International Journal of Research in Marketing Management and Sales



E-ISSN: 2663-3337 P-ISSN: 2663-3329

www.marketingjournal.net IJRMMS 2024; 6(2): 29-42 Received: 09-06-2024 Accepted: 17-07-2024

Susovan Dev

Department of Business Administration Assam University, Silchar, Assam, India

Sonia Laskar

Department of Business Administration Assam University, Silchar, Assam, India

Dr. HR Laskar

Department of Business Administration Assam University, Silchar, Assam, India

Awareness, perception and digital marketing of crypto currencies

Susovan Dey, Sonia Laskar and Dr. HR Laskar

DOI: https://doi.org/10.33545/26633329.2024.v6.i2a.174

Abstract

Cryptocurrency has become increasingly prevalent, and its decentralized nature and blockchain system have made it a more secure and attractive investment avenue for youth and millennials. Digital marketing is the promotion of goods or services through digital media, such as the Internet, smartphones, and display ads. Research in the field of digital marketing is important because it is vast, daunting, and global. Many businesses are unsure of where to begin and how to navigate the world of digital marketing. This study investigates youths and young professionals' awareness and perception of crypto currency, examines the marketing tools and techniques employed by crypto exchange platforms in India, and recommends the most effective techniques through an exploratory, qualitative research design. This is exploratory research using both qualitative and quantitative techniques. For the study, the researcher collected the primary data through a questionnaire-based survey method and sourced the secondary data from reliable online sources. The study in Assam used simple random sampling, with a sample size of 244. The findings suggest that increasing general public awareness through digital marketing efforts can lead to more cryptocurrency investments, making it a viable investment avenue.

Keywords: Awareness, crypto currencies, digital marketing, investment, perception

Introduction

Digital marketing is the promotion of goods or services through digital media, such as the Internet, smartphones, and display ads. It has evolved from traditional marketing and involves various digital strategies and platforms to engage with consumers who spend a significant amount of time online. Social media platforms like Facebook, Twitter, and Google have had a significant impact on customer views and expectations, leading to the transformation of various industries. A large network of consumers has made this possible by providing reliable data and real-time feedback.

Financial institutions use digital marketing to improve user engagement, lower prices, predict customer demands, enhance satisfaction, and maximize service usability. Fintech, encompassing technologies like artificial intelligence, blockchain, cloud computing, and the Internet of Things, is revolutionizing the delivery of financial services. BigTech companies like Google, Apple, Facebook, Amazon, Tencent, and Alibaba are redefining the financial services market by offering various financial services.

The emergence of cryptocurrency, which operates on the blockchain, is under scrutiny for its potential impact on banking processes, market industries, and crime payment methods. Blockchain technology underpins most cryptocurrencies, with different types having unique characteristics. Wallets are essential for storing and protecting cryptocurrencies, and mining validates transactions on a blockchain by solving complex cryptographic tasks.

Digital marketing encompasses strategies and technologies that businesses can use to reach their target audience and promote their products or services. Key strategies include SEO, SEM, local search marketing, content marketing, remarketing, responsive web design, email marketing, social media marketing, referral marketing, native marketing, and digital display advertising. Understanding and adapting to these advancements is crucial for businesses to stay competitive in the digital age.

2. Review of earlier research works

According to (Smith, 2011) [16], millennials prefer online coupons, side-panel ads, and

Corresponding Author: Susovan Dey

Department of Business Administration Assam University, Silchar, Assam, India graphics, and are more likely to write product reviews when given incentives. (Spilotro, 2016) [17] suggests that the adoption of IoT by millennials will revolutionize digital marketing, allowing for more personalized and targeted content marketing. (Duffett et al., 2019) [5] found that YouTube marketing communication positively impacts brand liking and preference among millennials in developing economies, with online usage and demographic factors also playing a role. (Corbet et al., 2018) [4] highlight the challenges faced by cryptocurrencies, such as regulatory oversight, potential for illicit use, and cybercriminal activity, which affect their perceived credibility as a legitimate investment asset class.

(Mikhaylov, 2020) [10] suggests that EOS cryptocurrency is the most promising and effective due to its low complexity, commission level, and ability to implement third-party applications. (Mirtaheri et al., 2021) [11] propose a computational approach to identify pump and dump scams on social media platforms and analyze bot activity in cryptocurrency-related tweets. (Torres et al., 2020) [18] argue that a dynamic linguistic decision-making approach can identify inefficient cryptocurrency behaviors and uncover arbitrage opportunities. According to a study by (Caporale et al., 2017) [3], the cryptocurrency market demonstrates persistence, with a positive correlation between past and future values. This suggests that the market is inefficient, allowing for trend trading strategies to generate abnormal profits.

Additionally, research by (Nizzoli et al., 2020) [12] reveals that online cryptocurrency manipulation is prevalent, with a significant number of Twitter accounts being bots or suspended accounts. Furthermore, 93% of invite links shared by bots lead to Telegram pump-and-dump channels. A recent study conducted by (Bhilawadikar & Garg, 2020) [2] reveals that millennial investors are increasingly showing interest in investing in cryptocurrencies. This growing interest is attributed to their financial literacy and maturity. Despite government and regulatory inactivity, young investors are drawn to the potential benefits of cryptocurrencies.

In Coimbatore, India, the general population is quite aware of cryptocurrency and blockchain technology, as highlighted by a study conducted by (Manivel et al., n.d.) ^[9]. With Bitcoin being the most popular investment class, India has the largest population of cryptocurrency owners globally. However, many people are ignorant of its benefits, downsides, and difficulties (Kashid & Patil, 2022) ^[7]. Cryptocurrency has become increasingly prevalent in digital marketing, but its decentralized nature and blockchain system can pose challenges for advertisers who want to gather shopper information (Bhadeshiya, 2021) ^[1]. However, cryptocurrencies are gaining popularity due to factors such as the availability of production equipment, user trust, and low entry costs, leading to their widespread

use in various economic activities (Kramarenko et al., 2019)

A computational approach can be used to automatically identify pump and dump scams on social media platforms, predict their success, and analyze bot activity in cryptocurrency-related tweets (Mirtaheri et al., 2021) [11]. Increasing digital engagement levels on cryptocurrency trading websites can enhance their SEO and SEM strategies, resulting in reduced digital marketing costs and increased traffic (Sakas et al., 2022) [15]. Cryptocurrencies utilize blockchain technology for secure transactions, offering a unique research opportunity for financial economics (Härdle et al., 2020) [6]. Social media platforms like YouTube, Instagram, and Facebook play a significant role in influencing young adults in India to make informed investment decisions by educating them about various investment options and providing financial guidance (Rani S & Prerana M, 2021) [13]. Technology awareness and government support have a positive impact on the behavioral intention of crypto users, with perceived factors such as usefulness, ease of use, and risk influencing their decision-making (Sagheer et al., 2022) [14]. According to (Tripathi et al., 2023) [19], the proposed decentralised exchange platform, TEX, facilitates safe and transparent cryptocurrency trading for Indian Rupees, thereby assisting in the development of more secure platforms both within and outside of India.

Objectives of the study

- To study the level of awareness and perception of the youths and young professionals regarding crypto currencies.
- 2. To study the digital marketing tools and techniques used by crypto currency trading exchanges in India

3. Research Methodology

This is exploratory research using both qualitative and quantitative techniques. A structured questionnaire collected the primary data, while authentic web sources provided the secondary data. The questionnaire was distributed to various demographics, including males, females, and age groups starting at 20 years and older. The research was conducted in Assam using simple random sampling, with a sample size of 244. The findings will help companies develop effective digital marketing tools and techniques for improving the awareness and perception of crypto currencies among youth and millennials.

4. Findings and Analysis

4.1. Awareness and perception of the youths and young professionals regarding crypto currencies

The findings regarding perception and awareness are presented below:

Table 1: Shows the number of respondents on the basis of their awareness of crypto currency

Sl. No.	Awareness	No of Responses	Percentage %
1.	Very Much Aware	90	36.9 %
2.	Much Aware	54	22.1%
3.	Moderately Aware	80	32.8 %
4.	Less Aware	14	5.7 %
5.	Not Aware	6	2.5 %
	Total	244	100 %

Table 2: Shows the interest of respondents in investment in cryptocurrency

Sl. No.	How likely are you to invest in cryptocurrency this year?	No of Responses	Percentage %
1.	Not so likely	80	32.8 %
2.	Somewhat likely	66	27 %
3.	Not at all likely	50	20.5 %
4.	Very likely	34	14 %
5.	Extremely likely	14	5.7 %
	Total	244	100 %

Table 3: Shows the respondents' risk perception towards crypto investment and stock market investment

Sl. No.	In your opinion, which is riskier, investing in the stock market or investing in cryptocurrency?	No of Responses	Percentage %
1.	Stock Market	22	9 %
2.	Cryptocurrency	56	23 %
3.	Both are equally risky	100	41 %
4.	Both are easy	6	2.5 %
5.	No Idea	60	24.6 %
	Total	244	100 %

Table 4: Shows the respondents' perception towards future value of cryptocurrency

Sl. No.	In 5 years, do you think cryptocurrency will be worth more or less than today?	No of Responses	Percentage %
1.	Significantly More	72	29.5 %
2.	Somewhat More	102	41.8 %
3.	About the Same	46	18.9 %
4.	Somewhat Less	16	6.6 %
5.	Significantly Less	8	3.3 %
	Total	244	100 %

Table 5: Shows the awareness of the respondents about different cryptocurrency exchange platforms

Sl. No.	Awareness of the respondents about different famous cryptocurrency exchange platforms	No of Responses	Percentage %
1.	Coinbase	8	3.3 %
2.	WazirX	34	13.9 %
3.	CoinSwitch	24	9.8 %
4.	Zebpay	12	4.9 %
5.	No idea	166	68 %
	Total	244	100 %

Table 6: Shows the different Social Media Platform where respondents have seen advertisements regarding cryptocurrency

Sl. No.	Have you seen ads over social media for investment in cryptocurrency?	No of Responses	Percentage %
1.	Facebook	80	32.8 %
2.	Instagram	64	26.2 %
3.	YouTube	104	42.6 %
4.	Twitter	28	11.5 %
5.	Never seen an Ad	86	35.2 %

Table 7: Shows the marketing technique which should be used by the marketer to promote cryptocurrency investments

Sl. No.	Have you seen ads over social media for investment in cryptocurrency?	No of Responses	Percentage %
1.	Traditional Marketing	-	-
2.	Digital Marketing	76	31.1 %
3.	Use both techniques	82	33.6 %
4.	Both are not worthy	-	-
5.	No idea	86	35.2 %
	Total	244	100 %

Interpretation

The survey reveals that 91.8% of respondents are aware of cryptocurrency, with 8.2% having an idea and 1% having extensive knowledge. However, only 19.7% are ready to invest, and nearly half have a high-risk perception of cryptocurrency investments. Despite this, 71.3% are optimistic about the growth of cryptocurrency, believing its value will increase in the future. The highest ad viewer base

is generated on YouTube, with 52 respondents seeing an ad about cryptocurrency investment, 14 on Twitter, and 43 not seeing any ad regarding cryptocurrency investment.

Digital marketing tools and techniques used by crypto currency trading exchanges in India

The tools and techniques that are being used by the popular cryptocurrency trading exchanges to promote their

platforms in India. Following are the popular cryptocurrency exchanges in India.

WazirX

WazirX, a cryptocurrency exchange acquired by Binance Holdings, offers security, multilingual assistance, and a P2P framework for depositing and withdrawing fiat currency. Its market capitalization is \$422,334,260.06, accounting for 12.97% of the total market share.

Table 8: Showing overall traction generated by WazirX in 6 months.

Sl. No.	Parameters	Engagement overview
1.	Total visits in 6 months	9.19M
2.	Avg. Visit duration	10 min 08 sec
3.	Bounce rate	34.17 %
4.	Top Visiting country	India

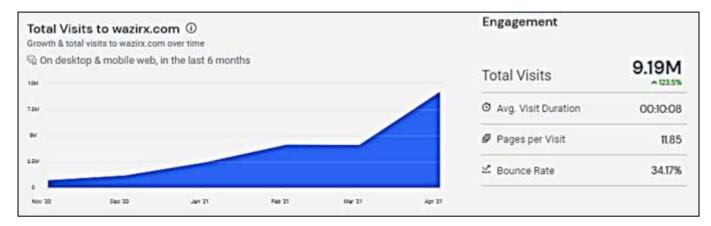


Fig 1: Traffic Overview of WazirX (Source: https://www.similarweb.com/)

Table 9: Showing sources from traffic is directed to WazirX

Sl. No.	Sources	Percentages
1.	Direct	72.71 %
2.	Referrals	3.44 %
3.	Search	21.73 %
4.	Social	1.54 %
5.	Email	0.43 %
6.	Display Advertisement	0.14 %
	Total	100%

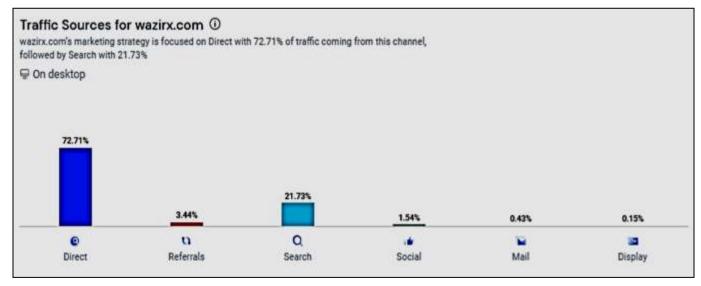
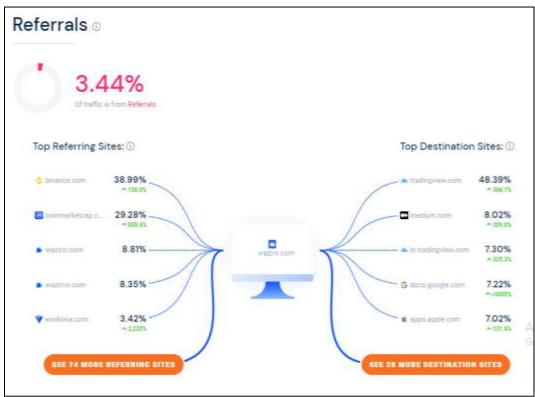


Fig 2: Traffic Sources of WazirX (Source: https://www.similarweb.com)

Table 10: Showing Top Referring sites & Top Destination sites

Top Referring sites	%	Top Destinations	%
Binance.Com	38.99 %	tradingview.com	48.39%
Coinmarketcap.Com	29.28 %	medium.com	08.02%
Wazirxr.Com	08.81 %	in.tradingview.com	07.30%
Wazirrxr.Com	08.35 %	docs.google.com	07.22%
Workona.Com	03.42 %	apps.apple.com	07.02%



Top 5 site referrals & destinations. (*Source:* https://www.similarweb.com)

Fig 3: Pictorial representation showing

Table 11: Showing Social media sites sending traffic to WazirX

Sl. No.	Social Media Sites	Percentage
1.	Twitter	44.14%
2.	YouTube	36.53%
3.	Linkedin	7.63%
4.	Facebook	3.76%
5.	Whatsapp	3.62%
6.	Others	4.32%
	Total	100%

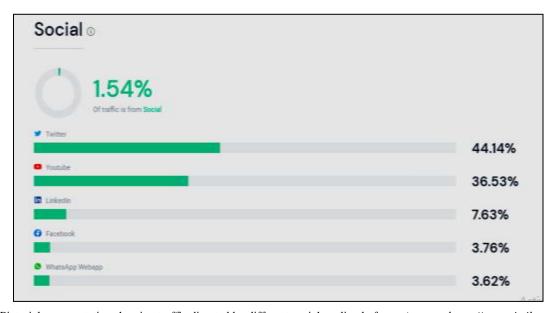


Fig 3: Pictorial representation showing traffic diverted by different social media platforms (source; https://www.similarweb.com)

Table 12: Showing Top advertising network and publishing partner of Wazirx

Sl. No.	Top Publisher	Top Ad Networks
1.	linkvertise.com	Taboola
2.	ndtv.com	Skimlinks
3.	wazirx.knoji.com	CPAlead
4.	google.com	Adgebra
5.	support.zerodha.com	Revenue Hits



Fig 4: Pictorial representation showing top publishers and advertising network of WazirX. (source; https://www.similarweb.com)

WazirX has a 9.19 million page visit count in the last six months, with an average visit duration of 10.08 minutes and a bounce rate of 34.17%. The site's marketing strategy focuses on direct search, with 72.71% of traffic coming from direct search, followed by organic search and paid referring search. Top sites include binance.com, coinmarketcap.com, wazirxr.com, and workona.com, while destination visits include tradingview.com, medium.com, docs.google.com, and apps.apple.com.

4.3 CoinDCX

CoinDCX, a Mumbai-based cryptocurrency exchange,

attracts Indian investors with over one lakh active users, over 200 cryptocurrencies, low trading fees, and free deposits and withdrawals, making it ideal for BTC trading.

Table 13: Showing overall traction generated by CoinDCX in 6 months.

Sl. No.	Parameters	Engagement overview
1.	Total visits in 6 months	1.23M
2.	Avg. Visit duration	10 min 48 sec
3.	Bounce rate	24.9 %
4.	Top Visiting country	India

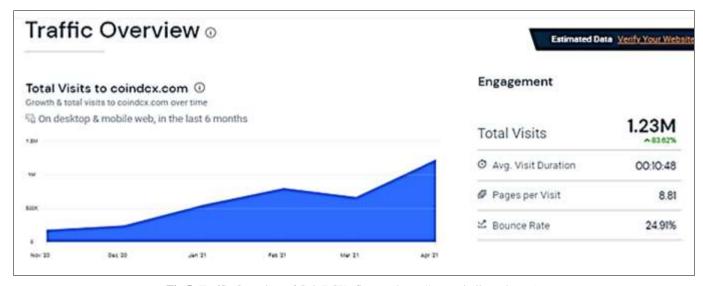


Fig 5: Traffic Overview of CoinDCX (Source: https://www.similarweb.com)

Table 14: Showing sources from traffic is directed to CoinDCX

Sl. No	Sources	Percentages
1	Direct	74.20 %
2	Referrals	01.32 %
3	Search	19.32 %
4	Social	2.84 %
5	Email	0.83 %
6	Display Advertisement	0.88 %
	Total	100%

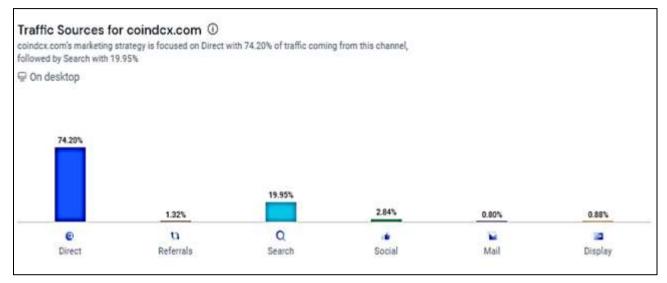


Fig 6: Traffic Sources of CoinDCX (Source: https://www.similarweb.com)

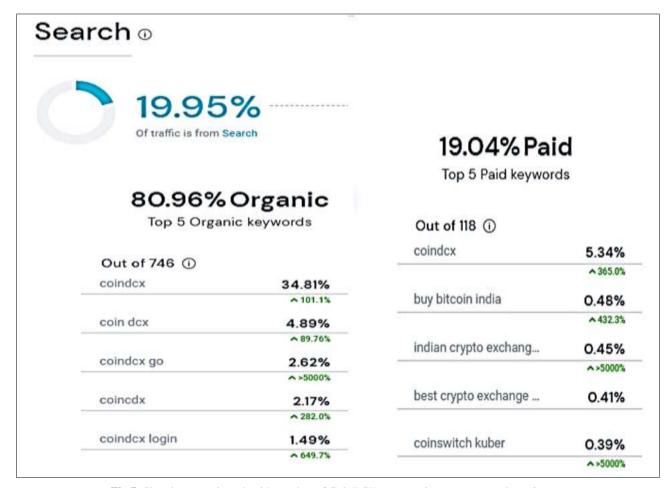


Fig 7: Showing organic and paid searches of CoinDCX (source; https://www.similarweb.com)

Table 15: Showing Top Referring sites & Top Destination sites

Top Referring sites	%	Top Destinations	0/0
coinmarketcap.com	32.79 %	dcxlearn.com	42.19%
medium.com	14.18 %	tradingview.com	22.80%
venture.coinbase.com	14.13 %	play.google.com	13.79%
coinsutra.com	07.03 %	api.zaakpay.com	04.89%
amazon.in	03.83 %	t.me	03.36%



Top 5 site referrals & destinations. (*Source:* https://www.similarweb.com)

Fig 8: Pictorial representation showing

Table 16: Showing Social media sites sending traffic to CoinDcX

Sl. No.	Social Media Sites	0/0
1.	YouTube	74.52%
2.	Twitter	9.39%
3.	Whatsapp	6.89%
4.	Linkedin	5.32%
5.	Facebook	1.60%
6.	Others	2.28%
Total	100%	

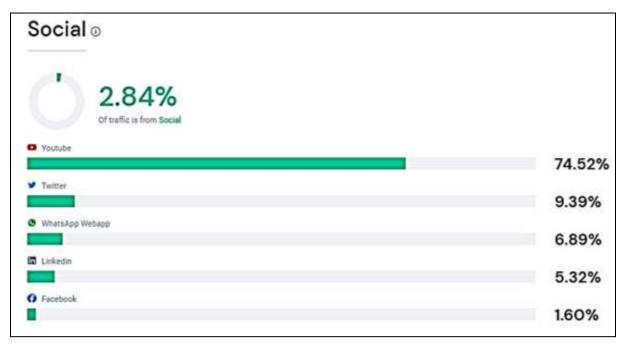


Fig 9: Pictorial representation showing traffic diverted by different social media platforms (Source: https://www.similarweb.com)

Table 17: Showing Top advertising network and publishing partner of CoinDCX

Sl. No.	Top Publisher	Top Ad Networks
1.	moneycontrol.com	Taboola
2.	textnow.com	Adroll
3.	tradelogical.com	Google Display Network
4.	mail.google.com	-
5.	manoramaonline.com	-

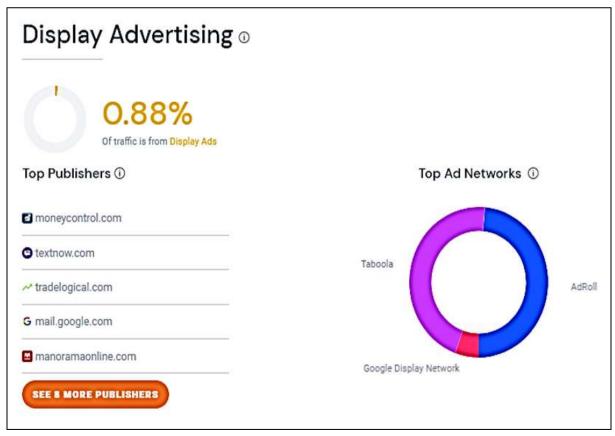


Fig 10: Pictorial representation showing top publishers and advertising network of CoinDCX. (Source: https://www.similarweb.com)

Analysis

CoinDCX has gained 1.29 million page visits in the last six months, with an average visit duration of 10.48 minutes and

a bounce rate of 24.9. The marketing strategy focuses on direct search, with 74.20% of traffic coming from direct search, followed by organic search, paid search, referrals,

social media, email marketing, and display advertising. Top referring sites are coinmarketcap.com, medium.com, venture.coinbase.com, coinsutra.com, and amazon.in. YouTube sends the most traffic, followed by Twitter, WhatsApp, LinkedIn, and Facebook.

4.4 Zebpay

Zebpay offers quick payments and enhanced security with its 'Disable Outgoing Transactions' function. It trades various cryptocurrencies and has a user-friendly interface, with a market capitalization of \$22,672,703.

Table 18: Showing overall traction generated by Zebpay in 6 months

Sl. No.	Parameters	Engagement overview
1.	Total visits in 6 months	261.72K
2.	Avg. Visit duration	04 min 26 sec
3.	Bounce rate	43.99 %
4.	Top Visiting country	India

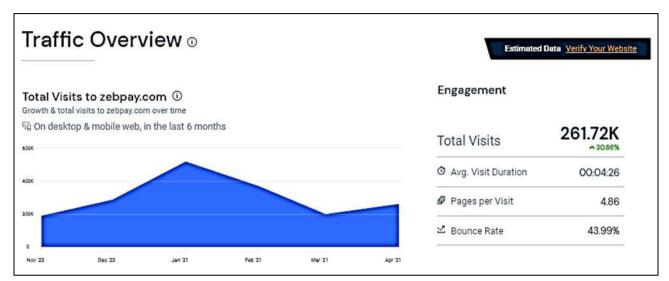


Fig 11: Traffic Overview of Zebpay (Source: https://www.similarweb.com)

Table 19: Showing sources from traffic is directed to Zebpay

Sl. No.	Sources	Percentages
1.	Direct	34.84 %
2.	Referrals	0.35 %
3.	Search	59.51 %
4.	Social	2.20 %
5.	Email	3.09 %
6.	Display Advertisement	-
·	Total	100%

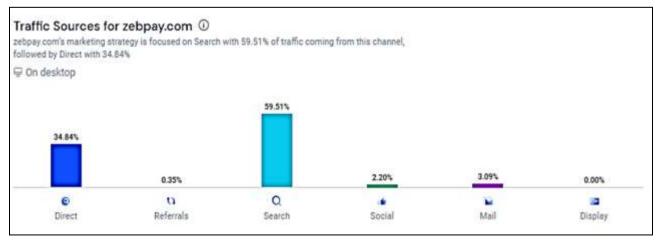


Fig 12: Traffic Sources of CoinDCX (Source: https://www.similarweb.com)

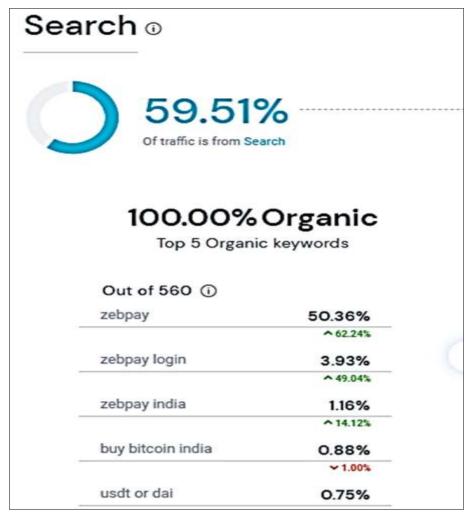


Fig 13: Showing organic searches of Zebpay (source; https://www.similarweb.com)

Table 20: Showing Social media sites sending traffic to Zebpay

Sl. No.	Social Media Sites	%
1.	YouTube	75.52%
2.	Twitter	15.79%
3.	Quora	5.96%
4.	Linkedin	2.73%
6.	Others	0.43%
Total	100%	

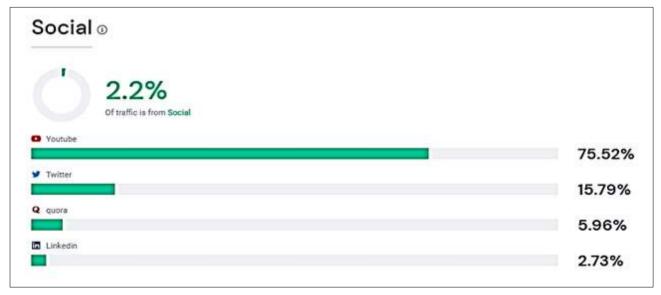


Fig 14: Pictorial representation showing traffic diverted by different social media platforms (Source: https://www.similarweb.com)

Analysis

Zebpay has logged 261.72 thousand page visits in the last six months, with an average visit duration of 04 minutes and an average total bounce rate of 44.99%. The marketing strategy focuses on organic search, with 59.51% of traffic coming from organic search, followed by direct search and referrals. YouTube is the most popular social media platform for Zebpay.

4.5 UnoCoin

UnoCoin, India's first cryptocurrency exchange, has over 1.2 million members and offers Bitcoin trading with Indian rupees. It also allows account recharge, mobile phone recharge, and DTH usage. With a market capitalization of \$476,710 USD, it supports online merchants.

Table 21: Showing overall traction generated by UnoCoin in 6 months.

Sl. No.	Parameters	Engagement overview
1.	Total visits in 6 months	139.06K
2.	Avg. Visit duration	04 min 04 sec
3.	Bounce rate	46.45 %
4.	Top Visiting country	India

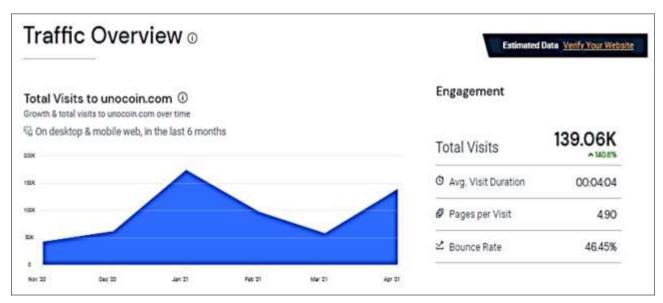


Fig 15: Traffic Overview of UnoCoin (Source: https://www.similarweb.com)

Table 22: Showing sources from traffic is directed to UnoCoin

Sl. No.	Sources	Percentages
1.	Direct	34.07 %
2.	Referrals	02.12 %
3.	Search	61.41 %
4.	Social	0.94 %
5.	Email	01.47 %
6.	Display Advertisement	-
	Total	100%

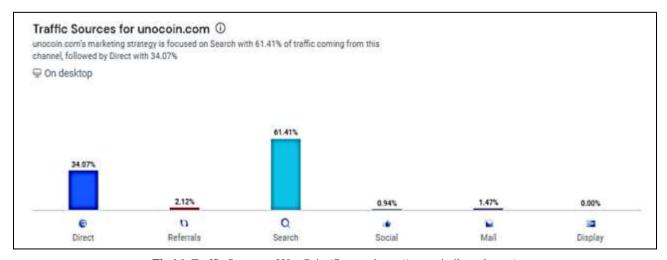


Fig 16: Traffic Sources of UnoCoin_(Source: https://www.similarweb.com)

Table 23: Showing top referring sites & top destination sites

Top Referring sites	%	Top Destinations	%
Bangalore.startup-list.com	33.69 %	e-pay.mobikwik.com	30.94%
gadgets.ndtv.com	16.90 %	app.intotheblock.com	18.24%
home.suddenlink.net	11.43 %	bitpay.com	17.34%
cryptolinks.com	11.29 %	xangle.io	11.41%
medium.in	07.94 %	play.google.com	08.66%



Top 5 site referrals & destinations. (*Source*: https://www.similarweb.com)

Fig 17: Pictorial representation showing

Table 24: Showing Social media sites sending traffic to UnoCoin

Sl. No.	Social Media Sites	%
1.	Twitter	35.53%
2.	Whatsapp	34.22%
3.	YouTube	26.08%
4.	Quora	04.17%
	Total	100%

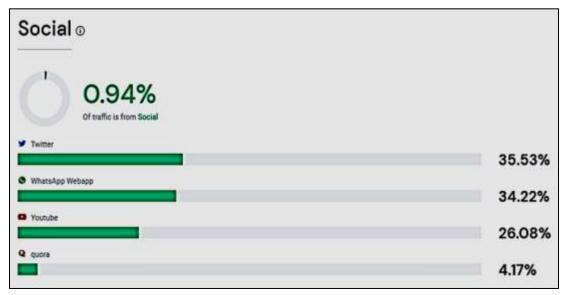


Fig 18: Pictorial representation showing traffic diverted by different social media platforms (Source: https://www.similarweb.com/)

Analysis

UnoCoin has a high total bounce rate of 46.45% and has 139.06 thousand page visits in the last six months. Its marketing strategy focuses on organic search, direct search, referrals, social media, and email marketing. Top referring sites are bangalore.startup-list.com, home.suddenlink.net, cryptolink.com, and medium.com. Twitter sends the most traffic, followed by WhatsApp, YouTube, and Quora. Top destination visits are e-pay.mobikwik.com, app.intotheblock.com, bitpay.com, xangle.io, and play.google.com.

Conclusion and Suggestions

The survey reveals that, while many are aware of cryptocurrency, only a small percentage are willing to invest due to perceived high risks. However, a significant number believe it will gain value in the future. YouTube is the most popular platform for cryptocurrency investment ads. Platforms such as WazirX and CoinDCX have high page visit counts, whereas Zebpay and UnoCoin have lower page visit counts and spend less time on their sites.

Cryptocurrencies are considered safe and transparent, and once regulated, they have the potential to become a major source of transactions. To turn youth and young professionals into crypto investors, digital marketers should focus on creating content that highlights these advantages and targets them. Employing digital marketing strategies is crucial to increase awareness and acceptance of cryptocurrency. This includes utilizing social media platforms, influencer marketing, hosting trading vlogs and podcasts, and creating targeted advertisements based on the Big Five model. Additionally, regional language advertisements should be considered to align with specific regions.

References

- Bhadeshiya HB. Role of cryptocurrency in digital marketing. Blockchain Technology and Applications for Digital Marketing. 2021 Jun;64-83. https://doi.org/10.4018/978-1-7998-8081-3.ch005.
- 2. Bhilawadikar VS, Garg E. Investment attitude of millennials towards cryptocurrencies. Social Business. 2020;10(4):383-410. https://doi.org/10.1362/204440820x15929907056652.
- 3. Caporale GM, Gil-Alana LA, Plastun A. Persistence in the cryptocurrency market. SSRN Electronic Journal. 2017. https://doi.org/10.2139/ssrn.3084023.
- Corbet S, Lucey BM, Urquhart A, Yarovaya L. Cryptocurrencies as a financial asset: A systematic analysis. SSRN Electronic Journal; c2018. https://doi.org/10.2139/ssrn.3143122.
- Duffett R, Petroşanu DM, Negricea IC, Edu T. Effect of YouTube marketing communication on converting brand liking into preference among millennials regarding brands in general and sustainable offers in particular: Evidence from South Africa and Romania. Sustainability, 2019, 11(3). https://doi.org/10.3390/su11030604.
- 6. Härdle WK, Harvey CR, Reule RCG. International research training group 1792 understanding cryptocurrencies understanding cryptocurrencies.

 Journal of Financial Econometrics. 2020;18(2):181-208
- 7. Kashid P, Patil P. Awareness, acceptance and penetration of cryptocurrencies in the Indian market

- with special reference to Bitcoin. International Journal of Health Sciences. 2022 Mar;6:8807-8815. https://doi.org/10.53730/ijhs.v6ns3.8140.
- Kramarenko A, Kvitka A, Diachek V, Davydov D. Cryptocurrencies in the global space: Factors and prospects of promotion. SHS Web of Conferences. 2019;67:06031. https://doi.org/10.1051/shsconf/20196706031.
- 9. Manivel R, Priya D, Banking BV. Pr ep rin t n ot pe er r Pr ep rin t n ot pe er ed.
- 10. Mikhaylov A. Cryptocurrency market analysis from the open innovation perspective. Journal of Open Innovation: Technology, Market, and Complexity. 2020;6(4):11-19. https://doi.org/10.3390/joitmc6040197.
- 11. Mirtaheri M, Abu-El-Haija S, Morstatter F, Ver Steeg G, Galstyan A. Identifying and analyzing cryptocurrency manipulations in social media. IEEE Transactions on Computational Social Systems. 2021;8(3):607-617. https://doi.org/10.1109/TCSS.2021.3059286.
- Nizzoli L, Tardelli S, Avvenuti M, Cresci S, Tesconi M, Ferrara E. Charting the landscape of online cryptocurrency manipulation. IEEE Access. 2020;8:113230-245. https://doi.org/10.1109/ACCESS.2020.3003370.
- Rani SY, Prerana M. Social-media influence on the investment decisions among the young adults in India. Asia-Pacific Journal of Management and Technology. 2021;2(1):17-26. https://doi.org/10.46977/apjmt.2021v02i01.003.
- Sagheer N, Khan KI, Fahd S, Mahmood S, Rashid T, Jamil H. Factors affecting adaptability of cryptocurrency: An application of technology acceptance model. Frontiers in Psychology. 2022 Jun;13:1-12. https://doi.org/10.3389/fpsyg.2022.903473.
- 15. Sakas DP, Giannakopoulos NT, Kanellos N, Migkos SP. Innovative cryptocurrency trade websites Marketing strategy refinement, via digital behavior. IEEE Access. 2022;10:63163-176. https://doi.org/10.1109/ACCESS.2022.3182396.
- 16. Smith KT. Digital marketing strategies that millennials find appealing, motivating, or just annoying. Journal of Strategic Marketing. 2011;19(6):489-499. https://doi.org/10.1080/0965254X.2011.581383.
- 17. Spilotro C. Connecting the dots: How IoT is going to revolutionize the digital marketing landscape for millennials. Undergraduate Honors Theses; c2016. Available from: http://digital.sandiego.edu/honors_theses/25.
- Torres R, Solis MA, Salas R, Bariviera AF. A dynamic linguistic decision making approach for a cryptocurrency investment scenario. IEEE Access. 2020;8:228514-24. https://doi.org/10.1109/ACCESS.2020.3045923.
- 19. Tripathi S, Kotagiri T, Sanjeeva P, Aggarwal S. TEX True Exchange (Decentralized crypto currency exchange for Indian markets). E3S Web of Conferences. 2023;430:0-6. https://doi.org/10.1051/e3sconf/202343001158.