

# THE PRINCIPLES OF MARKETING 3.0 OF ELECTRONIC COMMERCE ON THE NEXT WEB

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## Abstract

In web-based marketing, the constant growth of the Internet has thrown up inconceivable opportunities and problems. Web 3.0, the most recent version of the web, is believed to be a technologically sophisticated medium that allows users to Read/Write/Execute and also allows robots to perform some of the thinking formerly reserved for human beings, but also as a game changer on the existing business models on which digital marketing is conducting nowadays. The emerging economics burgeoning Internet population will soon have an array of Web 3.0 in which to work and play. Although some strategies of web 3.0 platforms have been proven to be successful for attracting user acceptance in the developed countries, the effects of these strategies are questionable in the market of emerging economics. In this study, we investigate the Web 3.0 market and e-commerce strategies. Based on the uses and gratifications theory, this study compares the different strategies of these local companies, and tries to explain which difference of e-commerce strategies between these competitors, and how can these Web 3.0 competitors survive in the environment of emerging economics. Limitations and Implications are discussed in the end.

# Keywords

Web 3.0, Emerging Economics, Electronic Commerce, Customer Relationship, Marketing 3.0

# **1. INTRODUCTION**

Modern world business models and Web developers have developed this word. Tim Berners, one of the key founders of internet, is according to researchers, is the "Father of the Web" and a staunch supporter of Web 3.0. "Web 3.0 will be able to read and understand material and context," he claims. Web 3.0 has been characterized in a variety of ways, with little agreement. Some have taken a wide approach to defining Web 3.0. According to this viewpoint, the Semantic Web concept is linked to the new Web landscape. In this scenario, rather than presenting and displaying page contents, the key is to comprehend the significance of information that completely matches our demands. This new statistic may not be synonymous with Semantic Web for others [1]. It is, nevertheless, mostly defined by semantics. Its rise is built on three key elements: the semantic web, Web 2.0 apps, and artificial intelligence. Web 3.0 is the third generation of the Web (2010-2022) that adds value to users by allowing them to have a better experience on a more intelligent Web both with full control of the content that they produce. It entails arranging a massive volume of data while taking into consideration the context and individual demands of each user and protecting their personal data against any mis-use. It is a Web whose goal is to make data understandable. Web 3.0 is a brand-new online ecosystem that incorporates user-generated data to give it new significance. In contrast to Web 2.0, which relies on user involvement, Web 3.0 relies on user collaboration. Objects and data are linked in Web 3.0 [2]. As a result, the semantic web reduces the number of options available to consumers while looking for information by filtering out irrelevant content.

Online marketing with web 3.0 is also known as intuitive Web, which is a Semantic Web that allows web services to communicate with one another. Individualized and behavioral Web 3.0 will be the norm. Web 3.0's goal is to usher in a new age of prolonged immersive experiences. It is feasible to find new venues for a value chain in this period that is not confined to the Web. Users' shopping experiences will be more engaging, as well as broader in scope. According to Marshall and Shipman (2003), the need to organize and order overflowing and chaotic information found on the Internet, the maturity of artificial intelligence, and the desire to eliminate redundant

elements while selecting or prioritizing others based on the needs of each user have all influenced most deployed efforts [3].

The blockchain technology was described as an alternative way to organize data in 1991 by the research scientist Stuart Haber and W. Scott Stornetta. They wanted to introduce a computationally practical solution for time-stamping digital documents so that they could not be backdated or tampered. They develop a system using the concept of cryptographically secured chain of blocks to store the time-stamped documents.

In 1992, Merkle Trees algorithms were incorporated into the design, which makes blockchain more efficient by allowing several documents to be collected into one block. Merkle Trees are used to create a 'secured chain of blocks.' It stored a series of data records, and each data records connected to the one before it. The newest record in this chain contains the history of the entire chain. However, this technology went unused, and the patent lapsed in 2004.

In 2004, computer scientist and cryptographic activist Hal Finney introduced a system called Reusable Proof Of Work (RPoW) as a prototype for digital cash. It was a significant early step in the history of cryptocurrencies, which gave boost for the development of the Blockchain technologies. The RPoW system worked by receiving a non-exchangeable or a non-fungible Hashcash based proof of work token in return, created an encrypted RSA-signed token that further could be transferred from person to person.

Further, in 2008, a man or a group under the name Satoshi Nakamoto conceptualized the theory of distributed blockchains. He improves the design in a unique way to add blocks to the initial chain without requiring them to be signed by trusted parties. The modified trees would contain a secure history of data exchanges. It utilizes a peer-to-peer network for timestamping and verifying each exchange. It could be managed autonomously without requiring a central authority. These improvements were so beneficial that makes blockchains as the backbone of cryptocurrencies. Today, the design serves as the public ledger for all transactions in the cryptocurrency space.

The evolution of blockchain has been steady and promising. The words block and chain were used separately in Satoshi Nakamoto's original paper but were eventually popularized as a single word, the Blockchain, by 2016. In recent time, the file size of cryptocurrency blockchain containing records of all transactions occurred on the network has grown from 20 GB to 100 GB.

There was a very good reason why this happened. The Leaman Brothers financial crisis in 2008, forced many to start thinking alternative ways on how money need to be produced, stored or distributed able to survive of a catastrophic event such as a collapse of a Commercial Bank in a "star like" system, like the present banking and monetary. The withdraw of 600bil\$ bad real estate loans from the financial system in USA, literally evaporated 13tri\$ of money globally over the next few years.

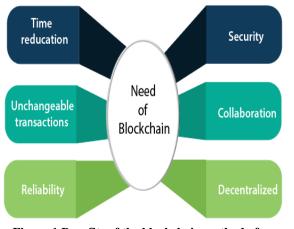


Figure 1 Benefits of the blockchain method of organizing data

Nachamoto's main goal was to create an alternative more resilient and more transparent form of "money" that can survive at any other such catastrophic event in the future. His brilliant idea was to introduce the work done before by Haber and others into his new concept. Nakamoto uploaded blockchain source code to Source Forge in 2008 so software developers around the world could contribute to the project. The first modern blockchain was launched in January 2009 along with the associated cryptocurrency, the Bitcoin. A bitcoin is different from other traditional currencies such as Dollar, Pound, and Euro, which can also be used to buy things and exchange values electronically. There are no physical coins for bitcoins or paper bills. When you send bitcoin to someone or used bitcoin to buy anything, you don't need to use a bank, a credit card, or any other third-party. Instead, you can simply send bitcoin directly to another party over the internet with securely and almost instantly.

The introduction of blockchain technology, ushers in a new age of the web, which we refer to as Web 3.0. The early days of the Internet were dominated by information delivered via static websites with little opportunity for interaction. It was largely created by information portals with flat material that enabled visitors to "just" read but not submit any comments, reviews, or feedback [4]. The capabilities to communicate, share information, create content, and trade data define Web 2.0, or the second stage of the World Wide Web's growth. This age, also known as participatory, allows all users to participate, create online material (user-generated content), and communicate with other users effortlessly. But all this with a price: users 'data were exposed to service providers, such as Google, Facebook and others, that can perform any data or metadata analysis. This resulted to specific marketing norms created by unknown algorithms, giving tremendous power to such big-tech companies on the internet. Blockchain is a rapidly evolving technology that is reshaping our way of life, but also the business model on which web2.0 is expanded affecting almost all industries from such marketing approach. Many people believe it will be as transformative as the internet's inception. With blockchain technology comes a whole new set of issues and

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difficulties for marketers, so it's critical to grasp what it is, what it can do for your organization, and how you can take advantage of this tremendous potential [5].

Web 3.0 is built on decentralization, with no one point of control or profit center. The blockchain allows value to be transferred without the need for a profit center or monopolistic service providers. While social media allowed users to share information, it concentrated control in the hands of a few private actors (creating digital oligarchies with social media companies, peer-to-peer ridesharing, and peer-to-peer hospitality networks), blockchain technologies allow for the creation of decentralized networks with no centralized points of control. One of the technology's most disruptive features is its ability to function on a decentralized basis without a central profit center in charge of managing and exploiting the network [7]. Without the use of a third-party middleman, such as banks or other financial organizations, blockchain technology enables for the safe movement of information, assets, and money. These third-party intermediaries aren't only banks; they also include shared economy and Web 2.0 economic platforms that benefit from each transaction, as well as popular social media platforms that earn from users' data [8]. Web 3.0 is frequently referred to as the "semantic web." semantic web because it generates meaningful data. Because Web 3.0 is a word used to describe the interaction that occurs data is identified, assessed, and turned into usable information as a result of the evolution of Web use and the transformation for transmission in these contexts by software tools [11]. Turning the Web into a decentralized database [10] will be the final result of this new era, which we now stand and view its beginning progress. Web 3.0 is recognized from internet's previous versions as the "machine" that get the relevant information we want in one step using smart web with intelligence analysis, personalization, interoperable web, blockchain smart contract automatic execution of agreements between web users, virtualization (virtual 3D environments), and multimedia are some of the most significant elements of these technologies [12].

The broad adoption of Web 3.0 technologies in marketing settings has resulted in the creation of emarketing 3.0. Web 3.0 is defined by facilitating cooperation and is powered by co-creation tools. This version of the web has transformed linear firms into platform businesses allowing multiple stakeholders to trade value in the Web 3.0 company platform. In this setting, merchants transition from resource ownership to exchange control, and major online retailers like Amazon embrace platform-based ecosystems [13]. There are several chances for digital merchants to take entrepreneurial action in such a rapidly changing business environment to target specialized markets for the exchange of information, commodities, and content [14].

## 2. CHANGING THE WAY PEOPLE USE E-SHOPS

In a world where consumers became dependent on Internet, buying experiences suffer a profound transformation. Consumers have to cope with the abundance of products and services delivered through all the communication channels provided by the Internet. In this context, customer behavior has suffered a profound change due to the accumulated experience resulting from his relationship with the Internet.

Due to the appearance of Web 2.0, time when the user became a direct part of the relationship between the one who posts the information and the recipient by being able to say their opinion about what was posted, the customers became more powerful and the seller more careful with his public messages.

Web 2.0 became a two-edged weapon both for the consumer and the product/services deliverer. The use of this weapon can bring both benefits and damage, depending on how it is used. The business organizations can do much easier to promote their activity, but at the same time, if they do not adapt their messages correctly to the expectations of consumers, they may have loss of image. In the same time, costumers have the big advantage of full information, but they can be easily influenced by the opinions of other customers to choose something they do not need or fit with their expectations.

Another consequence of the emergence of Web 2.0 is the way in which consumer organizations and consumer movements act. Their activity became more informal, but at the same time, they have more tools to inform and influence the decisions of the two partners of economic transactions. Now, the way how the costumer can be defended against the purchase of a noncompliant product can be done even before the purchase.

If Web 2.0 helps the world to be connected and the people to relate each other, the next step is to integrate the resources resulted from this interconnection to the business environment to obtain business value. It is not enough to have the possibility to access information, and it is more important to do it faster and efficient and to relate more than one keyword when you search something. Thus, the possibility of finding information in a context integrating data, concepts, and applications is defined by Nova Spivack as Web 3.0 concept [15]. At the same time, products and services cannot be studied inherently but in relation to the environment they come from; for this reason, it is necessary to analyze the relationship between the consumer, the community, and the environment, taking into account the socio-economic and scientific aspects of the product impact on the consumer [16].

In this paper, we try to highlight the transformation that occurred in consumer behavior through the use of Web 2.0 and all the application that arose from this concept. Thereby, we want to emphasize the transformation of the consumption habits and the way the purchase decision first became more rational, but once the marketing techniques were adapted to the new technologies, it became emotional.

Currently, the purchase decision is no longer a matter of need, it is influenced more by the environment to which the buyer relates because of the Web 2.0, a technology that is more and more present in our life. Another aspect is the fact that Web 2.0 gives the consumer the possibility to defend his rights against the abuse of the sellers.

#### **3. DESIGN AND APPROACH**

The goal of this study is to get a conceptual understanding of users' actions and behavioral patterns in relation to Web 3.0 marketing on e-shopping. The research focuses on the usage of social communication and the creation of new business models that are based on it, emphasizing the relevance of web 3.0 application engagement in marketing Web 3.0 on management systems, virtual reality, blockchain, and AI processes. In light of recent advancements, the article investigates the potential sources of web 3.0 competitive advantages available to enterprises. It identifies the changes they should do in order to enhance the decision-making process and capitalize on fresh opportunities. The article examines the influence of social networks and Web 3.0 technologies on organizational marketing for e-shopping, outlining several processes that might help businesses gain a competitive edge.

#### 3.1. The consumer in the web2.0 era

Omni-channel consumers usually think they know more about a purchase than sellers and have more control over the sales process [15]. This control is given access to multiple sources of information facilitated by the Internet, in general, and Web 2.0 applications, in particular. Web 2.0 exponentially increased the transactional nature of the Web and changed the way people express themselves, conduct business, learn about different subjects, shop, form communities, collaborate, and share their personal information. Web 2.0 is about users and content instead of surfing on the Internet. In the first Web development phase, suggestively called the Web 1.0 phase, the user consumes content created by someone else, and in the second phase, the Web 2.0 era, the content is created by the user. Web 2.0 designates the dynamic, interactive, and collaborative Web and refers to key concepts such as user empowerment, active participation, crowd sourcing, radical transparency, and rich user experience that are made available on the Web [16]. Gradually, the Web evolved to become a channel, and as it did, customer 2.0 took shape. This type of consumer uses technology to search for information, offer opinions, and explain experiences. The concept of social media is often associated with the term Web 2.0, given that social media tools have emerged

The concept of social media is often associated with the term Web 2.0, given that social media tools have emerged and developed in this second phase of the evolution of the World Wide Web. The social media refers to the means of communication (technologies, applications, and results) that provide digital interaction between individuals and offer the opportunity to share experiences and information through blogs, forums, social networks, portals, wikis, podcasts, user-generated content (UGC) sites, and virtual worlds [17].

Social media involves interaction between users and, at the business level, is the interaction between brand and customer. Social media communication is a type of viral marketing as well as an informal way of exchanging information among consumers about features, how to use products, and ownership of certain products or services. In spite of controversy over the fact that the digital media discourages real human interaction, leading to global social problems, which some consider to be a form of "involution," more and more companies are investing time and resources in promoting through these channels not only because the company sells and promotes its products and services this way, but also because it creates long-term relationships with the consumer. Using social media means enables people to participate in the promotion, sale, purchase, comparison, selection, and exchange of products and services in both online and offline markets as well as within communities [18].

Social media has transformed the Internet from a platform for information to a platform for influence [19]. Consumers' views in the social media are becoming increasingly important in terms of consumer buying behavior. The process by which consumers decide to submit reviews and comments influences the decision of consumers to choose and buy a product. Through the social media, people can convey their own thoughts, opinions, and feelings that can easily become accessible to the global community of Internet users. Communication through social media is one of the most influential sources in making a buying decision. For example, even a small amount of negative information from a few postings can have substantial impacts on consumer attitudes [20]. Also, people take a large number of reviews as an indicator of the popularity or value of a product and/or service. However, not all comments are equally created. There are high-quality reviews, often made operational as relevant, comprehensive, and accurate information related to a product that exerts a great influence on product valuation and purchase intent. On the other hand, poor-quality views have more or less likely effects to occur depending on several receptorrelated factors, such as previous engagement and experiences. For example, the quality of communication through social media exerts greater influence, when consumer involvement is higher Consumers are no longer passive recipients of merchant communications and offers; they create content on blogs, add comments on forums, engage in social networking discussions, and contribute to product ratings. Social media have turned consumers into active communicators and content creators [21]. They also began to assume, and in many cases, take over tasks (such as

"4P") traditionally associated with marketing. This shift of power, in the digital economy, from the seller to the buyer gave rise to the reverse marketing phenomenon, characterized by [22]:

• Reverse product design—more and more sites allow customers to design and configure their own products. The concept of "personalization" or "co-production" appears, whereby not only the marketing message but also the product/service is personalized, and the client engages in its conception. Customers are willing to pay more for "personalized" products/services built on customer instructions and requests. This issue is related with the concept of the "prosumer", defined as a customer who produces some of the goods and services he consumes. But this requires an updated database, dialog with each client, customer differentiation according to needs and values, and technologies for personalized product development;

• Reverse pricing—the Internet allows customers to switch from price accepting to creators through business models based on auctions and price offers;

• Reverse advertising—the old broadcasting is replaced by the narrowcasting, namely sharing the message only to those interested in a particular product or service. Moreover, permission marketing relies on a desired and anticipated interaction on both sides, relevant to the user and even rewarded by the company. Also, point casting is a service that is used today, whereby customers choose the ads they are interested in and want to see, advertising being initiated and accepted by customers;

• Reverse promotional campaigns—customers now request coupons, vouchers, and promotional offers with intermediaries;

• Reverse distribution channels—companies create and manage multiple distribution channels, requiring bid changes based on the particularities of each channel, of which Internet involves bringing offers and products to the customer, not bringing the customer to the shop;

• Reverse segmentation—the Internet allows the customer to get informed but also to inform companies about what it likes and dislikes, helping marketing specialists develop suitable deals for each customer segment and pay attention to the four Cs (the customer, costs, convenience, and communication).

Therefore, consumers distribute contents, are pricing decision makers by posting and reacting to prices, create ads about the brands they love, and use video sharing sites to broadcast it. Changes in the business environment—new social media systems, consumer empowerment, new wave of technology and globalization—will continue to lead to a profound mutation in marketing practices. Consumers are both creating and destroying value by modifying, changing, and repurposing the offerings of organizations and then sharing this knowledge across a range of social media. Through the social media, the consumer can provide the highest value to a business by significantly influencing the buying behavior of the online communities to which it belongs and by assuming the role of co-creator of the products and services.

Customer empowerment has resulted in a change of the roles adopted by customers during their purchase experience and has given rise to value customer co-creation, a concept referring to the active role assumed by the consumers that create value together with the firm. Through cocreation processes, companies seek to increase consumers' commitment to their brands and offerings. Especially, Web 2.0 technologies can provide new ways of interactions and communication of customers with firms and with other customers and enable development of specific platforms for the value co-creation practices [23]. Web 2.0 changes the nature of Internet use from a one-way broadcast business-to-consumer medium to three-way communication of business-to consumer, consumer-to-consumer, and consumer-to-business. This type of communication facilitates information seeking and sharing, consumer confidence in brand, and commitment and involvement of the consumer [24]. For example, companies can use online communities to get to know customers and their needs while gathering product, service, and marketing feedback. These brand communities can be useful to capture ideas even for entirely new product lines.

Nowadays, marketing is turning again, responding to the new dynamics in the social environment. We are witnessing at the beginning of the value-orientation marketing, completing the product-centric marketing and customer-centric marketing. Companies are expanding their focus from product to consumers and then to their concerns. Instead of treating people as mere consumers, marketers treat them as human beings in their entirety, with mind, heart, and soul energies. Consumers seek not only functional and emotional satisfaction but also the fulfillment of the human spirit through the products and services that they choose. In a confusing world, they seek to find those companies that are addressing the most profound human aspirations. Individuals have an underlying need for an emotional bond with high-involvement products that they buy [25]. Nowadays, social media has become one of the main ways to create this bonding. Social media eliminates barriers, allowing brands to develop stronger bonds with the consumer much like a human relationship [26].

Every business has to find ways to reach the consumer. Business owners and marketers need to understand the psychology behind the consumer. Having a presence across multiple channels and more crucially, listening to and interacting with customers within their own environment need to become the norm. The key concerns in understanding the person who uses the product or service as being part of a particular context in which technology is increasingly present. Also, this new consumer approach results from the creation of stable and sustainable relationships that highlights an emotional dimension. Feelings and emotions contribute to creating links between the organization and consumers. Such bonds can be harder to create, but they are even harder to break.

#### 3.2 The consumer as per the pillars of web3.0

Web 2.0 has reached the maturity stage, and the evolution continues to Web 3.0, considered an integral part of what the Internet of the Future will mean, which will be defined mainly by two developments (or revolutions), namely the development of the Semantic Web and the Internet of Things. Web 3.0 is intended to evolve out of upgrades and extensions to existing Web functionalities.

The Semantic Web (an extension of the Web to which Tim Berners-Lee, the current Web inventor, has been thinking for over 15 years) would allow machines to understand information on the World Wide Web (semantics, as a branch of linguistics, is studying the meanings of words). Thus, the Semantic Web would greatly facilitate the decision-making process for the consumer, by providing more relevant information. The Semantic Web allows the formal description of existing resources on the Internet (Web pages, text and multimedia documents, databases, services etc.) and the rapid and accurate identification of resources relevant to the user. The main applicability could be within the search engines. The current search engines work on string matching identify words specified in a syntax in a body of target documents, so that only documents that contain at least one of the words in the syntax are returned. For example, by executing a search for a syntagma in one of the search engines known today, the search engine would return the documents in which the syntax words entered in the query were identified. Instead, a semantic search engine would take into account the meaning of the entire syntax, so it would understand the concept, not the corresponding string, and would only return the relevant results. We can take this reasoning further and imagine a semantic search engine that actually answers users' questions. Semantic technology will create a meaningful format around human online interactions and human interests.

A major evolution in the years to come will also be the progressive connection of computers, machines, and many physical objects, giving rise to the Internet of Objects or Internet of Things, a concept and a paradigm that involve the ubiquitous presence of a large number of smart devices and active objects. These are capable of interacting and cooperating with other devices and objects through wire and wireless connections and unique addressing schemes in order to create services and applications tailored to users' needs. Nowadays, we have connected devices that meet our daily needs, "smart objects" that monitor our homes, cars, work environment, and physical activity. These devices have gained crucial importance in our life. Hereby, we are entering into a new era, one in which the Internet of Thing (IoT) will replace the traditional Internet that we know today. Businesses have embraced this trend very quickly, as the stakes are high: greater connectivity, easy access to data, and interconnected ecosystems. All this translates into lower costs and higher efficiency in optimizing resources. In the consumer segment, IoT solutions that are currently in development are "smart home" devices (which automate a series of home processes such as lighting, heating and water systems), wireless wearables, and portable devices, such as fitness bracelets and intelligent watches, that track and record physical activity like exercise, eating, sleeping, or behavior like reading, commuting etc. The use of IoT devices in everyday life will allow companies to get a clearer view of their clients' behavior. IoT finds its applicability in facilitating the personalization of the advertising message and the product/service, allowing customized recommendations (suppose your air conditioner has been broken and you have to buy another one. Depending on the previously stored data about the features of the product, the location, and the temperatures in that area, the website can make recommendations. In the same way, it can send you a newsletter with steps to follow to stay hydrated in the summer time) and quality services (devices will be able to communicate their status to the central system on a continuous basis. So stores can send a team to repair or to change the product if it can no longer be repaired, allowing for advance planning and optimization of these activities). The targeted daily or demographic routines, shopping preferences, and buying habits can all be traced and used to tailor and make marketing campaigns more relevant.

One of the main benefits of the Web 3.0 for consumers is that their interactions with their devices and applications will be personalized. Web 3.0 will be driven by data containing user identity, profile, and preference information, including location and behavior patterns. Also, 3.0 technologies will create smarter and more effective Web programs that could drastically reduce the time needed to compile and send optimal information, helping consumers quickly find what they need.

#### 3.3. Implication of a connected world

Consumer behavior is constantly changing, being very different from a decade or two ago. The explanation would be the fact that over time, the basic values that consumers respect today, compared to what they have been respecting in the past, have changed.

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Looking at the past, 30–40 years ago, people used to buy their goods from the neighborhood store, where they met and talked with acquaintances about these goods. The variety of products and services available was limited, consumers were obliged to fit into the budgets they demanded, and the payment was made in cash. There were not too many pre-cooked foods or foods containing food additives, and household and electronic products did not have as many technical features as today's products. The change of the form of payment, by credit, has created profound social problems, problems arising from the fact that the meaning of the contracts that consumers sign is not fully understood by the consumer, this having hidden clauses, or consumers are not aware of the whole concept of credit. Consumers are deluded by the misleading advertising that inoculates them the idea that they can buy now, going to pay later, without explaining the additional costs of these purchases.

At present, the range of goods and services is much higher, offers appear at every step, goods and services can be purchased directly from home, orders can be places for products that do not exist on the local market, and it is safe to say that the offer is unlimited. But, at the same time, the risks of purchasing products with a low quality are higher. The cash payment is no longer necessary, which can lead to a loss of control over the budget the customers have. The customer is purchasing goods and services that include characteristics with no urgent business but which gives them the impression of a higher social status. In this way, the concepts regarding the quality of the goods are changed.

The consumers appreciate cheap things, easy to get, and for which, they do not have to lose a lot of time, but at the same time, it has to give them the impression of a higher social status. The mass production serves these wishes. The individual mobility (the car), the international tourism for holidays, and the rising demands regarding the standard of consumption designed as normal or regular lead to a drastic reduction of resources, which cannot be restored [27].

Structural changes in the supply of products and services are the result of the impact that technical progress has on society but also of developments in the factors that make up the demand. Thus, the behavior of all who can be considered customers, industrial units, service providers, governmental and nongovernmental institutions, and individual consumers record spectacular changes as a result of the evolution of the value system and options for changing lifestyles.

One thing to note is that business organizations have changed their optics in terms of ethical and social responsibilities. In the past, consumers' needs were not always satisfied through observance of ethical principles on the part of producers and distributors, which led to consumer dissatisfaction. Thus, there has been the need to establish rules and principles to be respected by all those involved in the process of creating and delivering products and services. For this reason, business organizations have been forced to assess their negative ethical and/or social implications of noncompliance with such principles.

At present, those organizations that are faithful to the observance of an ethical code, so that they do not only act to achieve their own interests, are much appreciated by consumers, demonstrating that they are also concerned about the well-being of the community as a whole, not just of their own interest. This has even created a competitive advantage over those who do not implement such principles in their business model [28].

## 4. THE ROLE OF SOCIAL MEDIA IN CUSTOMER'S PROTECTION IN WEB 3.0

The Internet has become a very profitable channel for organizations to lead their business and gain competitive advantages in a technology-oriented market [29]. The social media is made up of easily accessible Web-based tools through which people interact, participate, create, recommend, valorize information, and react online to everything that happens around them. They provide a dynamic virtual environment where users are engaged in continuous traffic, generated by information and interactivity.

The social media allows users to connect with each other in a variety of ways, leading to the formation of groups based on geographic regions, common interests, occupations, or graduate education institutions [30]. They provide important opportunities for communication within these groups of people. An advantage of social networking sites, like Facebook, is that it helps to resume contact with people that have not been in contact for many years, but it allows people from the group within to create new relationships. Also, throughout the friends' statuses, they can find out what activities they have done, what impressions they have on the products they have purchased, or about the services they have been offered. Through the photo galleries posted by consumers, people can confidently form a view on those affirmed by the ones who posted, making it possible to add comments and forward the information posted.

The way people share both personal content and the news about professional activities has led to a transformation of the way people communicate nowadays. This is because the social media uses widely accessible technologies, which also include mobile communications.

Regardless of age or occupation, technology has become very important in people's lives. The social media has made borders disappear and enabled cultural exchanges to be made much easier, and so new concepts and principles have been integrated into the collective mentality. Social media can change perceptions, motivate members of society, and help them ally more easily.

Through the social media, consumers have gained a very strong weapon in their struggle to defend their rights, so the balance of forces is beginning to bend in their favor. People need to learn to use the social media to their true potential.

For organizations that wanted to have a closer connection with their customers, this change meant there was a way to listen and hear what customers say about their organization and products. They could start a conversation and develop a virtual, meaningful relationship with the people directly concerned. However, for those who wanted to control the transmitted message, this change involved the rethinking of the entire communication strategy—which was not desirable at all [31].

Also, with the help of social media, people can exchange opinions, can orient themselves to better choices, and make better decisions based on correct information. Misinformation is the mother of failure, and when a group, a neighborhood, a city, an area, or a country chooses to believe in something that is true or untrue, you will not be easily able to change their opinions about that.

Because the information that circulates in the online environment can be quickly and easily found, it can always be used to promote or defame a brand. Reviews, opinions, comments, or images transmitted through social media can have a strong influence on those who receive the message. Thus, social media has become a powerful force in the hands of consumers, allowing them to more easily defend their rights and find out more quickly whether they are deceived or not.

With the emergence and existence of social media platforms and applications in Web3.0, the balance between the power of organizations and consumers is beginning to lean toward consumers.

Social media has triggered online campaigns by consumers that can strongly influence consumers and, at the same time, transform them into a group of influence. By changing the paradigm on how organizations do business by focusing on consumers, they try to gain as much information as possible about the consumer's needs. On the other hand, from the consumers point of view, they have to face the avalanche of information coming from all the media, both traditional (TV, radio, print) and online. In this environment, which may seem hostile, the consumer has to spot the useful information and make the right decision about the purchase of the product/service that is needed.

Faced with this attempt, the consumer needs a governmental organization already in place, or it needs to be contributed to the creation of such independent bodies to defend their interests as customers[32]. On the one hand, the state through its institutions must, and sometimes does, protect consumer's interests according to the legislation. Through the applications and platforms provided by the social media, the formation of such groups has become much easier and can be done much without the members knowing themselves beforehand and without having to gather themselves in a certain place. The only thing they have to do is express their dissatisfaction on one of the existing social media platforms and try to convey the message to as many members as possible. If dissatisfaction is real and is shared by a large number of people, then the effect of "snowball," a very common effect on social media platforms, will make its presence felt.

If a negative campaign on a product or service produces the expected effect and reaches an appreciable number of people, then it is very difficult for organizations to react. The costs for both material and image repair of the damage will be very difficult to recover. Organizations will be forced to make great efforts to repair their image to consumers and will have a significant decline in sales.

In the past, the consumer did not have any direct defense against abuses to which he could be subjected by suppliers of goods and services. All he could do was call on a state body to make it right. Although in many cases it was gainful, the process was long and tedious, requiring quite a nervous consumption, and the consumer felt alone and without direct support. At the same time, he could not make his issue public, so that others could not do the same and, at the same time, raise his chances of success.

With the development and mass use of social media tools, the consumer has found that they are not only useful for communicating or entertaining but also in order to defend themselves against the abuse of product and service providers. Thus, consumers have begun to look at social media both as a weapon in their fight for righteousness and as a platform from which they present their wishes and problems with their suppliers of products and services [33].

The force of such consumer groups can be so great that it can bring great damage to those against whom it focuses the attack. The respective business organizations will have large image losses, will be forced to make great efforts to recover their lost image as outlined above, and financial losses will arise both because of declining sales and because of the lost image repair costs.

Once a negative social campaign has been launched, that is, once the conversation has been launched, there is a possibility that the image of the organization may suffer, but the effect would not have been so devastating if it neither had been sustained and amplified by the existence of discussions on the different platforms and applications offered by the social media nor would there be unconvinced opinions that need to be countered, but the organization, through a well-established strategy, can influence and induce those ideas that have a positive influence on consumers.

Be aware that an organization's brand is owned by consumers and employees. Influence must reverse itself on everyone; both consumers' opinion and employee actions of an organization can raise or destroy a brand. Thus, a business organization must be aware of this and convey the right message to attract and consume both the value of its brand and its employees.

Opinions, comments, or images transmitted through social media can have a strong influence on those who receive the message. There are also cases where a message is being sent, but due to the use of wrong channels or because the message is not clear, the desired effect is not obtained. That is why it is good to have prior research before sending a message that can have a strong influence on the public.

We can look at social media platforms as places where consumers present their problems and are thus heard more quickly by those who offer them products and services, can defend their rights, and can form themselves in consumer protection associations.

Social media can be used to defend or support the 21st century consumer. With tools and platforms that are cataloged to be part of the social media, the consumer can more easily present all the problems encountered and thus find a faster solution.

However, social media should not only be seen as a consumer defense tool but can also be used by organizations or authorities to improve the products and services they offer, for a better relationship with consumers or for better regulation of different areas of activity.

## **5. CONCLUSION**

Web 3.0 is more than just a collection of innovative technology and applications. Web 3.0 technologies provide a variety of services that can help you create a realistic marketing approach in the emerging e-shopping in Web 3.0, which can be characterized as a true e-social commerce environment. Based on the findings from the relevant literature, this chapter provides an overview from the evolution of the Web and describes how individual consumer behavior has been influenced in correlation with Web 2.0 and Web 3.0 phases, with emphasis on the changes induced by social media.

As shown above, the power shift from sellers to buyers has become obvious along with the transformation of the Web into a social platform. With the growth of online participation, consumers exert greater influence over the products and brands and are wielding greater control over the commercial marketplace. Moreover, the companies need to be aware that digital technology is a powerful tool in influencing and changing consumer behavior. In a world where new technologies pop up all the time, the companies that put consumer needs first are in a position to win. The priority for retailers no longer lies in increasing the number of their clients, but rather improving their experience—weather is online, in store, or across different channels. The key is engaging the consumer on a personal level about their brand and understanding how the consumer feels about the brand.

Conclusively, it can be said that companies must embrace the future of a more customer-centric marketplace and to adapt to the customer-first reality of the digital age of Web3.0. Ignoring consumer empowerment neglects changes that business organizations, especially marketers, have to undergo to be stronger players, missing out on opportunities to connect with a new generation of consumers who value convenience, personalization, collaboration, and value co-creation.

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