write offs, increasing cost leverage on the purchasing of key materials and ensuring that infrastructure investments are optimally utilized. Additionally, getting this right will help to improve time to market. By focusing product lifecycle management efforts in these areas, a company can buffer itself against the risk of an unplanned cost increase, a poor new product launch, an

unplanned obsolescence write off and can enhance the overall customer perception of the company as an effective innovator.

The company increased parts re-use, improved document retrieval time, reduced design cycle time, and ultimately reduced new product development cost by 15 percent. These improvements helped the company grow revenue by 25 percent, mainly from an increased rate of product introductions. As the economy becomes more global, labeling and compliance to packaging requirements and regulations have become critical to success. Without adherence to local packaging and labeling regulations a product may violate local requirements, preventing it from being distributed and sold in that market. Product lifecycle management technology and processes can help ensure that products being produced and targeted for specific markets are well-managed and are compliant. Product lifecycle management tools and processes have helped consumer goods companies with their efforts to try to continually drive demand through packaging and labeling innovation and design. Implementation of an optimal process and technology can allow a consumer goods company to effectively produce and distribute products that are only targeted for regional promotions or consumer preferences.

COLLABORATION BETWEEN STAKEHOLDERS

Today many companies are under pressure to develop innovative products and bring them to market more rapidly, while minimizing cannibalization of existing products, which are still in high demand. In order to meet the needs of both customers and consumers, companies need more efficient product lifecycle management processes. This includes heavy emphasis on managing new product introduction, product discontinuation, design for manufacturability and leveraging across their entire product and infrastructure characteristics. One chief benefit processes and technology is helping companies design products that can share common operations, components or materials with other products, thereby reducing risks of obsolescence writeoffs, increasing cost leverage on the purchasing of key materials and ensuring that infrastructure investments are optimally utilized. Additionally, getting this right will help to improve your time to market. By focusing product lifecycle management efforts in these areas, a company can buffer itself against the risk of an unplanned cost increase, a poor newproduct launch, an unplanned obsolescence writeoff and can enhance the overall customer perception of the company as an effective innovator.

Stakeholders in the Extended Supply Chain collaboration have emerged in the expansion of Sales and Operations Planning (S&OP) processes that include upstream and downstream value chain partners as regular participants. S&OP processes help maintain a well-coordinated and valid, current operating plan in support of customer demand, a business plan and a strategy. The improved resulting operating plan provides the management of each partner with a complete picture of forecasted demand, supply

capacity, corresponding financial information with financial implications and allows them to make informed, critical decisions.

Collaboration is seen in the increased focus around RFID. Value chain leaders are looking at functional areas to better integrate the supply chains of their partners with themselves. RFID can serve as a means to quickly and efficiently ensure that critical product information is communicated as products flow through the value chain and ultimately to the consumer. Recent estimates show that major retailers can lose 3-4 percent of revenue per year due to shelf stock outs, while inventory is available somewhere in the value chain. Better coordination of store-level product availability would have a significant impact to the entire value chain for these retailers. Additionally, better visibility of retailer product availability can reduce overall logistics costs as products move through the value chain to fulfill safe stock levels and ultimately consumer demand.

THE SEVEN PRINCIPLES OF SCM

More than two decades ago, a research study of 100+ manufacturers, distributors, and retailers uncovered some widely used supply chain strategies and initiatives. These ideas and practices were distilled down to seven principles and presented in an article in Supply Chain Management Review, a magazine widely read by SCM professionals. Below are the 7 important principles on Supply Chain Management are developed –

Principle 1 - Segment customers based on the service needs of distinct groups and adapt the supply chain to serve these segments profitably.

Principle 2 - Customize the logistics network to the service requirements and profitability of customer segments.

Principle 3 - Listen to market signals and align demand planning accordingly across the supply chain, ensuring consistent forecasts and optimal resource allocation.

Principle 4 - Differentiate product closer to the customer and speed conversation across the supply chain.

Principle 5 - Manage sources of supply strategically to reduce the total cost of owning materials and services.

Principle 6 - Develop a supply chain-wide technology strategy that supports multiple levels of decision making and gives clear view of the flow of products, services, and information.

Principle 7 - Adopt channel-spanning performance measures to gauge collective success in reaching the end-user effectively and efficiently.

Though they are more than two decades old, these timeless principles highlight the need for supply chain leaders to focus on the customer. They also stress the importance of

coordinating activities (demand planning, sourcing, assembly, delivery, and information sharing) within and across organizations.

CONCLUSIONS

In the contemporary business world, supply chain management professionals are expected to possess the knowledge and capabilities to support the improved efficiency, effectiveness and profitability of modern businesses. For large organizations, the ability to incorporate performance trade-offs across multiple functional areas, both internal and external, is critical. Meanwhile, small and mid-sized businesses must be able to deliver a unique value proposition in an increasingly competitive marketplace. Developing, manufacturing and selling a product can challenge the best organizations in the best of times. As a company's business driver's change, business processes, SCM technology investment and the overall approach to supply chain management must change and keep pace. An inefficient and poorly functioning supply chain can negatively impact every aspect of an organization, jeopardizing the long-term performance and success of a business. To remain successful, companies need organization-wide buy-in to supply chain excellence and some will need to re-evaluate their current processes and performance with these key trends. Companies that reevaluate their business and how the current supply chain structure supports the business—from a strategy, process, technology and organizational perspective—must focus on keeping their supply chain aligned with the overall business strategy. To succeed, companies must embrace Supply Chain Excellence as a core competency at all levels throughout the company and recognize that supply chain management is executed in many areas, not just the functional supply chain organization.

REFERENCES

1. Innovative Techniques of Supply Chain Management by Ramachandra

2. Trends in Supply Chain Management by Subhash Rao

3. Emily Dawn Szajda, GBSB Content Manager, (Feb 2017), What is Supply Chain Management, and Why is it Important?

4. Harland, C.M. (1996) Supply Chain Management, Purchasing and Supply Management, Logistics, Vertical Integration, Materials Management and Supply Chain Dynamics. In: Slack, N (ed.) Blackwell Encyclopedic Dictionary of Operations Management. UK: Blackwell.

5. MacDuffie and Helper, 1997; Monden, 1993; Womack and Jones, 1996; Gunasekaran, 1999

6. Mentzer, J.T.; et al. (2001). "Defining Supply Chain Management". Journal of Business Logistics. 22 (2): 1–25. doi:10.1002/j.2158-1592.2001.tb00001. Michael Wilson, Mar 14, 2017

7. Todo, Y.; Matous, P.; Inoue, H. (11 July 2016). "The strength of long ties and the weakness of strong ties: Knowledge diffusion through supply chain networks"

8. Khairi Kleab (2017) "Important of Supply Chain Management", International Journal of Scientific and Research Publications, Volume 7, Issue 9, September 2017 397 ISSN 2250-3153

9. www.hitachiconsulting.com.

10. Economic Times News paper

11. Times of India News paper

DIGITAL LEARNING AND SKILL ENHANCEMENT

Ms. Riancy Mascarenhas and Mr. Jitendra Rabada
Assistant Professors, Rosary College of Commerce & Arts, Navelim- Goa

ABSTRACT

Skill enhancement through digital learning has become increasingly important in today's fast-paced and technology-driven world. Digital learning offers learners a convenient and effective way to acquire new skills and knowledge and stay competitive in their respective fields. This chapter explores the context of skill enhancement through digital learning, discussing the meaning and methods of digital learning. It also highlights the process, techniques and challenges of skill enhancement through digital learning. The applications of digital learning on skill enhancement and the potential impact of skill enhancement on society and industry have also been discussed. Digital learning and classroom learning both have their advantages and disadvantages when it comes to skills enhancement and hence a comparison of digital learning vs classroom learning for skills enhancement is shown in this chapter. Skill enhancement through digital learning has become critical for professional development in today's world. It offers individuals the opportunity to access a wealth of knowledge and expertise from anywhere in the world, at any time, and at their own pace, making it an ideal tool for busy professionals seeking to enhance their skills and stay up-to-date with the latest industry trends and best practices. To conclude, skill enhancement through digital learning has become increasingly important in today's fast-paced and technology-driven world. It offers learners a convenient and effective way to acquire new skills and knowledge, and stay competitive in their respective fields. Skills enhancement through digital learning has the potential to transform society and industry. It is important for individuals and organizations to embrace the potential of digital learning and leverage it to enhance skills and improve outcomes.

Keywords: Skill Enhancement, Digital, Learning, Professional, Knowledge

INTRODUCTION

The emergence of digital technology has transformed the way we learn and acquire new skills. With digital learning, people can access a vast array of educational resources and platforms that are designed to help them enhance their skills and knowledge. Digital learning offers a range of benefits for learners, including convenience, flexibility, and access to a wider range of learning materials. In this chapter, we will explore how digital learning can enhance skills and why it is a valuable tool for personal and professional development.

Digital learning is a broad term that refers to the use of digital technology to facilitate learning and education. It encompasses a range of methods, tools, and platforms that allow learners to access educational resources and interact with instructors and peers.

Digital Learning Offers Convenience and Flexibility

One of the main benefits of digital learning is its convenience and flexibility. With digital learning, learners can access educational resources and platforms from anywhere and at any time, as long as they have an internet connection. This means that learners do not have to travel to attend classes or adhere to a strict schedule. They can study at their own pace and at a time that suits them, which makes it easier to balance learning with other commitments.

Digital Learning Provides Access to a Wide Range of Learning Materials

Another significant advantage of digital learning is that it provides access to a vast array of learning materials. Digital learning platforms offer a range of multimedia resources, including videos, audio recordings, and interactive simulations. These resources are designed to cater to different learning styles, making it easier for learners to understand and retain information. Moreover, digital learning resources are constantly updated, ensuring that learners have access to the latest information and technologies.

Digital Learning Offers Customization and Personalization

Digital learning also offers customization and personalization, allowing learners to tailor their learning experience to their individual needs and preferences. Learners can choose the topics they want to learn and access resources that are relevant to their interests and goals. Moreover, digital learning platforms often provide personalized feedback and assessments, helping learners to track their progress and identify areas that need improvement.

Digital Learning Enhances Collaboration and Communication

Digital learning also enhances collaboration and communication among learners. With digital learning platforms, learners can interact with each other through online forums, chat rooms, and collaborative projects. This fosters a sense of community and provides opportunities for learners to share knowledge and ideas. Moreover, digital learning platforms often offer access to expert instructors and mentors who can provide guidance and support throughout the learning process.

Digital learning is a valuable tool for enhancing skills and knowledge. It offers convenience, flexibility, access to a wide range of learning materials, customization, personalization, collaboration, and communication. Digital learning is ideal for people who want to improve their skills and knowledge at their own pace, in their own time, and in a way that suits their individual needs and preferences. As digital technology continues to evolve, digital learning will become even more important as a tool for personal and professional development.
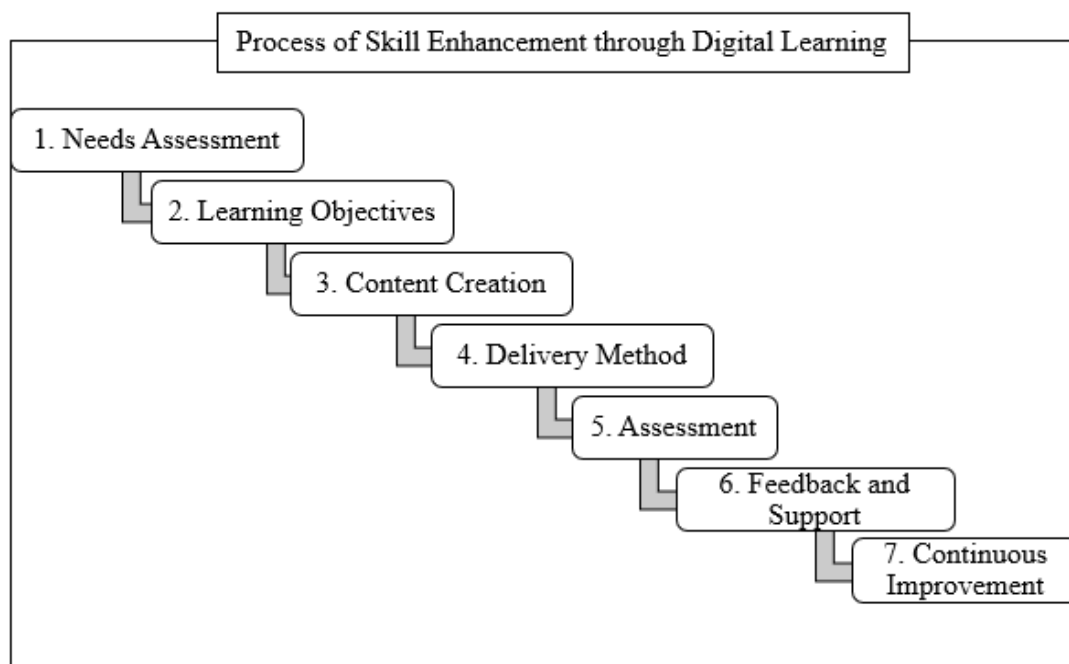
Methods of Digital Learning

1. **Online Courses:** Online courses are one of the most popular methods of digital learning. They are offered by educational institutions, private companies, and individual instructors, and are designed to deliver course content over the internet. Online courses can be delivered in a variety of formats, including video lectures, interactive simulations, and online quizzes. Learners can interact with instructors and peers through online discussion forums and other collaborative tools.

2. **Mobile Learning:** Mobile learning, also known as m-learning, involves the use of mobile devices such as smartphones and tablets to deliver educational content. M-learning allows learners to access educational resources anytime, anywhere, and at their own pace. Mobile learning content can include videos, podcasts, and interactive games, and can be delivered through mobile apps or mobile-optimized websites.

3. **Massive Open Online Courses (MOOCs):** MOOCs are online courses that are open to anyone with an internet connection. They are typically offered by top universities and other educational institutions and are free or low-cost. MOOCs are designed to deliver high-quality educational content to large numbers of learners, and they often include interactive features such as online discussion forums and peer-reviewed assignments.

4. **Blended Learning:** Blended learning involves combining traditional classroom instruction with online learning. This approach allows learners to access educational resources and interact with instructors and peers outside of the classroom, while still receiving face-to-face instruction. Blended learning can take many forms, from online discussions and assignments to virtual simulations and hands-on activities.

5. **Gamification:** Gamification involves the use of game design elements in educational content to make learning more engaging and interactive. Gamification can take many forms, including leaderboards, badges, and points systems. Gamification can be used in a variety of digital learning methods, including online courses and mobile learning.

6. **Personal Learning Networks (PLNs):** Personal learning networks involve using digital tools to connect with other learners and educators to share knowledge and resources. PLNs can include social media platforms, online forums, and other collaborative tools. PLNs can be used to support self-directed learning and to connect learners with others who share their interests and goals.

Digital learning offers a range of methods and tools to support learners in acquiring new knowledge and skills. Online courses, mobile learning, MOOCs, blended learning, gamification, and personal learning networks are just a few of the many methods available. As digital technology continues to evolve, new methods and tools will

emerge, making it easier for learners to access educational resources and connect with others who share their interests and goals.

Skills Enhancement through Digital Learning Process:

The digital learning process is a powerful tool for enhancing skills in a variety of fields. The process involves needs assessment, setting learning objectives, content creation, delivery method, assessment, feedback and support, and continuous improvement. By following these steps, learners can improve their skills, deepen their understanding of complex topics, and enhance their overall learning experience. Here are the key steps in the digital learning process for skills enhancement:

```
┌─────────── Process of Skill Enhancement through Digital Learning ───────────┐
│                                                                             │
│  ┌──────────────────────┐                                                   │
│  │ 1. Needs Assessment  │                                                   │
│  └──────────────────────┘                                                   │
│       ┌──────────────────────────┐                                          │
│       │ 2. Learning Objectives   │                                          │
│       └──────────────────────────┘                                          │
│            ┌──────────────────────┐                                         │
│            │ 3. Content Creation  │                                         │
│            └──────────────────────┘                                         │
│                 ┌───────────────────┐                                       │
│                 │ 4. Delivery Method│                                       │
│                 └───────────────────┘                                       │
│                      ┌─────────────────┐                                    │
│                      │ 5. Assessment   │                                    │
│                      └─────────────────┘                                    │
│                           ┌──────────────────────┐                          │
│                           │ 6. Feedback and      │                          │
│                           │ Support              │                          │
│                           └──────────────────────┘                          │
│                                ┌──────────────────┐                         │
│                                │ 7. Continuous    │                         │
│                                │ Improvement      │                         │
│                                └──────────────────┘                         │
│                                                                             │
└─────────────────────────────────────────────────────────────────────────────┘
```

1. **Needs Assessment:** The first step in the digital learning process is to assess the learner's needs. This involves identifying the skills or knowledge that the learner needs to develop or improve. This step is critical because it ensures that the learning experience is targeted and relevant to the learner's specific needs.

2. **Learning Objectives:** Once the learner's needs have been identified, the next step is to set clear learning objectives. These objectives should be specific, measurable, and achievable. They should also be aligned with the learner's goals and aspirations.

3. **Content Creation:** The next step is to create or select appropriate learning content. This may include videos, simulations, quizzes, games, and other interactive resources. The content should be engaging, relevant, and focused on the learner's specific needs.

4. **Delivery Method:** The delivery method is critical to the success of the digital learning process. The learning content should be delivered in a way that is accessible,

convenient, and engaging. This may include online courses, webinars, podcasts, or other formats.

5. **Assessment:** Assessment is an essential part of the digital learning process. The learner's progress should be monitored and evaluated regularly to ensure that they are achieving the learning objectives. This may include quizzes, tests, assignments, or other assessments.

6. **Feedback and Support:** Feedback and support are critical to the success of the digital learning process. The learner should receive regular feedback and support from instructors or mentors to help them overcome challenges and stay motivated. This may include online discussions, one-on-one coaching, or other forms of support.

7. **Continuous Improvement:** The final step in the digital learning process is continuous improvement. The learning experience should be evaluated regularly to identify areas for improvement. This may include updating or revising the content, delivery methods, or assessment methods.

Techniques for Skills enhancement through Digital Learning

Digital learning offers a wide range of techniques and strategies for enhancing skills in various fields. Microlearning, adaptive learning, video tutorials, interactive simulations, gamification, and social learning are just a few of the many techniques available. By using these techniques, learners can improve their skills, deepen their understanding of complex topics, and enhance their overall learning experience.

Here are some of the most effective techniques for skills enhancement through digital learning:

1. **Microlearning:** Microlearning is an approach to learning that involves delivering small, bite-sized pieces of content that learners can consume quickly and easily. This technique is highly effective for skills enhancement because it allows learners to focus on specific skills or topics, rather than having to wade through a lot of extraneous information.

2. **Adaptive Learning:** Adaptive learning is a technique that uses artificial intelligence and machine learning algorithms to personalize the learning experience for each individual learner. This approach allows learners to focus on areas where they need the most help, and it provides feedback and support tailored to their specific needs.

3. **Video Tutorials:** Video tutorials are highly effective for skills enhancement because they allow learners to see and hear the information they need to learn. Videos can be used to demonstrate techniques, walk learners through processes step-by-step, and provide visual examples of concepts.

4. **Interactive Simulations:** Interactive simulations allow learners to practice skills in a safe, controlled environment. This technique is highly effective for skills

enhancement because it allows learners to try out different approaches and techniques without fear of failure or negative consequences.

5. **Gamification:** Gamification involves using game elements, such as points, badges, and leader boards, to motivate learners and enhance engagement. This technique is highly effective for skills enhancement because it makes learning fun and engaging, and it provides learners with immediate feedback and recognition for their achievements.

6. **Social Learning:** Social learning involves interacting with other learners and instructors through online discussion forums, social media, and other collaborative tools. This technique is highly effective for skills enhancement because it allows learners to share knowledge and resources, ask questions, and receive feedback and support from others.

Applications of Digital Learning on Skills Enhancement:

Digital learning has revolutionized the way we learn and has made it easier to access information from anywhere at any time. Here are some of the key applications of digital learning on skills enhancement:

1. **Personalized Learning:** Digital learning allows for personalized learning experiences that can be tailored to the specific needs of each individual learner. This approach allows learners to focus on areas where they need the most help and provides them with feedback and support tailored to their specific needs.

2. **Remote Learning:** Digital learning has made it possible for learners to access high-quality education and training programs from anywhere in the world. This is particularly beneficial for learners who are unable to attend traditional classroom-based courses due to distance, time constraints, or other factors.

3. **Collaborative Learning:** Digital learning platforms allow learners to connect and collaborate with other learners and instructors from around the world. This approach encourages collaboration, knowledge sharing, and the development of a strong learning community.

4. **Interactive Learning;** Digital learning platforms often include interactive features such as simulations, games, quizzes, and videos that engage learners and promote active learning. These interactive features make the learning experience more engaging, fun, and effective.

5. **Mobile Learning:** Digital learning can be accessed on mobile devices, making it convenient for learners to access learning materials on the go. This approach allows learners to learn at their own pace and on their own schedule, increasing engagement and promoting a better learning experience.

6. **Continuous Learning:** Digital learning provides learners with access to a wealth of learning resources that they can access at any time. This approach encourages continuous learning and skills development, allowing learners to stay up-to-date with the latest industry trends and advancements.

Challenges for Skills Enhancement through Digital Learning:

Digital learning has many advantages when it comes to enhancing skills, but it also comes with some challenges. Here are some of the key challenges for skills enhancement through digital learning:

1. **Technical Challenges:** One of the main challenges of digital learning is technical issues. These can include problems with internet connectivity, hardware compatibility, and software functionality. Technical issues can be frustrating for learners and can disrupt the learning process.

2. **Self-Discipline and Motivation:** Digital learning requires self-discipline and motivation from learners. Without the structure and accountability of a traditional classroom, it can be challenging for some learners to stay motivated and on track with their learning.

3. **Lack of Personal Interaction:** Digital learning often lacks the personal interaction that traditional classroom-based learning provides. This can be a disadvantage for some learners who thrive on personal interaction and feedback from instructors and peers.

4. **Accessibility Issues:** Digital learning may not be accessible to all learners, particularly those who have disabilities or who lack access to the necessary technology. This can create inequality in the learning experience.

5. **Quality and Credibility of Content:** The quality and credibility of digital learning content can vary widely. Learners may have difficulty determining which sources are reliable and which are not. This can make it challenging to select appropriate content that aligns with their learning objectives.

6. **Assessment and Certification:** Assessment and certification can be a challenge in digital learning. Traditional assessment methods, such as exams and quizzes, may not be effective in a digital learning environment. Additionally, the credibility and recognition of digital learning certifications may be lower than those earned through traditional classroom-based learning.

Digital learning has many advantages for skills enhancement, but it also comes with some challenges. Technical challenges, self-discipline and motivation, lack of personal interaction, accessibility issues, quality and credibility of content, and assessment and certification are just a few of the challenges that learners may face. By understanding

these challenges and developing strategies to overcome them, learners can maximize the benefits of digital learning and enhance their skills effectively.

Potential Impact on Society and Industry for Skills Enhancement through Digital Learning:

The impact of skills enhancement through digital learning is significant, both for individuals and for society as a whole. Here are some potential impacts on society and industry:

1. **Improved Workforce Skills:** Digital learning can enhance workforce skills by providing targeted and relevant training that is accessible and convenient. This can improve the quality of the workforce and make businesses more competitive in the global marketplace.

2. **Increased Access to Education:** Digital learning can make education more accessible to a wider range of learners, regardless of their location or background. This can increase the number of people who have access to education and can lead to a more educated and skilled workforce.

3. **Improved Employee Retention and Engagement:** Digital learning can improve employee retention and engagement by providing opportunities for employees to develop new skills and advance in their careers. This can lead to higher job satisfaction and reduce turnover rates.

4. **Cost-Effective Training Solutions:** Digital learning can be a cost-effective training solution, particularly for businesses that have limited resources. Online courses and resources can be less expensive than traditional classroom-based training and can be delivered to a larger number of learners at once.

5. **Increased Innovation and Creativity:** Digital learning can promote innovation and creativity by providing learners with access to a wider range of resources and perspectives. This can lead to the development of new ideas and solutions to complex problems.

6. **Lifelong Learning Opportunities:** Digital learning can provide opportunities for lifelong learning, allowing individuals to continue to develop their skills throughout their careers. This can lead to a more engaged and informed society.

Digital Learning Vs Classroom Learning for Skills Enhancement:

Digital learning and classroom learning both have their advantages and disadvantages when it comes to skills enhancement. Here is a comparison of digital learning vs classroom learning for skills enhancement:

Points of Difference	Digital Learning	Classroom Learning
1. Accessibility:	Digital learning is accessible from anywhere with an	Classroom-based learning is often limited to specific

	internet connection, allowing learners to access training materials at their convenience.	locations, making it less accessible to learners who don't live in those areas.
2. Flexibility	Digital learning is self-paced, allowing learners to move through the material at their own pace and focus on areas where they need more help.	Classroom-based learning is often structured and inflexible, which can be challenging for learners who require more flexibility.
3. Cost-effective	Digital learning can be less expensive than classroom-based learning, as it eliminates the need for physical classrooms and instructors.	Classroom-based learning can be more expensive than digital learning, as it requires physical classrooms and instructors.
4. Resources	Digital learning can provide learners with access to a wider range of resources, including video tutorials, online forums, and interactive learning activities.	Classroom-based learning often provides a limited range of resources compared to digital learning, which can limit the types of learning activities and experiences available to learners.
5. Personal Interaction	Digital learning often lacks the personal interaction that classroom-based learning provides, making it more challenging for learners to ask questions and receive feedback.	Classroom learning provides personal interaction with instructors and peers, allowing learners to ask questions and receive feedback in real-time.
6. Technical Issues	Digital learning requires reliable internet connectivity and hardware, which can be a challenge for learners who don't have access to these resources.	Classroom learning provides a structured learning environment, which can be helpful for learners who require this type of environment to stay on track.
7. Self-discipline and motivation	Digital learning requires self-discipline and motivation from learners, which can be a	Classroom learning often provides hands-on experience with equipment

	challenge for some learners who require the structure and accountability of a traditional classroom.	and tools, which can be beneficial for learners who require this type of learning.
8. Content Quality	The quality of digital learning content can vary widely, making it challenging for learners to determine which sources are reliable and which are not.	Certifications earned through classroom-based learning are often more credible and recognized than those earned through digital learning.

Both digital learning and classroom-based learning have their advantages and disadvantages when it comes to skills enhancement. Ultimately, the best approach depends on the needs and preferences of the learner. Some learners may benefit more from the personal interaction and hands-on experience provided by classroom-based learning, while others may prefer the flexibility and accessibility of digital learning. It is important for learners to consider their learning style, goals, and resources when deciding which approach is best for them.

CONCLUSION

To conclude, Digital learning has revolutionized the way we learn and has made it easier to access high-quality education and training programs from anywhere in the world. Personalized learning, remote learning, collaborative learning, interactive learning, mobile learning, and continuous learning are just a few of the many applications of digital learning on skills enhancement. By leveraging these applications, learners can improve their skills, deepen their understanding of complex topics, and enhance their overall learning experience.

Looking towards the future, skills enhancement through digital learning has the potential to transform society and industry. By providing targeted and accessible training, increasing access to education, improving employee retention and engagement, providing cost-effective training solutions, promoting innovation and creativity, and offering opportunities for lifelong learning, digital learning can have a significant impact on individuals and society as a whole. It is important for individuals and organizations to embrace the potential of digital learning and leverage it to enhance skills and improve outcomes.

Overall, skill enhancement through digital learning has become increasingly important in today's fast-paced and technology-driven world. It offers learners a convenient and effective way to acquire new skills and knowledge, and stay competitive in their respective fields.

REFERENCES

- Ally, M. (2008). Foundations of educational theory for online learning. In Theory and practice of online learning (2nd ed., pp. 15-44). Athabasca University Press.

- Bartolomé, A. R., & Steffens, K. (2017). Advantages and disadvantages of mobile learning. In Mobile learning and higher education (pp. 19-35). Springer.

- Bates, T. (2015). Teaching in a digital age: Guidelines for designing teaching and learning for a digital age. Tony Bates Associates Ltd.

- Boulos, M. N., Maramba, I., & Wheeler, S. (2006). Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. BMC medical education, 6(1), 41.

- Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. The Internet and higher education, 15(1), 3-8.

- Ehlers, U. D., & Schneckenberg, D. (2010). Changing assessment — towards a new assessment paradigm using ICT. In Technology enhanced learning (pp. 27-46). Springer.

- Falconer, I., McGill, L., Littlejohn, A., & Boursinou, E. (2013). Overview and analysis of practices with open educational resources in adult education in Europe (No. JRC83167). Joint Research Centre, European Commission.

- Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. John Wiley & Sons.

- Hickey, D. T., & Zuiker, S. J. (2013). Games and learning. In Handbook of research on educational communications and technology (pp. 485-503). Springer.

- Pappas, C. (2019). Why digital learning is the future of education. eLearning Industry. Retrieved from https://elearningindustry.com/digital-learning-future-of-education

- Li, N., & Marsh, J. A. (2019). The value and limitations of massive open online courses for educators' professional development. Teaching and Teacher Education, 86, 102914.

- Mwanza-Simwami, D., & Edewor, N. (2015). Digital learning in higher education: A review of contemporary debates. International Journal of Education and Development using Information and Communication Technology, 11(3), 4-19.

- Siemens, G. (2005). Connectivism: A learning theory for the digital age. International journal of instructional technology and distance learning, 2(1), 3-10.

- Van Laer, S., & Elen, J. (2018). Massive open online courses (MOOCs) for professional development: Opportunities and challenges for rehabilitation professionals. Disability and Rehabilitation, 40(5), 553-558.

DIGITAL LEARNING– THE CONTEMPORARY MODE OF ENHANCED LEARNING

Savita Yashvant Kale
Yashwantrao Chavan School of Social Work, Satara

INTRODUCTION

The birth and development of cyberspace have pushed human civilization to a new prospect of innovation and advancement in all spheres of life. A sweeping change is seen especially in the means of communication where distance is no more a barrier. People are now able to connect to another part of the world seamlessly, do business, shop online, share and gain knowledge. Communication is also a crucial part of a teaching learning process hence educational institutions can attain its objective of enhancing the skills and knowledge of learners by adopting various methods of digital learning.

Digital learning

Digital learning is the use of digital tools to enable to learn or enhance knowledge. Digital learning is the use of technology in the teaching and learning. Digital learning process is supported by technology and gives learners an edge or advantage as it is not restricted over space, time or pace of learning. Digital learning has become a popular and necessity during the COVID-19 pandemic.

Effective digital learning tools can result into effective learning, enrichment of knowledge and skill development. Digital learning is often referred as virtual learning or elearning. Educational institutions who have regular learning mode can further promote skills development with the help of digital learning.

Different types of Digital Learning

Digital learning includes teaching or the use of digital technology to strengthen learners learning process. There are various types of digital learning and education institutions can use multiple methods.

Massive Open Online Courses (MOOCs)

Massive open online courses (MOOCs) are free online courses and become quite popular. The Government has initiated a program called SWAYAM with a three principles that is access, equity and quality. The objective of SWAYAM is make best teaching learning resources to accessible to all especially the most disadvantaged who could not participate in regular mainstream of knowledge.

Massive open online courses are generally offered by Colleges or Universities. Many learners prefer MOOCs as they these courses provide certification, enhance employment skills and additional supplementary education. It is imperative to note that

many industries accept MOOC certification from recognized provider which further helps in the up skill of employees.

SPOC (Small Private Online Course)

SPOC (Small Private Online Course) is online classes designed by universities or organization for specific learners. In SPOC the main learners are often either pre qualified or limited. SPOCs support blended learning method which is a combination of traditional learning method with online resources. One of the important differences between MOOCs and SPOCs is that in SPOCs enrollment is limited to certain groups/course and is often accepted as part of a course for credit based system.

Mobile Learning

Mobile learning refereed as mLearning. It is a manner of accessing learning material through mobile. The use of a mobile device has become quite common and necessity. Mobiles have become more powerful now days having powerful chips and speed. The advantage of mobile learning is that learners can access learning content at their own space, pace even during mobility (travel). The use of mobile devices is quite common among young generation; hence the effective usage for learning can be advantageous.

Online Classrooms

Online classrooms or virtual classrooms connect teachers to their students virtually. There are different Online learning often have live sessions or discussion. Online classroom is becoming quite popular after pandemic period and many institutions have started online degree or post degree programs. Virtual classrooms provide easy access to learning new subjects and helps in the enrichment of skills. Online classrooms are boon for working professionals or students who would pursue multiple courses.

Learning management system (LMS) – A important tool of elearning

A learning management system (LMS) is an e-learning tool or a platform which for used training and education purpose. A learning management system plays a vital role in the delivery of learning content in electronic format. Learning management system facilities, a trainer or a teacher to create a virtual learning environment where the educator can provide educational videos, provide study material, notes, share documents, conduct examination and even track the progress of the student from time to time. A learning management system makes can digital learning process more effective, practical, and goal oriented.

An LMS is an important tool which can help educators to move from an offline an teaching learning process of online teaching learning or help to adopt a blended form of learning of both offline and online learning. It helps to connect educators to learners. An LMS provides a flexible learning environment where learning process is not restricted to the four walls of classrooms. An LMS can also be used to conduct of online exams.

CONCLUSION AND SUGGESTIONS

The growth of digital learning has provided an important to the educator to reap the benefit of ICT technology. There are abundant of tools available which a teacher or an education institution can deployment according to its requirement. The recent guidelines of the UGC of allowing 40% of the syllabus of a course through online mode are laudable.

Education institutions nowadays a massive opportunity to choose of mode of learning according to their need. There is plenty of free learning tools like Google Classroom which can easily used in day to day teaching learning process. Education institutions who want to create a customized learning platform can opt for learning management system like Moodle which provides a comprehensive platform for learning.

The digital revolution has touched and significantly changed the different areas of life and educational sector can no longer remain aloof. The use of digital learning tool or system has become essential and inevitable. In the era of MOOC, and open and distance education, the digital learning has gained key importance. A digital learning system is beneficial to both educators and learner.

REFERENCES/ FOOT NOTES

1. https://techterms.com/definition/cyberspace

2. https://ugcmoocs.inflibnet.ac.in/

3. https://www.easy-lms.com/help/lms-knowledge-center/what-is-an-lms/item10182

4. For example http://www.du.ac.in/du/index.php?page=virtual-learning

5. https://ugcmoocs.inflibnet.ac.in/

6. https://www.ndtv.com/education/open-degrees-are-equivalent-to-regular-degrees-ugc-clarification-1816338

MARKETING 4.0 IN THE DIGITAL ECONOMY

Dr. Dileep Kumar S. D.
Coordinator, PG Department of Commerce, PES Institute of Advanced Management Studies, Shivamogga, Karnataka

Introduction

The Organization for Economic Cooperation and Development (OECD) asserts that technological advancements can move nations closer to long-term prosperity. The internet of things, cloud computing, advanced robotics, 3-D printing, and mobile internet are just a few of the top breakthroughs that McKinsey lists as having had the greatest economic impact. Although these digital technologies have been present for a while, it wasn't until lately that their impact peaked, thanks to the confluence of several technologies. Multiple economic sectors, including retail (e-commerce), transportation (automated cars), education (massive open online courses), health (electronic records and tailored medication), and social connections are all aided by these technologies (social networks). But many of the same technologies that power the digital economy is also unsettling significant incumbents and upending crucial sectors. Large stores like Borders and Blockbuster, for example, have been impacted by the entry of digitally empowered competitors in their individual markets. The new dominant incumbents in their industries are these newly empowered digital entrants, Amazon and Netflix. It's interesting to note that even previous disruptors can share the same destiny. Spotify and its music-streaming business model has successfully impacted Apple's iTunes, which had successfully displaced physical music stores with its online music sales. Since reaching a peak in the early 2000s, Apple's music sales revenue has been on the decline. To compete with Spotify, Apple introduced its own music streaming service, Apple Music, in the middle of 2015. Most clients are simultaneously excited and nervous as they adjust to the new disruptive technologies. For instance, automation of knowledge work has increased productivity while also raising concerns about job loss. Rapid innovation is now possible in a world of ways thanks to 3-D printing. On the flip side, 3-D printing can also be abused to make things like weapons. The biggest problem may be brought on by mobile internet. Peer-to-peer networking has been introduced, enabling users to be much smarter and more informed than in the past. However, a study by Przybylski and Weinstein from the University of Essex demonstrated that using a cell phone during dating can be detrimental. According to the study, using a cell phone can cause people to become distracted from their surroundings. It also found that people's capacity for empathy toward those around them is frequently inhibited by the sense of connectivity to a larger network. Customers therefore desire, for the ideal technological application that enables them to achieve self-actualization while also developing empathy as the march toward the digital economy intensifies. A new marketing strategy is needed to direct marketers in predicting and utilizing disruptive

technologies during this period of transition and adapting to the digital economy. This chapter discusses the significant transition from product-driven marketing (1.0), customer-focused marketing (2.0), and finally human-focused marketing (3.0). Now, let's talk about Marketing 4.0. A marketing strategy known as "marketing 4.0" mixes online and offline customer engagement. Digital engagement alone is not sufficient in the digital economy. In actuality, offline touch is a significant differentiator in a world that is becoming more and more online. Additionally, marketing 4.0 combines form and content. Because of the swiftly changing technology landscape, companies must be more adaptable and flexible, but their true selves are more crucial than ever. Authenticity is the most precious asset in a world that is becoming more and more open. Finally, Marketing 4.0 uses machine-to-machine connectivity, artificial intelligence, and human-to-human connectivity to boost client engagement while enhancing marketing productivity.

From Traditional to Digital Marketing: A Transition Era of Customer Community Confirmation before Segmentation and Targeting

Segmenting the market into uniform groups based on their geographic, demographic, psychographic, and behavioural profiles is the traditional first step in marketing. Targeting, which is the technique of choosing one or more categories that a brand is dedicated to pursuing based on their appeal and fit with the brand, usually comes after segmentation. The strategy of a brand must include both segmentation and targeting. They provide more precise placement and resource distribution. Additionally, they aid marketers in providing distinct solutions to various market segments. The vertical relationship between a brand and its clients, like that between a hunter and his prey, is also illustrated by segmentation and targeting. Marketing professionals make judgements on segmentation and targeting on their own, without consulting their clients. The factors that characterize the segments are chosen by marketers. Customers are only truly involved when they contribute to market research, which usually comes before segmentation and targeting exercises. Customers, who are "targets," frequently feel invasive and irritated by irrelevant communications directed at them. One-way messages from companies are frequently regarded as spam. Customers socially connect with one another in horizontal webs of communities in the digital economy. Communities are today's newest segments. Communities, as opposed to segments, are organically created by customers within the limits that they voluntarily specify. Communities of customers are resistant to spam and pointless advertising. In reality, they won't accept a company's attempt to impose it on these networks of connections. Brands must get consent in order to interact with a community of customers effectively. Seth Godin popularized the concept of permission marketing, which centers on seeking clients' permission before distributing marketing messages. Brands must, however, behave as friends who genuinely want to assist when requesting permission rather than as hunters using bait. Customers will be given the option to "confirm" or "ignore" the

friend requests, much like the Facebook system. This exemplifies the horizontal link that exists between businesses and consumers. However, as long as it is made clear to customers, businesses may continue to utilize segmentation, targeting, and positioning.

Brand Differentiation, Brand Feature and Code Clarification, and Brand Positioning

Traditional definitions of a brand include a name, a logo, and a tagline that sets one company's goods or services apart from those of rivals. Additionally, it acts as a reservoir for all the value produced by the company's branding initiatives. A brand has recently evolved to represent the total customer experience that a business offers to its clients. Consequently, a brand may operate as a platform for a firm's strategic because any actions taken by the company will be linked to the brand. Brand positioning and the idea of a brand go hand in hand. Since the 1980s, brand positioning has been acknowledged as a struggle for consumer attention. A brand needs an authentic set of differences to back its positioning in addition to a clear and consistent positioning if it is to build strong equity. In essence, brand positioning is a powerful promise that marketers make to win over the hearts and minds of consumers. Marketers must fulfil this promise with a strong and concrete differentiator through its marketing mix in order to demonstrate true brand integrity and gain customers' trust. Customers are now able to assess and even critique any company's brand-positioning promise thanks to the digital economy. Because of this transparency (caused by the growth of social media), businesses can no longer make erroneous or inconclusive claims. Companies can present themselves in any way, but positioning is nothing more than corporate posturing unless there is essentially a community-driven agreement. Today, repetition of brand identification and positioning messages, a crucial component of traditional marketing success, may not be sufficient. A brand needs to be adaptable enough to act in specific ways in specific circumstances in light of disruptive technology, shorter product life cycles, and quickly shifting trends. The brand's icons and codes, however, ought to remain constant. The personality is the true cause for the existence of the brand. The outside imagery can be varied as long as the brand's essential values are upheld. Consider it this way: MTV and Google maintain strong yet adaptable identities by having numerous logo variations (Google refers to them as doodles).

From Selling the Four P's to Commercializing the Four C's

A traditional technique for helping to plan what to provide and how to deliver it to customers is the marketing mix. The four Ps stand for product, pricing, position, and promotion. Market research is frequently used to identify the needs and desires of customers before developing a product. From product idea through production, most decisions are made by businesses. Companies combine cost-based, competition-based, and customer value-based pricing techniques to determine the product's selling price. The most significant input customers have for pricing is their projected willingness to pay, which is calculated using consumer value-based pricing. Companies must select

how to provide after deciding what to sell (product and pricing) (place and promotion). In order to make a product easily available and accessible to clients, businesses must decide where to distribute it. Additionally, businesses must use a variety of strategies to inform the target market about the product, including advertising, public relations, and sales promotions. Selling is made easier because clients are drawn to the value propositions when the four Ps of the marketing mix are appropriately crafted and positioned. The idea of the marketing mix has changed to account for increased client participation in a connected environment. Redefining the marketing mix (the four P's) as the four C's (co-creation, currency, communal activation, and conversation). Co-creation is the new approach to product development in the digital economy. Companies can increase the success rate of new product development by incorporating customers in co-creation early on. Co-creation enables customers to add their own unique touches to goods and services, enhancing value offerings. In the digital age, pricing is likewise changing, moving from standardized to dynamic pricing. Dynamic pricing, which involves setting variable rates in accordance with consumer demand and capacity use, is not a new concept in some sectors, such the travel and hospitality sectors. But technological development has spread the practice to other sectors of the economy. For instance, online retailers gather a tonne of data, enabling them to undertake big-data analytics and, as a result, provide unique pricing for each customer. By charging different consumers differently based on their prior purchasing habits, proximity to shopping locations, and other customer profile factors, businesses can maximize profits. Price in the digital economy is comparable to money in that it changes based on consumer demand. The idea of a channel is evolving as well. Peer-to-peer distribution is the most effective distribution model in the sharing economy. The hotel, taxi, car rental, and banking sectors are being disrupted, correspondingly, by companies like Airbnb, Uber, Zipcar, and Lending Club. They make it simple for customers to access goods and services that are not theirs, but rather those of other clients. This peer-to-peer dissemination will soon be accelerated much more by the rise of 3-D printing. Consider a scenario in which customers can order a product and have it produced in front of them in a matter of minutes. Customers in a connected environment need virtually quick access to goods and services, which can only be provided by peers who are nearby. The core of social activity is this. In recent years, the idea of promotion has also changed. Promotion has historically been a one-sided process where businesses distribute messages to audiences made up of customers. Customers can now reply to those communications thanks to the spread of social media. Additionally, it enables customers to discuss the messages with one another. Customers now have a place to talk about and rate the brands they have engaged with thanks to the growth of customer-rating services like Trip Advisor and Yelp. Companies have a good chance of surviving in the digital economy if they have a linked marketing mix (the four C's). But selling's fundamental premise also has to shift. Customers have typically been treated as passive objects by

sales tactics. The goal in a connected society is for both parties to actively seek out commercial benefit. Companies are engaging customers through open commercialization as a result of increased customer participation.

From Customer Service Processes to Collaborative Customer Care

Customers are considered as targets before they make a purchase. From the standpoint of traditional customer service, customers are treated like kings once they make the decision to purchase. Companies that have a customer-care philosophy treat their clients equally. In place of providing services, a business shows its sincere concern for the consumer by paying attention, responding, and constantly upholding the agreements agreed upon by the company and the customer. In traditional customer service, employees are in charge of carrying out particular tasks and procedures in accordance with rigid rules and SOPs. Service professionals frequently face competing goals in this situation. Collaboration is essential to the success of customer care in today's networked environment. When businesses invite customers to engage in a process by employing self-service facilities, collaboration occurs.

CONCLUSION

Marketing 4.0 is a marketing approach that combines online and offline interaction between companies and customers, blends style with substance in building brands, and ultimately complements machine to- machine connectivity with human-to-human touch to strengthen customer engagement. It helps marketers to transition into the digital economy, which has redefined the key concepts of marketing. Digital marketing and traditional marketing are meant to coexist in Marketing 4.0 with the ultimate goal of winning customer advocacy.

ABOUT THE EDITORS

Professor Dr. Shaikh Aftab Anwar

M. Com; MBA; Ph.D. (Business Administration) is an educationist, researcher, social activist and a transformational leader. He has more than 30 years of teaching, research, consultancy, executive education and industry experience. He was nominated as Senate Member of Savitribai Phule Pune University by the Governor of Maharashtra. He has served as BOS member, Faculty member, Examination Committee member of Savitribai Phule Pune University. Presently, Dr. Shaikh is working as Principal of Poona College of Arts, Science and Commerce, Pune -411001(MS).

Dr. Shaikh is also Member of several Educational and Professional Bodies in India and abroad. He has been accorded with several prestigious awards including National Youth Award by the Ministry of HRD, Government of India, and Prof. G. B. Kulkarni Award for Best Teacher in Commerce by the University of Pune.

He is Ph.D. and M.Phil. Research Guide of Savitribai Phule Pune University, Babasaheb Ambedkar Marathwada University, Aurangabad and Tilak Maharashtra Vidyapeeth, Pune. 33 students have completed Ph.D. and 16 students have completed M.Phil. under his guidance.

Dr. Shaikh has authored several books and published research papers and articles in refereed National and International Journals and presented papers in international conferences.

As a Social entrepreneur, Dr. Shaikh has established and run the organizations from scratch. He also offers advice to upcoming Educational Institutions and IT Education sector. He is a motivational speaker, Result-focused and effectual leader. He has extensively travelled to countries like China, Iran, Malaysia, Thailand, Singapore Oman, UAE (Dubai, Abu Dhabi, Saudi Arabia), Fiji, Kingdom of Tonga, Sri Lanka and Nepal.

Dr. Imran Baig Mirza

MCA; Ph.D. (Computer Application) is the Assistant Professor at the Department of BBA Computer Application at AKI's Poona College of Arts, Science and Commerce, Pune-411001(MS) Affiliated to Savitribai Phule Pune University, Pune. He has 16 years of teaching experience. He is a Doctorate in Computer Application under the Faculty of Commerce and Management from Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

He is Ph. D. Research Guide of Savitribai Phule Pune University, Pune.

He has published research papers in various national and international journals of repute.

ABOUT THE BOOK

"Contemporary Issues in Digital Marketing" is an edited book that offers a comprehensive overview of the latest research and developments in the field of digital marketing. The book covers a wide range of topics related to the use of digital technologies in marketing, including social media, mobile marketing, e-commerce, data analytics, and artificial intelligence.

Overall, "Contemporary Issues in Digital Marketing" is an essential resource for anyone looking to stay up-to-date on the latest trends and strategies in digital marketing. With contributions from leading experts in the field, the book provides a comprehensive overview of the current state of digital marketing and offers insights into the challenges and opportunities that lie ahead.

NEX GEN PUBLICATIONS

India | UAE | Nigeria | Uzbekistan | Montenegro | Iraq | Egypt | Thailand | Uganda | Philippines | Indonesia

www.nexgenpublication.com