

## **“The Next-Generation Marketing Principles For Online Sales”**

Dr. Neeraj Kumar Sharma, Project Faculty, MGNCRE, Hyderabad

### **Abstract**

*As the Internet grows, so are advertising possibilities and challenges. Web 3.0 will boost the emerging economy as Internet access grows. The extent to which web 3.0 customer acquisition practises impact developing country marketplaces is debatable, although comparable tactics have been effective in wealthier countries. The report examines Web 3.0 e-business commerce's environment and strategy. This research, grounded on the theory of wants and needs, examines the tactics used by these regional businesses in an effort to clarify the factors that set them apart when it comes to e-commerce and to answer the question of how Web 3.0 firms can thrive in the new economic landscape. Lastly, we talk about some potential restrictions and implications.*

**Keywords :** Terms like "Emerging Economy," "Electronic Commerce," "Customer Relationship," and "Marketing" are all relevant when discussing Web 3.0

### **INTRODUCTION**

Web 3.0 has been broadly defined. Semantic Web is linked to the current Internet. Understanding the importance of relevant information is more important than showing page content. This latest statistic may not be immediately associated with the Semantic Web. However, how it's described affects how we interpret it. Semantic web technologies, Web 2.0 apps, and AI helped boost its appeal. Web 3.0 gives users more control over their own content and a better online experience (2010-2022). Data must suit user needs while safeguarding privacy. It simplifies hard-to-understand information, in other terms. Web 3.0 emphasises user-generated content, making it distinct from earlier versions. Web 3.0's cornerstone is user cooperation, not user engagement. The semantic web filters out useless information because Web 3.0 integrates objects and data. Web 3.0 is used for online marketing and is based on the Semantic Web, which enables web services to interact. Web 3.0 will include greater personalisation and tracking. Web 3.0 aims for continuous, all-encompassing communication and cooperation. It's possible to design Internet-free value chain alternatives. The user's buying experience will be more interesting and informative. AI and the elimination of unneeded data storage and retrieval solutions are being developed to make sense of the web's unstructured data. Existing initiatives are impacted by certain criteria, while customers pick or prioritise others depending on their requirements.

Stuart Haber and W. Scott Stornetta suggested blockchain-based data organisation in 1991. Digital documents required to be timestamped to avoid backdating or tampering and be computationally feasible. They use a cryptographically protected chain of blocks to track timestamped documents.

Merkle Trees enhanced blockchain's efficiency in 1992. These algorithms combine many texts into one. Merkle Trees provide a "secured block chain." Each data record was linked to its predecessor. This chain's most recent record contains all earlier records. No one exploited the invention after the patent expired in 2004.

Satoshi Nakamoto invented distributed blockchains in 2008. His revolutionary design adjustment enables additional blocks to be added without official signatures. The improved trees may record all data exchanges. Instead of a central authority, a distributed network of peers verifies and timestamps transactions. No one is in control if it's decentralised. Blockchains have improved to become cryptocurrencies' underlying mechanism. Protocol records all Bitcoin transactions in a public ledger.

Blockchain has made steady, encouraging development. In Satoshi Nakamoto's initial article, "block" and "chain" referred to "the Blockchain." Blockchain data, which record bitcoin transactions, have grown from 20 GB to 100 GB in recent years.

This was noble and essential. The 2008 financial crisis at Lehman Brothers spurred many to doubt the durability of the current banking and monetary system. After the US removed \$600 billion in problematic real estate loans from banks, \$13 trillion vanished globally.

Nachamoto's primary objective was to design a new, more robust and transparent kind of "money" that would endure any future catastrophe. His brilliance was combining Haber's work into his own manner. In January of 2009, the first modern blockchain and its related cryptocurrency, Bitcoin, were introduced. While conventional currencies like the US dollar, British pound, and Euro may all be used to make online purchases and send and receive payments, a bitcoin is unique among digital currencies. Bitcoins, like paper money, do not have their own physical coins. There is no need for a financial institution, credit card company, or other intermediary when sending bitcoin or using bitcoin to make a purchase. Instead, bitcoin payments may be sent straight to the recipient via the internet in a safe and almost instantaneous manner. The Internet reaches Web 3.0 using blockchain technology. Most Internet information was formerly on read-only sites. Flat, one-way content on information portals encourages users to merely ingest the information rather than submit ratings or evaluations. Web 2.0 offers greater choices for social networking, collaboration, content generation, and information sharing. People may readily interact, share their opinions and experiences, and produce their own stuff in today's "participatory age" (user-generated content). challenges for marketers, therefore understanding it, what it can do for your company, and how to take use of its enormous potential is essential.

Web 3.0 is decentralised; there is no central authority or financial hub. The blockchain facilitates the movement of value without relying on a centralised authority or monopolistic service providers. In contrast to social media systems, which allow people to communicate information but concentrate power, blockchain technology provide decentralised networks without centralised centres of control. The system may operate decentralised, without a central body accountable for network administration and usage . "Web 3.0" has been used

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to symbolise this interaction because to the development of Web usage, which has led to the detection, evaluation, and transformation of data into meaningful information. This new age, whose beginnings we are seeing, will lead to the Internet becoming a distributed database. Web 3.0 may give consumers with the information they want in a single step.

Web 2.0 applications in corporations led to E-marketing 3.0. Web 3.0 emphasises collaborative production tools. Web 3.0 has turned traditionally linear businesses into platform ones, where multiple stakeholders can interact and exchange value. Online retailers of Amazon's stature embrace platform-based ecosystems, a shift from resource ownership to exchange control. Digital merchants have a number of opportunities to take initiative in today's ever-shifting economic climate by going after niche markets for the purchase and sale of services, goods, and content.

### **Altering Consumers' Online Shopping Habits**

In an Internet-reliant society, the traditional shopping experience has undergone radical change. Consumers must learn to navigate the dizzying array of options for purchasing and receiving information about goods and services made available through the Internet. Here, the customer's prior experiences with the Internet have led to a radical shift in his behaviour.

After the advent of Web 2.0, when readers could voice their opinions on uploaded content, consumers gained more clout and merchants learned to tread more lightly in their public pronouncements. The World Wide Web became a tool with advantages and disadvantages for both the buyer and the seller of goods and services. Depending on the user, this weapon might have both positive and negative effects. While it's lot simpler for businesses to spread the word about what they're doing to, if their messaging don't match up with what customers want, they risk damaging their reputation. While it's true that consumers have access to more data than ever before, this may also lead them astray if they let the recommendations of others sway them into purchasing an item that doesn't meet their needs or expectations. The rise of Web 2.0 has also altered the strategies of consumer advocacy groups and consumer-driven social movements. Their work is now more casual, but they have more resources at their disposal to educate and influence the choices of the two parties involved in commercial transactions. Before making a purchase, consumers may be protected against the risk of buying a product that does not meet safety standards. Web 2.0 enables individuals communicate and interact globally; next, put those relationships to work in business. You must also be able to find information fast and efficiently and create connections between words. Nova Spivack defines Web 3.0 as the ability to locate data, ideas, and applications. Goods and services can't be assessed in a vacuum, therefore it's vital to examine the customer's role, the community's and environment's influence on the product, and socioeconomic and scientific elements that contribute to consumer satisfaction. In this article, we want to draw attention to the way in which the advent of Web 2.0 and its many offshoots altered the habits of modern consumers. Our point is to highlight how people's shopping habits have changed as a result of technological advancements, and how their rationale for making purchases has shifted from logic to emotion as marketing strategies have evolved to appeal to these new consumer behaviours. Because of the Web 2.0, a technology that is increasingly prevalent in our lives, a consumer's choice to make a purchase is no longer determined just by need but is instead impacted by the buyer's immediate social and cultural context. One further benefit of Web 2.0 is that it empowers customers to stand up for themselves against merchants who try to take advantage of them.

### **APPROACH AND DESIGN**

The research aims to develop a theoretical foundation for analysing B2C e-commerce Web 3.0 buyer behaviours. This study examines how management systems, virtual reality, blockchain, and AI may be used to create new businesses, with an emphasis on web 3.0 application engagement. It pinpoints the adjustments individuals need to make to improve their judgement and seize new possibilities. This article looks at how organisations might use Web 3.0 and social media to promote online purchasing, presenting a number of strategies that could give them an advantage in a crowded marketplace.

### **An Overview of the Web 2.0 Consumer**

When it comes to making a purchase, omni-channel buyers often believe they have more information and power than sellers. The transactional character of the Internet has grown tremendously thanks to Web 2.0, which has also altered the ways in which people express themselves, do business, acquire knowledge, make purchases, join groups, work together, and disclose private information. In Web 2.0, rather than focusing on traditional web browsing, the focus shifts to the users and the information they create and share. The user primarily interacts with material made by others during the Web's first development period, also referred to as Web 1.0, but increasingly produces their own content during the current Web 2.0 age. Customer 2.0 emerged when the Web matured into an operational medium. This buyer group relies on digital tools for discovery, discussion, and narrative construction.

Social media platforms encourage business-to-audience connection. In viral marketing, product descriptions, attributes, and recommended applications are casually shared on social networks.

The Internet has shifted from being a source of knowledge to one of power thanks to social media. An growing amount of weight is being given to the opinions of consumers expressed on social media when analysing their purchasing habits. What factors into a consumer's choice to purchase a product are the reviews and comments they read, and how those reviews and comments are collected and displayed. People's personal ideas, views, and sentiments may readily be shared with the whole worldwide community of Internet users thanks to the prevalence of social media platforms. The way in which people talk to one another on the internet has a significant impact on their purchasing decisions. For instance, just a little bit of bad news from a few of posts may have a big effect on customer sentiment. Additionally, many individuals see the total number of reviews as a measure of the product's or service's popularity or worth. But not every remark is made the same. High-quality evaluations have a substantial effect on how products are perceived and how likely people are to make a purchase after reading them. Several receptor-related variables, including prior involvement and experiences, influence the likelihood that poor-quality views will have an impact. An increase in consumer participation, for instance, has been linked to an increase in the quality of communication through social media. Customers participate in the communications and offerings of businesses by

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writing material for blogs, commenting on forums, starting threads on social networking sites, and rating products they use. , or "4Ps," are the standard marketing terms. In response to this imbalance of power in the digital economy, a new trend known as reverse marketing emerged, exemplified by :

- Configure and create your own product options are becoming more popular among online retailers. The idea of "personalization" or "co-production" emerges, when the customer is involved in the creation of both the marketing message and the product or service. In general, customers are prepared to shell out extra cash for "customised" goods and services that are developed in response to specific needs. The term "prosumer," which refers to a consumer who also creates some of the products and services he uses, is relevant here. However, this calls for an up-to-date database, conversations with each consumer, segmentation based on requirements and values, and tools for customised product creation;
- Inverted pricing, whereby consumers may flip the script from price takers to price setters through auction and offer-based business models made possible by the Internet;
- Inverted marketing, in which targeted messages are narrowcast to consumers rather than disseminated to a wider audience. Permission marketing, on the other hand, is based on a transaction that is welcomed and expected by both parties, is of value to the customer, and is in some way rewarded by the business. Point casting is another popular service of the present day, with viewers selecting the commercials they wish to see based on their own interests.
- Coupons, vouchers, and other promotional incentives are being requested by consumers through intermediaries, a practise known as "reverse promotional campaigns"
- Instead of attracting clients directly, inverted supply chains have enterprises disperse their wares via a number of intermediaries, each of which need a unique set of pricing and conditions in order to attract customers.;

Customers may research products and services online, but they can also provide feedback to businesses about what they like and don't like. This "reverse segmentation" enables marketers to tailor offers to specific demographics of customers while still focusing on the " 4 Cs" (the, costs, customer , communication and convenience). Therefore, people engage as decision-makers in the pricing structure by posting and responding to prices, spreading material, making advertisements for their favourite businesses, and broadcasting them on video sharing sites. By adapting and reposting information about companies' products and services on various social media platforms, consumers may either add or subtract value. Consumers may provide the most value to a company via social media by acting as co-creators of goods and services and greatly influencing the purchasing decisions of the online communities to which they belong.

Consumers gain trust in the brand, feel more connected to the product, and are more likely to take an active role in its creation when they are able to ask questions and get answers via this channel of communication. Online communities are a great way for businesses to get to know their consumers and their requirements while also receiving valuable input on products, services, and marketing strategies. Even for completely new product lines, these brand communities may be quite helpful for capturing ideas.

The marketing industry is making a comeback as it adapts to the shifting social landscape. At this very moment, we are seeing the last stage of product-centric marketing and the beginning of customer-centric marketing with a focus on value. Businesses are shifting their priorities from making a good product to catering to customers' wants and needs. Marketers don't just see their customers as wallets; they see whole persons, brimming with intellectual, emotional, and spiritual vitality. In addition to meeting their practical and emotional needs, consumers look for items and services that will help them achieve their deepest spiritual aspirations. They're looking for the firms that are answering humanity's deepest desires in a world full with distractions. People want to feel connected to the goods they invest a lot of time and energy into using. These connections may now be made via the use of social media. Because of the breakdown of boundaries facilitated by social media, companies and consumers may develop connections like to those seen in real relationships.

Reaching your target audience is essential for any company. Consumer psychology is an important topic for business owners and marketers to investigate. The standard must be to be present across numerous channels and, more importantly, to listen to and communicate with consumers where they already are. Important things to think about when trying to put the user of a product or service within the context of that product or service. Further, this shift in consumer behaviour is the end outcome of cultivating long-term connections that give priority to the emotional component. An organization's ability to evoke an emotional response from its customers is a key factor in building lasting relationships with its customers. It may be more challenging to forge these ties, but they are almost impossible to shatter once they have been established.

### **The Buyer in Light of Web3.0 Principles**

Semantic Web and Internet of Things will shape future Internet architecture. Web 3.0 is a key aspect of the Future Internet now that Web 2.0 is mature. Web 3.0 is expected to result from updated and expanded Web capabilities.

There may be the most potential for use in SEO. The current generation of search engines relies on string matching, or the process of looking for a set of keywords throughout a body of target documents to filter results down to those that include at least one of those keywords. A semantic search engine, on the other hand, would consider the context of the full grammar in order to comprehend the idea rather than the literal string, and then return only the most relevant results. If we extend this line of thinking, we may picture a semantic search engine that provides accurate responses to user queries.

Through wired and wireless connections and individual addressing systems, they are able to communicate and collaborate with one another to develop services and applications that meet the specific requirements of their users. We now have "smart things" that can keep tabs on our homes, automobiles, workplaces, and even our physical activity thanks to the proliferation of Internet-connected gadgets. Because of the widespread use of IoT devices, businesses will have a more nuanced understanding of their customers' habits.

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The Internet of Things may be useful since it makes it easier to tailor both the ad and the product or service being promoted to each individual customer (say, if your air conditioner breaks and you need to replace it, IoT can help you locate the best deal on a replacement unit). The product's characteristics, the user's location, and the current weather all factor into the website's suggested purchases. This lets retailers dispatch a staff to fix the goods or replace it if it's beyond repair, and it can all be planned and optimised in advance. Marketing initiatives may be more relevant to their intended audiences by tracking their daily or demographically specific routines, shopping preferences, and purchasing patterns.

Personalization of user experiences is a key feature of Web 3.0, which will benefit customers in many ways. For Web 3.0 to take off, it will need to be fueled by information on individual users, such as their whereabouts and how they typically spend their time online. More intelligent and efficient Web applications, made possible by Web 3.0 technology, will help users discover what they need much more rapidly.

### **Impact of Global Interconnectivity**

Consumer habits have changed dramatically during the last two decades. The reason for this is because consumers' core values have evolved through time, shifting away from those of the past and toward those of the present. Going back thirty to forty years, individuals used to purchase their items at the local shop, where they also socialised and spoke with neighbours. Products and services were scarce, customers had to work within predetermined price points, and transactions were conducted only in hard currency. There weren't as many convenient options like ready-to-eat meals or foods with added ingredients, and appliances and electronics didn't have nearly as many advanced capabilities. The shift to credit as a method of payment has resulted in serious societal issues, such as customers signing contracts they do not fully understand (due to, for example, the presence of "hidden provisions") or being unfamiliar with the notion of credit altogether. Misleading These days, consumers can choose from an unprecedented array of products and services; deals pop up at every turn; purchases can be made without ever leaving the house; special orders can be placed for items that are unavailable in stores; and it's safe to say that the supply is practically boundless. In contrast, however, there is a greater potential for harm from buying low-quality goods. Due to the elimination of cash transactions, clients may find themselves with less financial discipline. The client is spending money on a product or service because it has a certain perceived value, but the purchase serves no immediate use. That manner, people's ideas about what constitutes high-quality merchandise are altered.

Customers want low-priced goods that are convenient to get without requiring them to sacrifice too much of their time, but which also give them the sense that they belong to a more affluent social class. This desire is being met by the mass manufacturing process. Personal transportation (the automobile), foreign vacationing, and increased consumer expectations all contribute to an unsustainable depletion of natural capital.

The influence of technological advancement on society, as well as changes in the components that make up demand, lead to structural shift. Thus, the growth of the value system and the possibilities for altering lives has resulted in dramatic changes in the behavior. It's important to recognise that corporations have shifted their focus to include consideration of their social and ethical obligations. In the past, customers were dissatisfied since manufacturers and retailers didn't always behave ethically while meeting their demands. As a result, it's become necessary to codify a set of guidelines that all parties engaged in making and selling goods must adhere to. Because of this, businesses must consider the social and ethical costs of acting contrary to these ideals.

Today's customers place a premium on businesses that demonstrate they care about more than just their bottom line by adhering to an established code of ethics and treating their employees and the community with respect. That's given them an edge over rivals who haven't adopted these strategies.

### **SOCIAL MEDIA AND WEB 3.0: PROTECTING CUSTOMERS**

The Internet has evolved into a very lucrative commercial tool for companies seeking to dominate a technologically advanced marketplace. The term "social media" refers to a collection of widely available Web-based applications that enable users to communicate, collaborate, share, recommend, and evaluate information and experiences in real time. They provide a lively online setting where users are always among a flurry of action thanks to data and user input.

Members of the same group may both reconnect with old friends and acquaintances and form new connections with those outside of their existing network. Friends may learn about one other's recent exploits by reading their status updates, which also reveal their thoughts on the goods and services they have acquired. Users may create an opinion on the products and services that have been verified by other users via picture galleries, and then provide feedback or share the information with their social networks.

Communication has evolved as a result of the widespread dissemination of information, both personal and professional. The reason for this is that social media relies on easily available technology, such as texting and other forms of mobile communication.

Technology has become vital to the lives of individuals of all ages and walks of life. Due to the ease with which social media has made cross-cultural communication and exchange possible, new ideas and values have been rapidly assimilated into the general public's worldview. People's perspectives, motivation, and ability to form coalitions may all be influenced by and strengthened by the widespread use of social media. By amplifying their voices via social media, consumers have acquired a potent tool in the fight for their rights, and the tide is slowly turning in their favour. The public at large must acquire the skills necessary to maximise their usage of social media.

This shift has made it possible for businesses to hear directly from their consumers about their experiences with the company and its offerings. They may initiate contact and build a genuine connection with those immediately involved, even if only virtually. However, this shift necessitated a reconsideration of the whole communication approach, which was undesirable for those seeking to exert control over the sent message .

In addition, social media facilitates the sharing of ideas, the navigation of alternative paths, and the creation of well-informed judgments. As the old adage goes, "false information is the mother of failure," and it's not easy to alter people's minds after they've made up their minds about whether or not something is true.

The material that travels online is always useful for either promoting or smearing a brand because of its accessibility. Whether in the form of reviews, thoughts, comments, or photographs, the content shared through social media may have a significant impact on its audience.

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As a result, customers now have a potent weapon at their disposal in the form of social media, which they can use to advocate for their own interests, as well as to rapidly ascertain whether or not they have been duped.

Online consumer campaigns, made possible by social media, have the potential to have a significant impact on consumers and to morph them into a cohesive political force. Through a shift in perspective that puts the customer first, companies hope to learn more about their wants and requirements. Consumers, on the other hand, have to deal with a deluge of information from both conventional (television, radio, and print) and digital media. In this potentially dangerous setting, consumers must sort through the noise to find the facts they can utilise to make educated product or service purchase decisions.

To counteract this, consumers either require an existing government agency to advocate on their behalf or could lobby for the establishment of consumer advocacy groups. On the one hand, the law mandates that the state, via its institutions, safeguard consumer interests. With the help of social media and its many apps and platforms, it is now much simpler to create such organisations, and members don't even need to know one other or meet in person to get started. They need merely go to one of the numerous social media sites already in existence to vent their frustration and spread the word to as many other users as they can. If individuals are really unhappy and their feelings are widely expressed, the "snowball" effect, which is widespread on social media, will manifest itself.

Material and public perception repairs will be very costly and difficult to recoup. Companies will see a major drop in revenue and be obliged to make considerable efforts to restore their reputation with customers.

When dealing with vendors of products and services, consumers formerly had little legal protections. Ultimately, he had to appeal to a government agency for help. The procedure, although often rewarding, was time-consuming and nerve-racking, leaving the customer feeling alone and unsupported. On the other hand, he couldn't go public with his problem, for fear that others would try to replicate his efforts and lower his odds of succeeding.

Because of the proliferation of social media platforms, users have learned that they can utilise these platforms not just to share information and have fun, but also to fight back against the exploitation they face from businesses. As a result, consumers have started seeing social media as both a tool in their struggle for justice and a forum through which to voice their needs and complaints to the companies that provide them.

Such consumer organisations may be quite powerful, causing significant harm to the targets of their ire. As a result, both the companies' sales and profits will suffer, and the respective organisations' reputations will take a major hit.

After a negative social campaign has begun, the conversation has begun, there is a chance that the organization's image will suffer.

Remember that customers and workers alike have a stake in a company's reputation. People may have a positive or negative impact on a brand via their opinions and the actions of their employers. Therefore, in order to attract and retain valuable workers and customers, a company must understand this and communicate effectively.

The recipients of an opinion, remark, or picture shared on social media may be profoundly affected by the content of the communication. The intended result may not be achieved when a communication is transmitted via the improper channels or is ambiguous. Which is why it's important to do your homework before releasing a message to the public that might potentially have a major impact.

For example, customers may voice their concerns about a company's product or service, get prompt responses from that company, have their rights defended, and organise into consumer protection groups all via their use of social media platforms.

The modern consumer may use social media as a defence or a weapon. Users may express all their issues and have them resolved more quickly with the help of social media and the many platforms and tools available on the web nowadays.

Social media is often seen as a means through which consumers may protect their rights, but it can also be used by businesses and government agencies to enhance the quality of their wares, foster stronger relationships with customers, and more effectively govern a variety of sectors.

### CONCLUSION

Web 3.0 involves more than just new features and upgrades. Web 3.0 technologies have led to the fast expansion of online buying in Web 3.0, a real e-social commerce environment. These technologies may help you design a viable marketing strategy. This chapter outlines the growth of the Internet and discusses consumer behaviour in Web 2.0 and Web 3.0. Along with the Web's emergence as a social medium, the aforementioned transfer of power from vendors to consumers has been readily apparent. Consumers now have more say in what items and brands succeed in the market because to the proliferation of consumer engagement online. Also, businesses should be aware that digital technology is a potent instrument for shaping and changing customer habits. In a world where innovative technologies are on the scene often, the organisations who prioritise their customers' wants and requirements stand to succeed. Whether shopping online, in a physical store, or via a combination of media, the customer experience is now the top focus for retailers. The secret is in learning how the customer feels about the brand and interacting with them on a personal level regarding the product.

Summing up, it can be argued that in order to succeed in the Web3.0 era, businesses must accept the realities of a future market that puts customers first. Business organisations, and notably marketers, that fail to adapt to the changing consumer landscape risk losing out on engaging a new generation of customers who place a premium on ease of use, customization, teamwork.

### References

1. Hendler, J., *Web 3.0 Emerging*. Computer, 2009. 42 (1): p. 111-113.
2. Lassila, O. and J. Hendler, *Embracing" Web 3.0"*. IEEE Internet computing, 2007. 11 (3): p. 90-93.
3. Rudman, R. and R. Bruwer, *Defining Web 3.0: opportunities and challenges*. The Electronic Library, 2016.
4. Barassi, V. and E. Treré, *Does Web 3.0 come after Web 2.0? Deconstructing theoretical assumptions through practice*. New media & society, 2012. 14 (8): p. 1269-1285.
5. Kreps, D. and K. Kimppa, *Theorising Web 3.0: ICTs in a changing society*. Information Technology & People, 2015.

6. Alabdulwahhab, F. A. *Web 3.0: the decentralized web blockchain networks and protocol innovation*. in *2018 1st International Conference on Computer Applications & Information Security (ICCAIS)*. 2018. IEEE.
7. Khan, A. G., et al. *A journey of WEB and Blockchain towards the Industry 4.0: An Overview*. in *2019 International Conference on Innovative Computing (ICIC)*. 2019. IEEE.
8. Sharma, N. K. (2022, May 15). *How to Write an Article/Research Paper of Social Science for Publication in an Indexed Journal*. How to Write an Article/Research Paper of Social Science for Publication in an Indexed Journal. <http://dx.doi.org/10.13140/RG.2.2.27844.71049>
9. Sharma, N. K. (2021, December 31). *Easy Way to Determine the Sample Size*. Easy Way to Determine the Sample Size. <http://dx.doi.org/10.13140/RG.2.2.35758.84808>
10. Sharma, N. K. (2020, August 21). *An Analysis of Corporate Social Responsibility in India*. An Analysis of Corporate Social Responsibility in India. <http://dx.doi.org/10.2139/ssrn.3676827>
11. Sharma, N. K. (2019, March 31). *CSR Expenditure of BSE Listed Companies in India: An Analytical Study*. CSR Expenditure of BSE Listed Companies in India: An Analytical Study. <http://dx.doi.org/10.13140/RG.2.2.23626.18882>
12. Sharma, N. K. (2015, October 31). *Emergence of SNS as Marketing Communication Tool*. Emergence of SNS as Marketing Communication Tool. <http://dx.doi.org/10.13140/RG.2.2.32958.51526>
13. Sharma, N. K. (2018, February 28). *Corporate Governance and Its Relation to Business*. Corporate Governance and Its Relation to Business. <http://dx.doi.org/10.13140/RG.2.2.16541.74729>
14. Ramesh, R., Shukla, A. K., & Sharma, N. K. (2017, May 31). *Corporate Social Responsibility in Our Changing Business World*. Corporate Social Responsibility in Our Changing Business World. <http://dx.doi.org/10.13140/RG.2.2.30674.58562>
15. Pandey, R. N., & Sharma, N. K. (2018, February 28). *Management of Stress Life*. Management of Stress Life. <http://dx.doi.org/10.13140/RG.2.2.20795.03361>
16. Saraf, C. and S. Sabadra. *Blockchain platforms: A compendium*. in *2018 IEEE International Conference on Innovative Research and Development (ICIRD)*. 2018. IEEE.
17. Gururaj, H., et al., *Blockchain: A new era of technology*. Cryptocurrencies and blockchain technology applications, 2020: p. 1-24.
18. Shaltout, M. S. A.-F. and A. I. B. Salamah. *The impact of Web 3.0 on E-Learning*. in *2013 Fourth International Conference on e-Learning "Best Practices in Management, Design and Development of e-Courses: Standards of Excellence and Creativity"*. 2013. IEEE.
19. Evans, T. M., *Role of International Rules in Blockchain-Based Cross-Border Commercial Disputes*. Wayne L. Rev., 2019. 65: p. 1.
20. Isaias, P., et al., *Towards learning and instruction in Web 3.0: Advances in cognitive and educational psychology*. 2011: Springer Science & Business Media.
21. Balzarova, M. A. and D. A. Cohen, *The blockchain technology conundrum: Quis custodiet ipsos custodes?* Current Opinion in Environmental Sustainability, 2020. 45: p. 42-48.
22. Morris, R. D., *Web 3.0: Implications for online learning*. 2011, Springer.
23. Sharma, N. K. (2015, November 4). *Industry Initiatives for Green Marketing in India*. Industry Initiatives for Green Marketing in India. <http://dx.doi.org/10.4172/2151-6219.1000192>
24. Sharma, N. K. (2016, February 28). *Penetration Of E-Commerce And Its Acceptance : An Exploratory Study Of Sme's In India*. Penetration Of E-Commerce And Its Acceptance : An Exploratory Study Of Sme's In India. <http://dx.doi.org/10.13140/RG.2.2.24150.47689>
25. Sharma, N. K. (2016, February 28). *Corporate Social Responsibility Is Not a Charity but a Responsibility in India*. Corporate Social Responsibility Is Not a Charity but a Responsibility in India. <http://dx.doi.org/10.13140/RG.2.2.22472.75520>
26. Shukla, A. K., Ramesh, R., & Sharma, N. K. (2018, February 18). *An Overview of Corporate Social Responsibility in India*. An Overview of Corporate Social Responsibility in India. <http://dx.doi.org/10.13140/RG.2.2.21633.89446>
27. Sharma, N. K. (2022, March 31). *Post-Pandemic Human Resource Management: Challenges and Opportunities*. Post-Pandemic Human Resource Management: Challenges and Opportunities. <http://dx.doi.org/10.13140/RG.2.2.31311.56484>
28. Sharma, N. K. (2022, May 31). *Instruments Used in the Collection of Data in Research*. Instruments Used in the Collection of Data in Research. <http://dx.doi.org/10.2139/ssrn.4138751>
29. Rachna, S. R., & Sharma, N. K. (2022, July 31). *How Garbage Dumps affect Urban Environment : A Case Study of Prayagraj District*. How Garbage Dumps Affect Urban Environment : A Case Study of Prayagraj District. <http://dx.doi.org/10.13140/RG.2.2.23364.09603>
30. Kumar , P., & Sharma, N. K. (2022, April 30). *NGO Impact On India's Development Process*. NGO Impact On India's Development Process. <http://dx.doi.org/10.13140/RG.2.2.31972.24963>
31. Yadav, G. P., & Sharma, N. K. (2022, March 31). *Marketing in India is adapting to shifting consumer attitudes and behaviours*. Marketing in India Is Adapting to Shifting Consumer Attitudes and Behaviours. <http://dx.doi.org/10.13140/RG.2.2.24422.50241>
32. JOHNS, R. and R. Johns, *THE WEB 3.0 CLASSROOM*. Emerging Web 3.0/Semantic Web Applications in Higher Education: Growing Personalization and Wider Interconnections in Learning, 2015: p. 141.
33. Snae, C. and M. Brückner, *Ontology-driven e-learning system based on roles and activities for Thai learning environment*. Interdisciplinary Journal of E-Learning and Learning Objects, 2007. 3 (1): p. 1-17.
34. Pandit, V. R. *E-learning system based on Semantic Web*. in *2010 3rd International Conference on Emerging Trends in Engineering and Technology*. 2010. IEEE.
35. Trastour, D., C. Bartolini, and C. Preist. *Semantic web support for the business-to-business e-commerce lifecycle*. in *Proceedings of the 11th international conference on World Wide Web*. 2002.
36. Hepp, M., et al., *Ontology management: semantic web, semantic web services, and business applications*. 2007: Springer Science & Business Media.
37. Lal, M., *Web 3.0 in Education & Research*. BVICAM's International Journal of Information Technology, 2011. 3 (2).

38. Miranda, P., P. Isaias, and C. J. Costa, *E-Learning and web generations: Towards Web 3.0 and E-Learning 3.0*. International Proceedings of Economics Development and Research, 2014. 81: p. 92.
39. Garrigos-Simon, F. J., R. L. Alcamí, and T. B. Ribera, *Social networks and Web 3.0: their impact on the management and marketing of organizations*. Management Decision, 2012.
40. Tasner, M., *Marketing in the moment: the practical guide to using Web 3.0 marketing to reach your customers first*. 2010: Ft Press.
41. Erragcha, N. and R. Romdhane, *New faces of marketing in the era of the web: from marketing 1.0 to marketing 3.0*. Journal of research in marketing, 2014. 2 (2): p. 137-142.
42. Ferrari, S., *Marketing strategies in the age of web 3.0*, in *Mobile Computing and Wireless Networks: Concepts, Methodologies, Tools, and Applications*. 2016, IGI Global. p. 2132-2149.
43. Polat, V. and A. E. Akgün, *A conceptual framework for marketing strategies in web 3.0 age: adaptive marketing capabilities*. Journal of Business Studies Quarterly, 2015. 7 (1): p. 1.
44. Poore, M., *The Next G Web. Discernment, meaning-making, and the implications of Web 3.0 for education*. Technology, pedagogy and education, 2014. 23 (2): p. 167-180.
45. Horrocks, I., et al. *Semantic web architecture: Stack or two towers?* in *International Workshop on Principles and Practice of Semantic Web Reasoning*. 2005. Springer.
46. Yadav, U. S., Singh, S., Bhardwaj, S., & Sharma, N. K. (2022, July 31). *The Art of Choosing a Research Sample*. PARF. <http://doi.org/10.13140/RG.2.2.10030.79682>
47. Sharma, N. (2022, October 31). *Effects of Integrity and Controls on Financial Reporting Fraud*. Retrieved December 8, 2022, from <http://doi.org/10.13140/RG.2.2.24507.49447>
48. K, S. (2022, October 31). *Regional Trade Arrangements and Their Varieties*. Retrieved December 8, 2022, from <http://doi.org/10.13140/RG.2.2.27862.93766>
49. Kumar. (2022, October 31). *“Opportunity for Creative Tourism After The Pandemic.”* Retrieved December 15, 2022, from <http://dx.doi.org/10.13140/RG.2.2.33097.62565>
50. Agrawal, & Kumar. (2022, October 31). *Consumer behavior changes after COVID-19*. Retrieved December 15, 2022, from <http://dx.doi.org/10.13140/RG.2.2.29742.18247>
51. Rudman, R., *Web 3.0: governance, risks and safeguards*. Journal of Applied Business Research (JABR), 2015. 31 (3): p. 1037-1056.
52. Tiago, M. T. P. M. B. and J. M. C. Veríssimo, *Digital marketing and social media: Why bother?* Business horizons, 2014. 57 (6): p. 703-708.
53. Glazier, A., *Searchial Marketing:: How Social Media Drives Search Optimization in Web 3.0*. 2011: Author House.
54. Hatzivasilis, G., et al. *Secure Semantic Interoperability for IoT Applications with Linked Data*. in *2019 IEEE Global Communications Conference (GLOBECOM)*. 2019. IEEE.
55. Ciccacese, P., et al. *An open annotation ontology for science on web 3.0*. in *Journal of biomedical semantics*. 2011. BioMed Central.
56. Bergmann, H., et al., *Semantic interoperability to enable smart, grid-interactive efficient buildings*. 2020, Lawrence Berkeley National Lab.(LBNL), Berkeley, CA (United States).
57. Patela, R. and N. Patela, *The Third Generation of Internet: The Semantic Web as a Component of Web 3.0*.
58. Parida, V., M. Westerberg, and J. Frishammar, *Inbound open innovation activities in high-tech SMEs: the impact on innovation performance*. Journal of small business management, 2012. 50 (2): p. 283-309.
59. Lindberg, K., *Economic impacts*. The encyclopedia of ecotourism, 2001. 5 (23): p. 363-377.
60. Piazzolo, M. and N. A. Zanca, *Medical tourism: A case study for the USA and India, Germany and Hungary*. Acta Polytechnica Hungarica, 2011. 8 (1): p. 137-160.
61. Kherfi, M. L., D. Ziou, and A. Bernardi, *Image retrieval from the world wide web: Issues, techniques, and systems*. ACM Computing Surveys (Csur), 2004. 36 (1): p. 35-67
62. Cambria, E. and A. Hussain, *Sentic computing*. marketing, 2012. 59 (2): p. 557-577.
63. Knautz, K., et al., *Finding emotional-laden resources on the World Wide Web*. Information, 2011. 2 (1): p. 217-246.
64. Allemang, D. and J. Hendler, *Semantic web for the working ontologist: effective modeling in RDFS and OWL*. 2011: Elsevier.
65. Kiryakov, A., et al., *Semantic annotation, indexing, and retrieval*. Journal of Web Semantics, 2004. 2 (1): p. 49-79.
66. Russo, A. and F. Perrini, *Investigating stakeholder theory and social capital: CSR in large firms and SMEs*. Journal of Business ethics, 2010. 91 (2): p. 207-221.