Educational Administration: Theory and Practice
2024, 30(4), 6549-6554
ISSN: 2148-2403
https://kuey.net/

Research Article

An E-Commerce Platform Assistant For Block Chain Technology And Digital Marketing

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Citation: Dr. P. Uma Maheswari et al. (2024), An E-Commerce Platform Assistant For Block Chain Technology And Digital Marketing, *Educational Administration: Theory and Practice*, *30*(4), 6549-6554, Doi: 10.53555/kuey.v30i4.2421

ARTICLE INFO

ABSTRACT

The growth of modern e-commerce platforms with mobile functionalities has been one of the important highlights in B2C commerce. The internet provides many opportunities for marketers to help them create new online marketplaces and enter new spheres in their existing markets. The arrival of e-commerce changed many conventional organizational structures and transformed the value-creation process comprehensively. At the same time, applications of new technologies such as blockchain in marketing have been changing the traditional dynamics of brand marketing. The need for a blockchain marketing strategy seems evident for organizations thriving in an era of transformation of the internet into a decentralized web. The main objective of this proposal is to provide relevant knowledge and information to Digital marketing and blockchain Technology and to assist decision-makers in building up the network among Digital marketing and blockchain Technology.

Keywords: e-commerce, blockchain marketing, Digital marketing.

INTRODUCTION

One of the major developments in business-to-consumer (B2C) commerce has been the rise of contemporary e-commerce platforms with mobile features. The emergence of e-commerce completely altered the value generating process and altered many traditional organizational structures. The conventional dynamics of brand marketing are also evolving as a result of the use of new technologies like blockchain in marketing. Marketers can explore new areas inside their current markets and establish new online marketplaces with the assistance of the internet. But the advent of blockchain has fundamentally altered how organizations and individuals utilize the internet. In these situations, a summary of blockchain technology's effects on marketing would assist you become acquainted with how blockchain will change marketing both today and in the future. It aware of the relevance of customer-centric marketing if you wish to understand the role that blockchain plays in marketing. In today's competitive B2C markets, businesses must communicate with their clientele. Customers also need to be able to explain to potential customers how their products or services add value. Over time, corporations have seen a progressive shift in the communication strategies they employ depending on the industry.

Nonetheless, marketing's basic goals and associated risks with regard to customer involvement would always be the same. For businesses to succeed in this era of the internet becoming a decentralized web, a blockchain marketing plan is clearly necessary.

Blockchain technology has generated a lot of hype while demonstrating its worth through validated use cases across several industries. For instance, the fields of supply chain management, real estate, healthcare, and finance have all seen significant applications of blockchain technology. Consequently, it is clear that marketing is one of the possible applications for blockchain technology. The majority of people who are thinking, "How is blockchain used in marketing?" could find the answers in the characteristics of blockchain technology. Let's examine the various characteristics of blockchain that make it a good fit for this technology.

DETECTION OF GAP IN RESEARCH

- **Voting:** Although India is the world's largest democracy, only 67% of voters cast ballots;

- **Security**: Electronic voting machines are susceptible to hacking, tampering, and other forms of interference that could impede the voting process; and
- **Transparency**: Voters are faced with uncertainties regarding the counting of their votes and the accuracy of the results.
- **Reliability:** There may be trust difficulties as a result of data manipulation and tampering within the database.
- **Paper trail**: The absence of a paper trail in voting solutions makes it challenging to audit the results and increases the likelihood of disagreements.
- **Expensive**: The present traditional voting method is pricey.

GOALS OF THE SUGGESTED STUDY

- To plan and carry out educational events about digital marketing and solving customers' block chain technology problems.
- To create cutting-edge applications based on native expertise;
- To offer pertinent information and knowledge to the fields of digital marketing and block chain technology
- To help those in charge create a network between block chain technology and digital marketing.
- To identifying the service that is offered to clients
- To set up the new app's training procedure.
- To keep an eye on consumers' new benefits and training.

SUGGESTED METHODS FOR THE SCIENTIFIC WORK

- The block chain sector is thriving and vibrant in the United States of America, where a number of well-known businesses are making major contributions to the block chain and crypto currency ecosystem. Here are a few major figures in the block chain sector in the United States
- Global Inc. Coin base (COIN) when it comes to technology and financial infrastructure designed specifically for the crypto currency market, Coin base is a global leader. It functions as a platform for exchanging crypto currencies, enabling users to purchase, sell, and store different coins including Ethereum, Bit coin, and more.
- Coin base's easy-to-use interface has helped make digital assets more widely accepted by making it a popular alternative for people and organizations just starting out in the realm of cryptocurrency.

IBM Corp.:

- A major player in technology, IBM has significant Block chain projects. The business provides a large selection of Block chain products and services. IBM's block chain initiatives span a number of sectors, such as finance, healthcare, and supply chain management.
- IBM has established itself as a major participant in developing the use of distributed ledger technology for enterprise applications thanks to its knowledge of Block chain technology and its dedication to innovation.

Microsoft Corp.:

- Microsoft has included block chain technology into its products after seeing its potential. Through its Azure cloud platform, the corporation offers Block chain services and solutions. This makes it possible for businesses and developers to create, implement, and maintain Block chain applications.
- Microsoft's engagement in block chain technology is indicative of its dedication to advancing block chain research and innovation in the field.

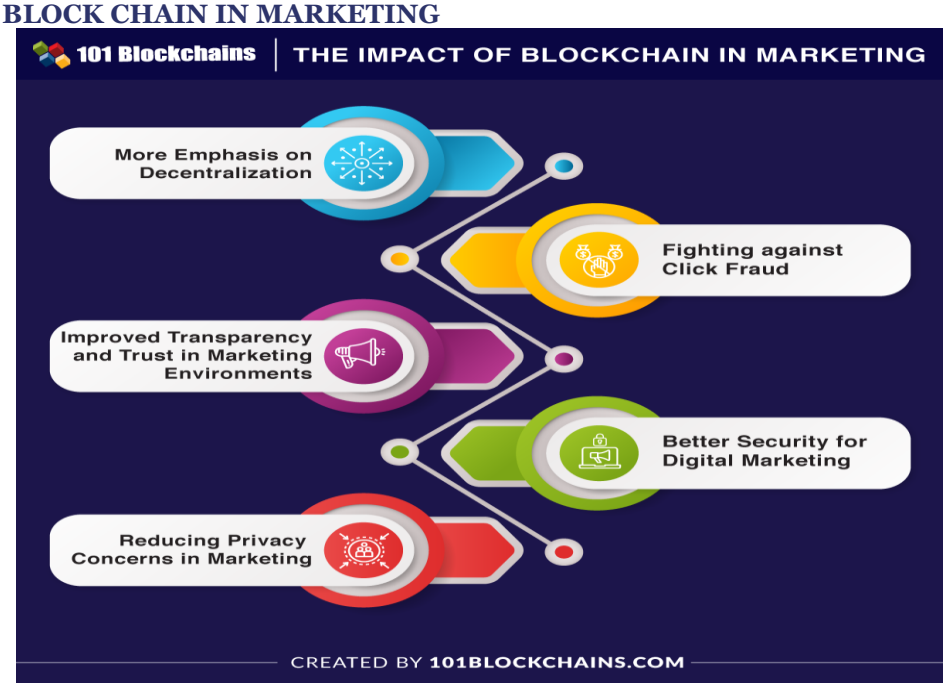
Amazon:

- The e-commerce and technology behemoth Amazon has advanced significantly in the Block chain space. Through its Amazon Web Services (AWS) platform, it provides a broad range of Block chain services, simplifying the implementation and management of Block chain solutions for organizations.
- By entering the Block chain space, Amazon has shown that it is committed to provide cutting-edge technological solutions for a range of uses.

Galaxy Digital Holdings Ltd (BRPHF):

- Galaxy Digital is a leading Block chain company and digital asset that gives users access to the crypto currency market. Serving organizations, new businesses, and eligible people, the company provides a range of services pertaining to crypto currencies and Block chain technology.
- Due to its proficiency in Block chain investments and digital assets, Galaxy Digital is ideally positioned to play a major role in the institutional adoption.
- Impact of block chain in marketing

IMPACT OF BLOCK CHAIN IN MARKETING



More Emphasis on Decentralization

The first impetus for decentralization came from the internet, which also brought about significant adjustments in how businesses distributed their goods and services. The old middlemen have been replaced by new digital intermediates that provide a comprehensive variety of services and advanced commerce solutions.

Fighting against Click Fraud

One of the main causes of the paucity of research in this area may be the dearth of block chain instances in the marketing sector. Customers use communication as a key tool to learn about new offerings in goods and services as well as other updates. However, given the numerous scandals and fraud efforts, the value of an internet business is also called into doubt.

Improved Transparency and Trust in Marketing Environments

Block chain provides the advantages of decentralization as a solution to the power that digital middlemen have over a business's marketing strategy and decision-making. It's also critical to recognize that customer trust in brands has been declining at previously unheard-of rates.

Better Security for Digital Marketing

Cryptographic techniques have served as the cornerstone upon which block chain has been built. The security risks as the situations, events, or settings that provide significant dangers for marketing campaigns and systems would be the main topic of discussion while discussing a block chain marketing strategy.

Reducing Privacy Concerns in Marketing

Ensuring security, trust, and transparency in the marketing process is just one aspect of a block chain marketing agency's job. One of the most important factors influencing a person's decision to use a certain online technology service is privacy. Studies have demonstrated that consumers are worried about the privacy and security of their online purchases.

Bottom Line

The synopsis of the possible benefits of implementing block chain technology for the marketing industry indicates that it's a wise investment. Block chain's decentralized, secure, and private architecture makes it the perfect technology for marketing by nature. The primary task of a block chain marketing agency would be to integrate these advantages into your current marketing strategy while yet leaving room for progress.

EXPECTED OUTPUT

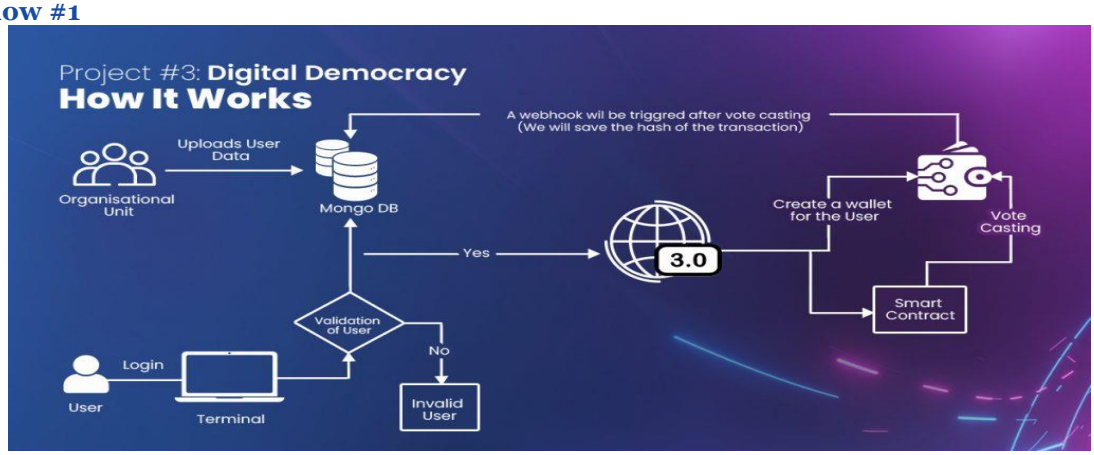
- The platform can collaborate with other businesses or groups to provide extra services like voter outreach initiatives or voter education materials. Through cooperative marketing initiatives or revenue-sharing arrangements, these could bring in money.
- Form partnerships with the public and private sectors

- Election authorities can customize the online voting system by using it to create custom ballots or integrate it with voter databases that already exist.
- The Future of Crowd funding: Handling Quadratic Funding Block chain in Industry 4.0
- The Effect of Block chain on Insurance Underwriting and Risk Management
- The Effect of Block chain on Data Interoperability in the Healthcare Sector

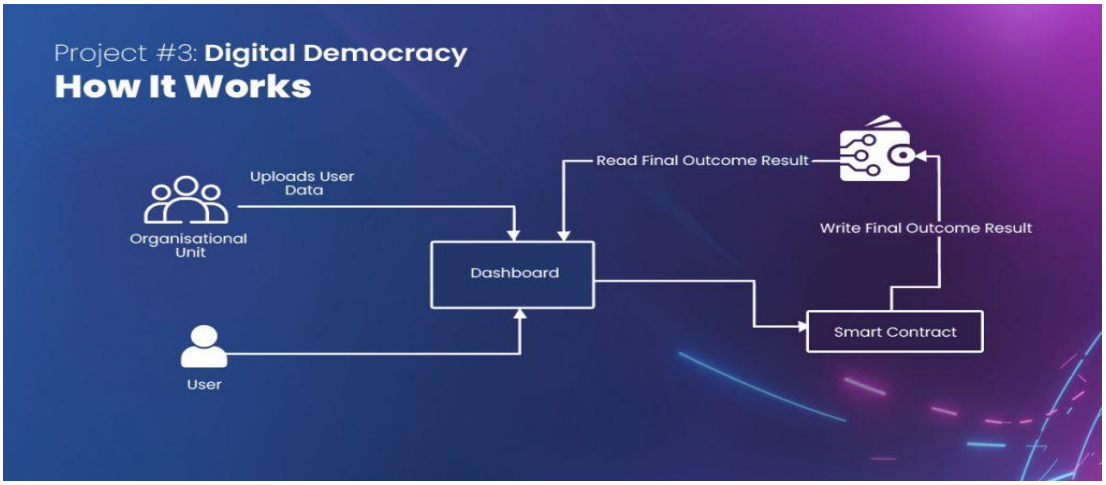
DETAILS OF DATA SETS TO BE GENERATED

- Digital Democracy: An Online Voting Application with the Following Capabilities
- Voters can establish a distinct digital identity that is connected to their physical identity by using decentralized identity verification enabled by blockchain technology.
  A visible and tamper-proof ledger that offers an unchangeable record of every vote cast, making it more challenging to tamper with the results.
- Ensuring privacy so that a person's vote remains confidential;
- Preventing voters from assigning their voting privileges to other parties; and
- Facilitating simple voting processes for all qualified voters. The system facilitates seamless vote verification to ensure validity. It upholds voter anonymity to ensure that their choices remain private. It processes votes quickly and efficiently to make the results available in real-time. It is resistant to cyber attacks and can withstand attempts to compromise the integrity of the voting process. These are just a few of the features that make the system easy to use and accessible to all voters, regardless of their technical ability.

Workflow #1



Workflow #2



Tech Stack
FrontEnd: React Js
Backend: Node Js
Web 3.0: Metamask, Solidity, Polygon, and Hardhat
Database: MongoDB

IMPORTANCE OF THE PROPOSED STUDY IN MAKING POLICIES

Marketing must change to keep up with the changing attitudes of customers, who are becoming more decentralized in nature. Traditional corporate marketing efforts are losing users due to worries about data and ad fatigue. This is where the present landscape is disrupted by block chain technology.

In past web eras, platform shutdowns due to server failures cost brands and enterprises a great deal of money. Given their efforts toward centralization, Face book and Google Suites are definitely familiar with this problem. A distributed network reduces the possibility of platform crashes brought on by centralized server failures when supporting Web3 systems. The distributed network will keep computing even if one node or network goes down.

Relevance of the Proposed Study for Society

Hackathon Diaries #3 Digital Democracy: Web-app Vote, One-click Remote

All of our company's tech enthusiasts, problem solvers, and innovators were invited to participate in the INT. Hackathon 2023, which was an exciting chance for them to demonstrate their skills, work with colleagues, and realize their innovative ideas. Because of the unbridled creativity, this provided a platform that left us all in wonder.

This edition's tech gigs highlighted our dedication to the Digital India program, since we have experience providing numerous government bodies with our services. With the tagline, "No stress, no mess, just a simple click and your vote is expressed," the team stressed "digital democracy."

MARKET POSSIBILITIES

- **Growing demand for remote voting**: As more individuals hunt for convenient and safe remote voting options, the COVID-19 pandemic has pushed the trend toward remote voting.
- **Adoption of block chain technology**: Block chain is becoming more widely used in many industries, and its possible uses in elections and voting are being investigated more and more.
- **Potential cost savings**: When compared to more conventional voting techniques like paper ballots and in-person voting, an online voting software that uses block chain technology can offer cost-saving alternatives.

CONCLUSION

To sum up, there are a lot of advantages to incorporating digital marketing and block chain technology into an e-commerce platform. These include increased efficiency and security as well as increased customer trust and involvement. Block chain technology can help e-commerce companies reduce the risk of fraud, improve supply chain transparency, and guarantee the integrity of transactions. Furthermore, data analytics and personalized targeting can be used to optimize digital marketing campaigns, increasing consumer happiness and conversion rates. E-commerce platforms can stay ahead of the curve in a field that is becoming more and more competitive with this connection. But it's crucial to understand that effective execution necessitates thorough planning, financial support for technology infrastructure, constant observation, and flexibility in response to shifting consumer demands and technical advancements.

Through constant strategy refinement and awareness of new trends, e-commerce companies can set themselves up for long-term success in the digital era. Acknowledging the mutual benefits of block chain technology and digital marketing creates new avenues for market distinction, growth, and innovation. With the use of a decentralized voting method, digital democracy is a cutting-edge web application that aims to transform democracy. It makes use of block chain technology to guarantee safe, open, and unchangeable elections. It gains the ability to usher in a new era of democracy by avoiding lengthy lines and antiquated voting procedures.

References

1. Christidis, K., & Devetsikiotis, M. (2016). Blockchains and smart contracts for the internet of things. *IEEE Access, 4*, 2292-2303.
2. Chuen, D. L., & Deng, R. H. (2018). Handbook of blockchain, digital finance, and inclusion (Vol. 2). Academic Press.
3. Iansiti, M., & Lakhani, K. R. (2017). The truth about blockchain. *Harvard Business Review, 95*(1), 118-127.
4. Karpagam, S. & Rajakrishnan, V. S. (2022). Consumer Attitude towards Online Shopping. *Quing: International Journal of Commerce and Management,* 2(1). 1-6. https://doi.org/10.54368/qijcm.2.1.0003
5. Kosba, A., Miller, A., Shi, E., Wen, Z., & Papamanthou, C. (2016). Hawk: The blockchain model of cryptography and privacy-preserving smart contracts. In 2016 IEEE Symposium on Security and Privacy (SP) (pp. 839-858). IEEE.

6. Kshetri, N. (2017). Blockchain's roles in strengthening cybersecurity and protecting privacy. *Telecommunications Policy, 41*(10), 1027-1038.
7. Kulkarni, A. A. (2023). A Study of Digital Banking Literacy among Women in Nashik City. *Quing: International Journal of Commerce and Management, 3*(2), 164-170. https://doi.org/10.54368/qijcm.3.2.0008
8. Lacity, M. C., & Khan, S. (2016). Digital marketing and advertising with a focus on social media: A new era of mobile and Web 2.0 engagement. *MIS Quarterly Executive, 15*(2).
9. Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from https://bitcoin.org/bitcoin.pdf
10. Ravi Teja, T. D. K. & Kumar, S. N. (2022). Supply Chain Disruption in the Health Care During the Pandemic Period. *Quing: International Journal of Commerce and Management, 2*(3), 69-75. https://doi.org/10.54368/qijcm.2.3.0005
11. Swan, M. (2015). Blockchain: Blueprint for a new economy. O'Reilly Media, Inc.
12. Swan, M. (2017). Blockchain: Blueprint for a New Economy. O'Reilly Media, Inc.
13. Tapscott, D., & Tapscott, A. (2016). Blockchain revolution: how the technology behind Bitcoin is changing money, business, and the world. Penguin.