ANALYSIS OF THE METAVERSE UTILIZATION FOR MARKETING PURPOSE
(Case Study of XYZ Pharmacy in the Netherlands)

Digna Rayhan Adintama, Cahyaningratri S.E., M.Bus[1]

Dignarayhan71@gmail.com

Departemen Manajemen Fakultas Ekonomika dan Bisnis Universitas Diponegoro
Jl. Prof. Soedharto SH Tembalang, Semarang 50239, Phone: +622476486851

ABSTRACT

XYZ Pharmacy was established in 2017 and provides TelePharmacy service, Over-the-Counter medicine, and Prescription medicine (Include: cannabinoid-based prescription-only medication for chronic health disorders). Since December 2022, XYZ Pharmacy has been focusing on developing its metaverse presence as a means to expand its marketing reach and create awareness among customers. Using secondary and primary data, this report will be beneficial for the company in the future as it strategizes how to build the metaverse space for reaching and presenting their developments and projects to customers.

The second chapter presents key definitions and concepts associated with the metaverse, marketing, marketing channels, SWOT analysis, and the 4Ps marketing matrix. These concepts can help XYZ Pharmacy better comprehend the metaverse and digital marketing channels. In Chapter 3 of the study, the use of the metaverse as a marketing channel for XYZ Pharmacy is analyzed. It discusses the findings as well as approaches by which XYZ Pharmacy can utilize the metaverse as a marketing channel.

During the research, it was discovered that the company's internal issues derive from a lack of marketing strategy and resources. This is because they are still exploring the metaverse as a marketing channel. In addition, there are some external threats that XYZ Pharmacy will face that are mentioned in this research. Therefore, in the last two chapters, the researcher gives some recommendations and perspectives that could help the company solve its problems.

Keyword: Digital marketing channels, Metaverse presence, XYZ Pharmacy, Lack of marketing strategy and resource.

INTRODUCTION

XYZ Pharmacy Pharmacy was established in 2017 and provides TelePharmacy service, Over-the-Counter medicine, and Prescription medicine (Include: cannabinoid-based prescription-only medication for chronic health disorders). These medications are produced in XYZ Pharmacy's own approved production facility in Germany and the Netherlands and are only available with a doctor's prescription. The drug for XYZ Pharmacy is distributed in the

---

[1] *Corresponding author*

Netherlands by a proprietary Pharmacy, which is distinguished by its patient-centric and individualized approach to medication distribution. This Pharmacy also distributes any other medication that is available at any other Pharmacy in the Netherlands.

XYZ Pharmacy has been working on its metaverse development since December 2022. XYZ Pharmacy views the metaverse as a useful asset that allows the company to present its

developments and projects to customers. They already have metaverse space through an application called Spatial.

The metaverse is a virtual world that combines the physical and digital worlds, where users can experience an alternate reality that is a metaphor for their real worlds by controlling their own avatars, which are analogous to their physical selves. The metaverse expands and changes the Internet and social media into an online 3D "third place" where avatars can do a variety of things for social interaction, community building, and creative expression. Right now, users are able to shop, play, travel, and socialize as a result of the activity-based nature of the metaverse. This is accomplished by utilizing a variety of the platform's features, such as a world map (for store visits, sightseeing, as well as gameplay, role play, and mission/quest completion), an avatar (for customizing oneself and immersing oneself in a brand story), socializing features (such as chat, crew, and photobooth for finding friends and taking and sharing (for trying and shopping branded virtual items) (Wongkitrungrueng & Suprawan, 2023). The following three core design dimensions could be used to implement the potential variety of metaverse experiences: the degree of immersion, the faithfulness of the virtual environment to the real world, and the level of social interaction authorized among users. Immersiveness is the degree of immersion provided by a system, as determined by the underlying technology and the level of virtuality. Telepresence, which promotes immersion, is the result of media properties such as vividness and interaction. Immersiveness can be adjusted by technological elements, and it is recognised to have a beneficial impact on consumers' perceived value, attitudes, and behavioral intentions in marketing, Using the simulations and games literature, environmental fidelity can be defined as the degree to which the metaverse environment (including self-representations) physically and functionally emulates the real world, and the term "sociability" refers to the degree to which a business or service facilitates and encourages users to engage in group activities (such as sharing, collaborating, or creating) with one another (Barrera & Shah, 2023).

This report aims to analyze how to utilize the metaverse as a marketing channel to present XYZ Pharmacy's developments and projects to customers. This report will be beneficial for the company in the future as it strategizes how to build the metaverse space for reaching and presenting their developments and projects to customers.

RESEARCH PROBLEM

Currently, XYZ Pharmacy is trying to use the metaverse to present the company's developments and projects to customers. From December 2022, XYZ Pharmacy has been putting effort into developing its metaverse. Via a program called Spatial, they already have built the metaverse space. Nonetheless, the organization is currently exploring metaverse marketing strategy and lacks a fully developed approach in this area.The Metaverse presents a

promising new technology for marketing channels. However, to fully enhance the utilization of XYZ Pharmacy metaverse space, several areas require further development, exploration, and research.

There are many different public relations and advertising strategies that might utilize the metaverse. A highly effective marketing strategy for the business could involve using 3D virtual worlds to develop interactive experiences that let customers explore a company's products and services in an exciting and interesting way (Bushell, 2022). This research aims to examine how to utilize the metaverse as a marketing channel to present company developments and projects.

RESEARCH OBJECTIVE

1. The purpose of this report is to provide an analysis regarding expanding XYZ Pharmacy's online presence through the creation of immersive virtual experiences through the Metaverse to Mr. Ernesto as CEO of XYZ Pharmacy B.V. Netherlands before July 31, 2023.
2. The purpose of this research is to provide useful information for companies to use and enhance the metaverse space as a marketing channel to present XYZ Pharmacy's developments and projects to customers.

RESEARCH METHOD
Research Type

Qualitative research methodologies were used in this research. The researcher employed desk research and interviews (primary data) as the data gathering methods to gather data for the study. The researcher used interviews as primary data. Desk research is a sort of secondary data gathering in which the researcher makes use of data that has already been collected. A range of sources, including journals, books, newspapers, and websites, among others, may be used to acquire this information.

Sources of Type

1. Primary Data

    Interviews were the main method of data collection that the researcher chose. Interviews give the opportunity to ask questions that are topic-specific and relevant to the study problem in order to elicit the most thorough responses. In addition, unlike surveys and questionnaires, this method of data collection allows for deeper and more personal interactions with the study participants.

    Due to time and resource constraints, the researcher conducted semi-structured interviews via Google Meeting with a representative of MYCB1. From the MYCB1 representative, the researchers obtain some important primary data that is then employed as one of the sources in this study. In addition, due to various time and resource constraints, the core data gathering was continued via personal messages.

2. Secondary Data

The secondary data is gathered from journals, previous research, industry data, and more. These data were used to compile information such as the definition of metaverse marketing, the threats and opportunities posed by the metaverse as a marketing channel, the metaverse marketing strategy framework, key performance indicators and metrics for metaverse marketing, and the regulation regarding advertising medicine in the Netherlands. Given that the metaverse is a relatively new concept, one of the main challenges of using this method is the unavailability or lack of clarity in certain data required for the research.

Method of Collecting Data and Analysis

For this final project, the author gathered the necessary data through a literature review, data analysis, and observation. The literature review involved exploring various sources such as Journals, books, and Saxion libraries to find relevant information related to the study's subject. Additionally, data collected from the interview with the CEO of XYZ Pharmacy in Netherlands.

To produce this final project, the author engaged in participatory observation during an internship at XYZ Pharmacy. This allowed the author to actively participate in various activities, such as assisting in problem-solving and seeking solutions.

CONCLUSION

The metaverse can be considered a new potential marketing channel for XYZ Pharmacy. While it is still relatively new, only a few companies, particularly in the gaming industry, have utilized this channel. XYZ Pharmacy has constructed their metaverse space using Spatial.io, one of the metaverse platforms. Spatial.io was selected after the company conducted extensive research on the metaverse platform. In addition, based on the analysis and data collected for this study, Spatial.io is renowned for being readily accessible and ideal for social gatherings and events.

In my opinion, XYZ Pharmacy may not need to utilize the metaverse as a marketing channel at this time. This evaluation is founded on the following reasons. First, as stated before, some large companies have begun to investigate and use the metaverse as a marketing channel, it is vital to remember that the metaverse is still in its early stages of development. The market and user adoption are always changing. It may take some time for the metaverse to evolve as a mainstream marketing platform. As a result, XYZ Pharmacy can benefit from monitoring industry trends and evaluating metaverse progress before fully committing its resources. Second, the general population still has a limited understanding of the metaverse. This lack of knowledge may result in a relatively small potential audience for XYZ Pharmacy in the metaverse. In order to reach a broader audience, XYZ Pharmacy would be better served by concentrating on channels where customers are more familiar and responsive. XYZ Pharmacy can maximize its marketing efforts by optimizing its presence on well-established channels that already have moderate followers and a substantial user base. By investing in these channels, such as social media platforms, XYZ Pharmacy is able to leverage its existing reach and create awareness more effectively.

On the contrary, the establishment of a metaverse space environment by XYZ Pharmacy presents a significant advantage. By creating their presence in the metaverse in advance, XYZ Pharmacy eliminates the need to invest considerable time and energy in building the space from scratch. Instead, they can focus on optimizing their metaverse marketing strategies to leverage the potential of this emerging platform.

To better understand the situation, a SWOT analysis and confrontation matrix will be used to summarize XYZ Pharmacy's strengths, weaknesses, opportunities, and threats in using the metaverse as a marketing channel.

RECCOMENDATION

1. HR & Organization

a. Employing 3D designers

As previously mentioned, the role of a 3D designer is crucial to utilizing the metaverse for marketing purposes. Visual appeal is crucial in the metaverse for capturing users' attention and delivering information effectively. A 3D designer is capable of creating convincing and visually appealing representations of XYZ Pharmacy's products and services. This improves the overall user experience and helps create awareness and a memorable presence for XYZ Pharmacy in the virtual space. In addition, a 3D designer can create visually clear and well-defined representations of XYZ Pharmacy's products and services. Utilizing high-quality 3D visuals enables the audience to comprehend and visualize the offerings with ease. Information can be conveyed more effectively and with less likelihood of confusion when provided with clear visuals. XYZ Pharmacy has the option of employing a 3D designer on a full-time or part-time basis.

b. Employing marketing experts/managers

Marketing experts are able to devise a comprehensive strategy for the metaverse marketing initiatives of XYZ Pharmacy. They are capable of analyzing the target audience, identifying their preferences and behaviors in the metaverse, and developing a strategy to effectively engage them. This includes establishing goals, identifying key performance indicators, and determining the most effective strategies for achieving desired results. In addition, as stated previously, they could help determine the appropriate marketing budget, prioritize initiatives, allocate funds to different marketing campaigns, and optimize the budget for maximum impact. This ensures that XYZ Pharmacy's marketing activities are in line with its goals, producing the intended results. In addition, marketing professionals can establish KPIs and metrics to assess the efficacy of XYZ Pharmacy's metaverse marketing initiatives. They can monitor KPIs and metrics to assess the results of various campaigns and make data-driven optimization decisions.

c. Implementing and determining KPIs and metrics

To attain XYZ Pharmacy's primary objective of generating brand awareness, it is advisable to implement the previously outlined KPIs and

metrics, namely Insights, Exposure, Reach, and Engagement. XYZ Pharmacy must determine and define the specific goals associated with each metric. By implementing these KPIs and metrics, XYZ Pharmacy is able to effectively monitor and evaluate the success of their metaverse efforts. In addition, by actively conversing with customers and paying close attention to their feedback, XYZ Pharmacy can establish strong relationships with its metaverse audience. By comprehending customers' needs and preferences, XYZ Pharmacy can tailor its products and services to meet their expectations, thereby decreasing the likelihood of consumer dissatisfaction and defection.

d. Consulting with legal experts

XYZ Pharmacy Pharmacy may encounter difficulties promoting prescription drugs in the metaverse due to advertising limitations in the Netherlands. It is highly recommended to get the advice of legal counsel to guarantee compliance with applicable regulations. Experts in the law can evaluate XYZ Pharmacy Pharmacy's product and marketing plans and recommend alternatives within the legal framework, as well as advise on how to comply with advertising limits when promoting the Pharmacy's prescription medication. This proactive approach helps XYZ Pharmacy Pharmacy navigate regulations, explore targeted promotion options, and mitigate compliance risks, enabling effective promotion while complying with pharmaceutical advertising regulations in the Netherlands.

2. Finance

The following table presents the estimated salaries and fees that XYZ Pharmacy must pay to employ and consult with experts:

Table 5.1

Employee Salaries and Fees

Experts Type	Salaries	Job Description
Salary for 3D Designer	In Amsterdam, Netherlands, the average 3D animator's gross salary is €80,618 per year, or € 39 per hour (ERI Economic Research Institute, n.d.).	3D animators animate objects and environmental elements within the metaverse, as well as designing and developing complex graphics and/or 3D animation that are visually appealing to users (ERI Economic Research Institute, n.d.).
Salary for Marketing	In Amsterdam, the Netherlands,	Manages the direction and

experts	the average marketing manager's gross salary is € 113,383 per year, or € 55 per hour (ERI Economic Research Institute, n.d.).	promotion of marketing activities, as well as the enhancement of the company's product image, market data, and information. Identifies and evaluates marketing strategies based on knowledge of the organization's objectives and market characteristics, and identifies potential clients (ERI Economic Research Institute, n.d.).
Fee for legal consultation	The hourly rates of lawyers range from €150 to €200 (excluding VAT) based on their level of experience and expertise (VDHR Advocaten, n.d.).	Provide extensive legal analysis and guidance.

3. **Marketing**

   a. **Implementing and Developing metaverse-specific marketing strategies.**

      Given that the metaverse is anticipated to be primarily adopted by younger generations, it is crucial for XYZ Pharmacy to tailor their marketing efforts within the metaverse to effectively reach and engage this target audience. In addition, XYZ Pharmacy can improve their marketing efforts by including more specific target audience criteria within the metaverse. By establishing specific demographic, psychographic, and behavioral characteristics of their target audience in the metaverse, XYZ Pharmacy is able to ensure that their marketing efforts are more targeted and precise. This will increase the effectiveness of their marketing campaigns by allowing them to tailor their messages, content, and experiences to the specific preferences and requirements of their metaverse audience. Regarding its marketing strategy, XYZ Pharmacy can utilize the metaverse marketing strategy framework outlined in this research.

      Additionally, the development of metaverse-specific marketing strategies will provide XYZ Pharmacy with greater budgetary insight and control. XYZ Pharmacy can make more informed budget allocation decisions. They are able to identify the metaverse's most effective campaigns and experiences, ensuring that their resources are allocated optimally.

b. **Hosting Health education virtual events and collaborating with health influencers.**

Within the metaverse, pharmacies may organize health education sessions directly related to their products and services. Audiences are able to obtain health-related information, consult with healthcare professionals, and even engage in gamified health challenges or wellness programs in the metaverse. In addition, collaborating with social media-savvy health influencers who resonate with Generations Alpha, Z, and Y can further amplify the impact of these initiatives. These influencers can utilize their influence and digital reach to promote virtual events, engage their followers, and promote participation. Their authenticity and relatability can aid in establishing a rapport with the intended audience, resulting in increased interest and participation in health education activities.

c. **Optimizing and integrating with existing marketing channels.**

It is essential to use XYZ Pharmacy's existing marketing channels to properly execute a campaign to promote awareness of XYZ Pharmacy's metaverse environment. These social media, which include Facebook, LinkedIn, and Instagram, are useful for informing and engaging XYZ Pharmacy target audience about the metaverse's accessibility and immersive experiences.

Through these channels, XYZ Pharmacy is able to promote the features and capabilities of the metaverse, highlighting the fact that it is accessible on any device. This information helps to clarify any misunderstandings or concerns regarding the metaverse and make it more accessible to a wider audience. XYZ Pharmacy can effectively reach and engage our target audience, which includes Generations Alpha, Z, and Y who are already active in the metaverse, by leveraging our existing marketing channels.

It's also important to recognize that not all age groups, especially those between 50 and 74, may be familiar with the metaverse. It becomes essential to maximize XYZ Pharmacy existing marketing channels in order to reach and engage this group effectively.

d. **Creating Virtual Assistant or Customer Service: look at SFA ITALIA Metaverse space.**

Create and develop virtual help desks and customer service centers where consumers can interact with agents in a virtual environment. Developing a virtual assistant or customer service within the metaverse can improve customer service. Without having to wait for a human representative, the virtual assistant can assist and guide consumers through the metaverse. This recommendation has been implemented by one of the company which is SFA ITALIA, you can see the example from this link (https://www.spatial.io/s/SFA-ITALIA-XPERIENCE-Showroom 643f3b7bcf98fa889d431468?share=7674268442656437146).

REFFERENCES

Abu-Khzam, F. N., & Lamaa, K. (2018). Efficient heuristic algorithms for positive-influence dominating set in social networks. *Conference on Computer Communications Workshops*. https://doi.org/10.1109/infcomw.2018.8406851

Age, A. (2022, April 21). Fidelity enters the metaverse with financial education. *Ad Age*. https://adage.com/article/digital-marketing-ad-tech-news/fidelity-opens-metaverse-activation-decentraland/2412596

Barnes, S. J., & Mattsson, J. (2011). Exploring the fit of real brands in the *Second Life*[1] virtual world. *Journal of Marketing Management*, *27*(9–10), 934–958. https://doi.org/10.1080/0267257x.2011.565686

Barone, A. (2023b, March 26). *Digital Marketing Overview: Types, Challenges, and Required Skills*. Investopedia. https://www.investopedia.com/terms/d/digital-marketing.asp

Barrera, K. G., & Shah, D. (2023b). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, *155*, 113420. https://doi.org/10.1016/j.jbusres.2022.113420

Benzaghta, M. A. (n.d.). *SWOT analysis applications: An integrative literature review*. Digital Commons @ University of South Florida. https://digitalcommons.usf.edu/globe/vol6/iss1/5/

Bloomberg. (2022, March 24). iMining Enters into Agreement for the First-Ever Metaverse Pharmacy to be Launched in Decentraland. *Bloomberg.com*. https://www.bloomberg.com/press-releases/2022-03-24/imining-enters-into-agreement-for-the-first-ever-metaverse-Pharmacy-to-be-launched-in-decentraland

Boyon, N. (2022, May 25). Enthusiasm for the metaverse and extended reality is highest in emerging countries. *Ipsos*. https://www.ipsos.com/en/global-advisor-metaverse-extended-reality-may-2022

Businesswire. (2021, December). *Spatial Unveils New Market Focus To Pioneer A Free And Open Metaverse With $25 Million In New Funding*. Businesswire. Retrieved May 10, 2023, from https://www.businesswire.com/news/home/20211214005169/en/Spatial-Unveils-New-Market-Focus-To-Pioneer-A-Free-And-Open-Metaverse-With-25-Million-In-New-Funding Statista. (2022a, May 2). *Global interest in metaverse experiences 2022, by generation*. https://www.statista.com/statistics/1305147/interest-in-trying-metaverse-experiences-worldwide-generation/

Clickthrough rate (CTR): Definition - Google Ads Help. (n.d.). https://support.google.com/google-ads/answer/2615875?hl=en#:~:text=CTR%20is%20the%20number%20of,your%20CTR%20would%20be%205%25.

Constantinides, E. (2006). The Marketing Mix Revisited: Towards the 21st Century Marketing. *Journal of Marketing Management*, *22*(3–4), 407–438. https://doi.org/10.1362/026725706776861190

Contributor, S. (2020, November 13). *What Digital Marketing Channels Are Right For Your Business?* Forbes. https://www.forbes.com/sites/square/2020/11/13/what-digital-marketing-channels-are-right-for-your-business/?sh=f51bf7a2d7a7

Council, B. (2023). 10 Best Metaverse Platforms to Watch Out in 2023. *Blockchain Council.* https://www.blockchain-council.org/metaverse/10-best-metaverse-platforms/

Decentraland. (2023, May 3). *FAQ.* Decentraland Documentation. https://docs.decentraland.org/player/general/faq/

Decentraland. (n.d.). *How Many DAU Does Decentraland Have?* https://decentraland.org/blog/announcements/how-many-dau-does-decentraland-have

Deloitte. (n.d.). *What do consumers think of the metaverse, virtual finance and gaming?* Deloitte Netherlands. https://www2.deloitte.com/nl/nl/pages/technologie-media-telecom/articles/what-do-consumers-think-of-the-metaverse-virtual-finance-and-gaming.html

Dolan, R., Conduit, J., Fahy, J. V., & Goodman, S. (2016). Social media engagement behaviour: a uses and gratifications perspective. *Journal of Strategic Marketing*, *24*(3–4), 261–277. https://doi.org/10.1080/0965254x.2015.1095222

Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B. A., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D., Gustafsson, A., Hinsch, C., Jebabli, I., . . . Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *66*, 102542. https://doi.org/10.1016/j.ijinfomgt.2022.102542

Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., Dutot, V., Felix, R., Filieri, R., Flavián, C., Gustafsson, A., Hinsch, C., Hollensen, S., Jain, V., Kim, J., Krishen, A. S., . . . Wirtz, J. (2022). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*. https://doi.org/10.1002/mar.21767

E. Pelton, L., Strutton, D., & R. Lumpkin, J. (n.d.). *Marketing Channels*. https://ebs.online.hw.ac.uk/documents/course-tasters/english/pdf/h17mc-bk-taster.pdf

Epic games. (n.d.). *What platforms or devices are compatible with Fortnite?* Epic Games. https://www.epicgames.com/help/en-US/fortnite-c5719335176219/technical-support-c5719372265755/what-platforms-or-devices-are-compatible-with-fortnite-a5720385202331#:~:text=Fortnite%20is%20a%20high%2Dfidelity,Mali%2DG72%20MP12%20or%20higer.

ERI Economic Research Institute. (n.d.). *Salary Expert - Marketing Manager Salary Amsterdam, Netherlands*. Salary Expert. https://www.salaryexpert.com/salary/job/marketing-manager/netherlands/amsterdam

Facebook. (n.d.). https://www.facebook.com/help/285625061456389

Fidelity Investments | Company Overview & News. (n.d.). Forbes. https://www.forbes.com/companies/fidelity-investments/?sh=636c279c370a

Gharbi, W. (n.d.). Unlocking the Potential of Metaverse Marketing: Strategies for Success. *www.linkedin.com*. https://www.linkedin.com/pulse/unlocking-potential-metaverse-marketing-strategies-success-gharbi/

Guesalaga, R. (2016). The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*, *54*, 71–79. https://doi.org/10.1016/j.indmarman.2015.12.002

Gürel, Ş., & Tat, M. (2017). SWOT ANALYSIS: A THEORETICAL REVIEW. *The Journal of International Social Research*, *10*(51), 994–1006. https://doi.org/10.17719/jisr.2017.1832

Heil, D. (2018). Reputation Risk. *The International Encyclopedia of Strategic Communication*, 1–6. https://doi.org/10.1002/9781119010722.iesc0150

Hollingsworth, S. (2022). R.I.P. to the Top 10 Failed Social Media Sites. *Search Engine Journal*. https://www.searchenginejournal.com/failed-social-media-sites/303421/#close

Ibrahim, D. (2023, March 28). *What Is the Fortnite Metaverse: Reality or Fiction? [2023]*. The Metaverse Insider. https://metaverseinsider.tech/2023/02/14/fortinte-metaverse/#:~:text=The%20Fortnite%20metaverse%20describes%20the,for%20its%20Battle%20Royale%20mode.

Indeed Editorial Team. (2022). What Is Reputation Risk? And Strategies to Minimise It. *Indeed Career Guide*. https://hk.indeed.com/career-advice/career-development/reputation-risk

Išoraitė, M. (2016). MARKETING MIX THEORETICAL ASPECTS. *International Journal of Research - Granthaalayah*, *4*(6), 25–37. https://doi.org/10.29121/granthaalayah.v4.i6.2016.2633

Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent Research on Team and Organizational Diversity: SWOT Analysis and Implications. *Journal of Management*, *29*(6), 801–830. https://doi.org/10.1016/s0149-2063_03_00080-1

Jin, S. A., & Sung, Y. (2009). The roles of spokes-avatars' personalities in brand communication in 3D virtual environments. *Journal of Brand Management*, *17*(5), 317–327. https://doi.org/10.1057/bm.2009.18

Joy, A., Zhu, Y., Peña, C., & Brouard, M. (2022). Digital future of luxury brands: Metaverse, digital fashion, and non-fungible tokens. *Strategic Change*, *31*(3), 337–343. https://doi.org/10.1002/jsc.2502

JPMorgan (JPM) Enters Metaverse, Unveils Virtual Onyx Lounge. (n.d.). Nasdaq. https://www.nasdaq.com/articles/jpmorgan-jpm-enters-metaverse-unveils-virtual-onyx-lounge#:~:text=JPMorgan%20Chase%20JPM%20became%20the,world%20based%20on%20blockchain%20technology.

Keeports, A., & Keeports, A. (2022, May 4). 5 Brands That Successfully Entered the Metaverse - Quantilus. *Quantilus*. https://quantilus.com/5-brands-that-successfully-entered-the-metaverse/

Keller, K. L., & Swaminathan, V. (2019). *Strategic Brand Management: Building, Measuring, and Managing Brand Equity, Global Edition*.

Kemp, S. & Data Reportal. (2023). Is Anyone Actually Using the Metaverse? — DataReportal – Global Digital Insights. *DataReportal – Global Digital Insights*. https://datareportal.com/reports/digital-2023-deep-dive-metaverse-in-reverse?utm_source=Global_Digital_Reports&utm_medium=Partner_Article&utm_campaign=Digital_2023 Siakam, C. (2023). Metaverse market- statistics for 2022-2023. *METAV.RS*. https://metav.rs/blog/metaverse-market-statistics-2022-2023/

Kenton, W. (2023). Marketing Mix: The 4 Ps of Marketing and How to Use Them. *Investopedia*. https://www.investopedia.com/terms/m/marketing-mix.asp#:~:text=The%20four%20primary%20elements%20of,creates%20value%20for%20the%20customer.

Key, T. M. (2017). Domains of Digital Marketing Channels in the Sharing Economy. *Journal of Marketing Channels*, *24*(1–2), 27–38. https://doi.org/10.1080/1046669x.2017.1346977

Kim, J. (2021). Advertising in the metaverse: Research agenda. Journal of Interactive Advertising, 21(3), 141–144.

Kotler, P., & Keller, K. L. (2007). Marketing management (12th ed.). Grada Publishing, a.s.

Kreps, D. M., & Kimppa, K. K. (2015c). Theorising Web 3.0: ICTs in a changing society. *Information Technology & People*, *28*(4), 726–741. https://doi.org/10.1108/itp-09-2015-0223

Landell, H. (2016). The Risk Matrix as a tool for risk analysis : How to apply existing theories in practice in order to overcome its limitations. -. https://www.diva-portal.org/smash/get/diva2:944825/FULLTEXT01.pdf

LandVault. (n.d.-b). *Prove metaverse marketing ROI with measurements and analytics*. LandVault - Metaverse Builders. https://landvault.io/blog/metaverse-marketing-roi

Landz. (2022, July 13). Side-by-Side Comparison of the Major Metaverse Platforms. *Medium*. https://medium.com/@landz_nft/side-by-side-comparison-of-the-major-metaverse-platforms-ec2c3fe8a21c

Lee, L. H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2021). All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda. *ArXiv (Cornell University)*. https://doi.org/10.48550/arxiv.2110.05352

LinkedIn Page analytics / LinkedIn Help. (n.d.). https://www.linkedin.com/help/linkedin/answer/a547077/linkedin-page-analytics?lang=en#:~:text=Gain%20insight%20into%20the%20performance,for%20all%20Page%20admin%20roles.

Luenendonk, M., & Luenendonk, M. (2019, September 18). Marketing Mix | Place in Four P's | Cleverism. *Cleverism*. https://www.cleverism.com/place-four-ps-marketing-mix/

M. (2022b, December 7). *Building the Metaverse Responsibly*. Meta. https://about.fb.com/news/2021/09/building-the-metaverse-responsibly/

Manola, S. (2023, January 16). *How to Calculate, Track, and Analyze Conversion Rates*. AB Tasty. https://www.abtasty.com/blog/calculate-analyze-conversions/

McLaughlin, J. (2022b). *Marketing in the Metaverse: a Guide to the Metaverse and Web 3.0 for Marketers and Brands*.

Meta. (n.d.). *Facebook Analytics Is No Longer Available*. Meta. Retrieved May 11, 2023, from https://www.facebook.com/business/help/966883707418907

Miao, C. F., Kozlenkova, I. V., Wang, H., Xie, T., & Palmatier, R. W. (2021). An Emerging Theory of Avatar Marketing. *Journal of Marketing*, *86*(1), 67–90. https://doi.org/10.1177/0022242921996646

Mileva, G. (2022, April 25). *20 Brands Leaping into the Metaverse*. Influencer Marketing Hub. https://influencermarketinghub.com/metaverse-brands/#toc-0

Mrad, M., Ramadan, Z. B., & Nasr, L. (2022). Computer-generated influencers: the rise of digital personalities. *Marketing Intelligence & Planning*, *40*(5), 589–603. https://doi.org/10.1108/mip-12-2021-0423

Mui, C. K., & Ming, L. T. (2020). A Critical Review on Impression Rate and Pattern on Social Media Sites. *International Conference on Digital Transformation and Applications (ICDXA) 2020*.

Munir, S. (2022). 23 Important Facebook Metrics You Should Track in 2022. *Social Champ*. https://www.socialchamp.io/blog/facebook-metrics/

Neiger, B. L., Thackeray, R., Van Wagenen, S. A., Hanson, C. L., West, J. H., Barnes, M. R., & Fagen, M. C. (2012). Use of Social Media in Health Promotion. *Health Promotion Practice*, *13*(2), 159–164. https://doi.org/10.1177/1524839911433467

Netherlands: share of daily internet user, by age | Statista. (2022, February 23). Statista. https://www.statista.com/statistics/1241851/netherlands-internet-users-use-accessed-internet-daily-age/

O'Guinn, T., Allen, C., Scheinbaum, A. C., & Semenik, R. J. (2018). *Advertising and Integrated Brand Promotion*. Cengage Learning.

Pham, V. (n.d.). FACEBOOK METRICS FOR BRAND AWARENESS MEASUREMENT. *www.linkedin.com*. https://www.linkedin.com/pulse/facebook-metrics-brand-awareness-measurement-josie-vy-pham/

Pośpiech, Ł. (2022, June 15). *10 Metaverse Marketing Challenges for Affiliate Marketers and Brands*. Zeropark Blog. https://zeropark.com/blog/metaverse-marketing-challenges/

Prabhu, A. (2022, December 30). *Top 10 Conversion Metrics for Digital Marketing*. Best OKR Software by Profit.co. https://www.profit.co/blog/kpis-library/top-10-conversion-metrics-for-digital-marketing

Roblox. (n.d.). *Computer Hardware & Operating System Requirements*. Roblox Support. https://en.help.roblox.com/hc/en-us/articles/203312800-Computer-Hardware-

Operating-System-Requirements#:~:text=System%20hardware%20requirements&text=Processor%3A%20Roblox%20recommends%20you%20have,issues%20with%20older%20AMD%20processors.&text=Storage%20Space%3A%20Roblox%20recommends%20you,storage%20space%20to%20install%20Roblox.

Romaniuk, J., Wight, S., & Faulkner, M. (2017). Brand awareness: revisiting an old metric for a new world. *Journal of Product & Brand Management*, *26*(5), 469–476. https://doi.org/10.1108/jpbm-06-2016-1242

Ryder, B. & Jing Daily. (2022). How To Quantify Your Brand's Success In Web3: Key Takeaways From The Geeiq x Jing Daily 'Measure Your Success In The Metaverse' Webinar. *Jing Daily*. https://jingdaily.com/web3-takeaways-geeiq-jing-daily-measure-success-metaverse-webinar/#:~:text=Traditional%20Web2%20metrics%20will%20still,and%20transactions%20on%20the%20blockchain.

SideQuest. (n.d.). *Decentraland VR on SideQuest - Oculus Quest Games & Apps including AppLab Games (Oculus App Lab)*. https://sidequestvr.com/app/11626

Solcansky, M., Sychrová, L., & Milichovský, F. (2011). MARKETING EFFECTIVENESS BY WAY OF METRICS. *ResearchGate*. https://www.researchgate.net/publication/228463982_MARKETING_EFFECTIVENESS_BY_WAY_OF_METRICS

Spatial announces Creator Toolkit powered by Unity | Auganix.org. (2022, December 16). Auganix.org.https://www.auganix.org/immersive-3d-social-platform-spatial-announces-creator-toolkit-powered-by-unity/

Spaziani, M. (2022). Comparing the most popular Metaverse Platforms. *Inglobe Technologies*. https://www.inglobetechnologies.com/metaverse-platforms/

Statista. (2022, August 10). *Netherlands Facebook users 2022, by age group*. https://www.statista.com/statistics/579352/age-distribution-of-facebook-users-in-the-netherlands/

Statista. (2022b, July 27). *Social media audiences in the Netherlands 2021, by social network*. https://www.statista.com/statistics/579626/social-media-penetration-in-the-netherlands-by-social-network/

Statista. (2023, February 17). *Roblox games global DAU as of Q4 2022, by region*. https://www.statista.com/statistics/1192586/daily-active-users-global-roblox-region/#:~:text=As%20of%20the%20fourth%20quarter,daily%20active%20users%20in%20Europe.

Thackeray, R., Neiger, B. L., Hanson, C. L., & McKenzie, J. F. (2008). Enhancin Promotional Strategies Within Social Marketing Programs: Use of Web 2.0 Social Media. *Health Promotion Practice*, *9*(4), 338–343. https://doi.org/10.1177/1524839908325335

Thanseer, A., Riyas, M., Mariappan, J., & Raghavan Edassery, J. (2022). Importance Of Marketing Mix In Successful Positioning Of Products And Their Services On The Market. *Journal of Positive School Psychology*, *6*. http://journalppw.com

Trunfio, M., & Rossi, S. (2022). Advances in Metaverse Investigation: Streams of Research and Future Agenda. *Virtual Worlds*, *1*(2), 103–129. https://doi.org/10.3390/virtualworlds1020007

US Census Bureau. (2021, October 8). *The Baby Boom Cohort in the United States: 2012 to 2060*. Census.gov. https://www.census.gov/library/publications/2014/demo/p25-1141.html

VDHR Advocaten. (n.d.). *Approach & Fees*. https://www.vdhradvocaten.nl/approach-fees

Web Traffic Sources Metric. (n.d.). https://www.klipfolio.com/resources/kpi-examples/digital-marketing/web-traffic-sources#:~:text=The%20Web%20Traffic%20Sources%20metric,banner%20ads%20or%20paid%20search.

What is a conversion rate? (n.d.). Optimizely. https://www.optimizely.com/optimization-glossary/conversion-rate/

Withana, S. (n.d.). Metaverse Marketing Metrics. *www.linkedin.com*. https://www.linkedin.com/pulse/metaverse-marketing-metrics-saliya-withana/

Y., & Carlson, N. (2021, October 27). *Five Organic Social Media Metrics Every Company Should Be Tracking*. Forbes. https://www.forbes.com/sites/theyec/2021/10/27/five-organic-social-media-metrics-every-company-should-be-tracking/?sh=6a03f3c1b10d