

#### How to Cite

Fahrizal, M., Diah, J. M., & Herdiansyah, D. (2024). The use of digital content in increasing consumer awareness and interest towards electric bicycles: A digital marketing approach. *International Journal of Business, Economics & Management*, 7(1), 27-34. <https://doi.org/10.21744/ijbem.v7n1.2250>

# The use of Digital Content in Increasing Consumer Awareness and Interest towards Electric Bicycles: A Digital Marketing Approach

**Meizi Fahrizal**

Politeknik Negeri Pontianak, Pontianak, Indonesia

Correspondent author Email: [meizi.fahrizal@yahoo.co.id](mailto:meizi.fahrizal@yahoo.co.id)

**Januardi M Diah**

Politeknik Negeri Pontianak, Pontianak, Indonesia

Email: [januardipolnep@gmail.com](mailto:januardipolnep@gmail.com)

**Dedi Herdiansyah**

Politeknik Negeri Pontianak, Pontianak, Indonesia

Email: [herdiansyahdedi@yahoo.com](mailto:herdiansyahdedi@yahoo.com)

**Abstract---***In efforts to promote environmentally friendly products like electric bicycles, digital marketing strategies continue to evolve to meet the informational and persuasive needs of potential consumers. This study aims to investigate the impact of digital content usage on increasing consumer awareness and interest in electric bicycles. The research method employed is a literature review, searching for related literature. The findings indicate that creative, educational, and interactive visual content plays a significant role in building brand awareness and driving consumer interest. A multi-platform strategy that utilizes social media, blogs, and email marketing has proven effective in reaching a broader target audience. Additionally, personalized content, the use of influencers, and interactive dialogue between the brand and consumers can enhance engagement and the likelihood of conversion. This research provides insights into best practices in digital marketing for sustainable products, offering strategic recommendations for electric bicycle industry players, and suggests directions for further research in digital marketing dynamics.*

**Keywords---***consumer awareness and interest, digital marketing, digital, electric bicycles, industry.*

## Introduction

The current technological advancements have made digital marketing one of the primary strategies for companies to reach their consumers. With the development of information technology, digital content now plays a crucial role in influencing consumer purchasing decisions. The benefit of digital as a form of marketing method using digital technologies has become a key element in promoting products and services. Product and service promotions conducted by many large and small companies through social media, websites, and mobile applications introduce brands in a way that can reach a broader audience more personally and interactively (Syahputra & Rahmawati, 2021; Setiawan, & Fadhillah, 2023). Digital technology also provides new and innovative platforms for marketing to connect their products with consumers more efficiently and effectively. One of the sectors beginning to feel the impact of the digital revolution is the electric bicycle industry (Ulm et al., 2021; Kiki & Hanifi, 2022).

The electric bicycle industry represents an advancement in transportation technology that combines the development of electric technology with human needs for sustainable and environmentally friendly transportation modes, such as pollution, rising fossil fuel prices, and the need for a healthy lifestyle (Purwanto et al., 2023). Electric bicycles have a small electric motor that provides a boost to the wheels when pedalling, usually powered by rechargeable batteries. This motor makes travel easier, especially on uphill roads, so the electric bicycle industry

includes various types of bicycles, including city bikes, mountain bikes, and folding bikes (Haryanto et al., 2021; Fauzi, 2020).

This shift towards digital marketing and the embracing of electric bicycles underlines a broader trend towards sustainability and technological integration in consumer products. Companies leveraging digital platforms to promote electric bicycles not only cater to the growing demand for eco-friendly transportation solutions but also align with consumer preferences for digital engagement and convenience. The emphasis on digital content, personalized marketing strategies, and the use of innovative technologies in marketing practices reflects the evolving landscape of consumer engagement and the importance of digital fluency in reaching and influencing target audiences (Stilo et al., 2021; Hallberg et al., 2021; Elliot et al., 2018).

This sustainable vehicle, promotion is growing more and more as part of a solution to climate change, so it requires effective marketing to attract consumer interest. Digital content plays an important role in bridging the gap between these technological innovations and emerging market opportunities (Li et al., 2020; Llopis-Albert et al., 2021). The electric bike industry, taking advantage of these developments, has implemented a variety of digital marketing tactics, such as content marketing, search engine optimization (SEO), and social media campaigns, to attract attention and build relationships with potential consumers (Saputra & Riyanto, 2020).

Electric bikes are considered one of the eco-friendly transportation solutions, on the other hand facing the challenge of raising consumer awareness and interest. Despite its many advantages, such as energy efficiency and its contribution to reducing air pollution, the adoption of electric bikes is still limited (Izzati, 2022; Siregar et al., 2023). This is due to a lack of consumer awareness and understanding of the benefits of electric bikes. Electric bikes have emerged as an environmentally friendly alternative to transportation, offering solutions to reduce carbon emissions and air pollution. The presence of electric bicycles is an attempt to maintain a balance between development and environmental conservation and also one of the alternative eco-friendly solutions, that offers great potential to reduce the carbon footprint and air Pollution in urban areas. Environmental crises, such as global warming, air pollution, and decreased quality of life, are serious concerns that require innovative and sustainable solutions (Salmeron-Manzano & Manzano-Agugliaro, 2018; McLoughlin et al., 2012).

On the other hand, electric bikes, by combining electric energy efficiency with human physical abilities, offer means of transport that are not only energy-efficient but also effective in reducing greenhouse gas emissions. The use of electric bikes as an alternative to urban transport supports global initiatives for the transition to a low-carbon economy, in line with the goals of sustainable development set by the United Nations (Popovich et al., 2014; Hung, & Lim, 2020).

Seeing the various benefits of electric bikes, the urgency of using electric bicycles as environmentally friendly solutions is quite high. First, electric bikes do not produce exhaust gas emissions like conventional motor vehicles, so their use can significantly reduce air pollution. Second, electric bikes can help overcome traffic jams. Electric bikes take far less space than electric cars, allowing for faster and more efficient mobility on crowded city streets. Third, electric bicycles are a more sustainable alternative to fossil-fuel vehicles. Its use can be one way to anticipate an increasing energy shortage (Kwiatkowski et al., 2021; Muetze & Tan, 2007).

Finally, although there are some challenges in the use of electric bikes, such as safety of use, initial costs, and charging infrastructure, however, the potential long-term benefits for the environment and urban communities cannot be ignored.

In this context, digital marketing not only serves as a promotion tool but also as a platform to educate and inform the public about the advantages and advantages of electric bikes over conventional vehicles. However, despite its enormous potential, the adoption of electric bikes still faces many obstacles, including a lack of consumer awareness and interest (Murti et al., 2023). Therefore, research into how digital marketing can raise consumers' consciousness and interest in electric bicycles has become highly relevant. Digital marketing, with its unique ability to reach a wide audience and provide relevant and interesting information, can play a key role in educating the public about the benefits of electric bikes and encouraging wider adoption (Bailey et al., 2015; Yang et al., 2021).

Thus, this study looks further into consumer awareness and interest in electric bikes, which are a product that should be placed and understood by consumers in the right way, considering challenges and obstacles such as security, cost, and availability of recharge infrastructure.

## Research Methods

A literary research method is one of the approaches in research that relies on written sources or library materials as primary data. This method is used to collect, review, and analyze findings from previous studies that are relevant to the research topic. In the context of research on "Use of Digital Content in Increasing Consumer Awareness and

Interest in Electric Bicycles: Digital Marketing Approaches," methods of literary research can be described as follows: 1) Selection of Literary Sources following the contexts of the research that has been done, 2) Literary search using keywords on the Internet, 3) Evaluation of literature taken (Earley, 2014; Williams, 2007).

Literary research methods enable researchers to gain an in-depth understanding of research topics through critical analysis of previous studies. In the context of digital marketing for electric bikes, this method can provide insight into effective strategies, consumer behaviour, and factors that influence awareness and interest in electric bicycles.

## Result and Discussion

### *Digital marketing theory*

Digital marketing is a marketing strategy that uses technology and the Internet to promote a product or service, taking into account local consumer habits and ongoing market trends. Digital marketing covers a variety of concepts, strategies, and practices used to promote products or services through digital channels. It is an evolution of traditional marketing that adapts to the needs and behavior of consumers in the digital age (Wahyudi et al., 2022; Afianti et al, 2023). Digital marketing is a conceptual understanding and strategy used to marketing goals through various digital channels. In this digital age, marketing is no longer limited to conventional media like television, radio, and print, but uses digital media to create brand awareness, generate prospects, and convert prospects into sales. By leveraging social media and popular online platforms in Indonesia, such as Instagram, Facebook, and YouTube, to increase the visibility of products or services offered (Chaffey & Ellis-Chadwick, 2019; Bala & Verma, 2018). By combining digital marketing strategies that match local preferences, companies can succeed in marketing their products or services in the Indonesian market.

Digital marketing has almost the same meaning as conventional marketing, which means achieving organizational goals through understanding, anticipation and satisfaction of customer needs. The distinctive is the channel used to connect a product or service to a consumer (Kannan, 2017).

Digital marketing involves the use of digital technology for marketing goals as well as an effort to develop or adapt marketing concepts themselves. Digital marketing can communicate in global coverage, provide two-way interaction between companies and consumers, and enable message personalization. Effective strategies in digital marketing include speed of distribution, appropriate media selection, and understanding consumer behaviour in the digital world. The strategy covers four main aspects, including; First, Understanding and Knowing the Target Audience. It is important to understand and recognize the target audience. It includes knowledge about consumer behavior, preferences, and shopping habits. Companies can use various methods of market research, such as online surveys, interviews, and focus groups to gain a deeper understanding of their audiences. Second, quality content creation. Creating high-quality content that is relevant to the target audience is the core digital marketing strategy. Content can be blog posts, infographics, videos, social media posts, email newsletters, and more. The aim is to attract and engage the audience, as well as promote the company's products or services. The third is SEO (Search Engine Optimization). The next digital marketing strategy is search engine optimization (SEO). SEO is about increasing the visibility of websites in search engines so that they can be reached by organic searches. This includes the use of relevant keywords, link building, and ensuring that websites are indexed by search engines. Fourth, Social Media Marketing. Social media is a powerful platform to reach and engage with the audience. Social media marketing strategies can cover everything from organic posting to specifically target paid campaigns. Fifth, analytics and reporting. Marketing analysis plays an important role in digital marketing strategies. Marketing analysis tools can provide valuable insights into how audiences interact with company content, products, or services. It can help companies make data-based decisions, and maximize their efficiency (Kingsnorth, 2022; Patrutiu-Baltes, 2016). By combining all these aspects, companies can create effective digital marketing strategies that can improve their reach and boost their business growth.

### *Digital marketing scope*

The scope of digital marketing covers a wide range of strategic and operational aspects that are used to promote products or services through digital technology (Kim et al., 2021; Krishen et al., 2021; Melović et al., 2020). Digital marketing is not limited to content, but it is an important part, including the creation and distribution of valuable and relevant content to attract and retain an audience. 2) Google Ads. Pay-per-view campaigns through Google Ads help companies reach their target audiences more efficiently through paid searches and display ads on the Google network. 3) Social Media. Implementing marketing strategies on social media platforms enables brands to interact with their audience, raise brand awareness, and drive conversions. 4) SEO and SEM (Search Engine Optimization

and Search Engine Marketing). SEO helps increase website visibility in search engines organically, while SEM covers paid aspects such as PPC (Pay-per-Click) to attract traffic. 5) Email marketing. Email communication is an effective way to interact with customers, provide information about products or services, and invite them to special events or offers. 6) Digital Marketing Offline. This includes marketing through digital media that does not require the use of the Internet, such as digital billboards, digital radio ads, and digital TV (Chaffey & Ellis-Chadwick, 2012; Bala & Verma, 2018).

The digital marketing scope shows a holistic approach that takes into account both online and offline strategies in creating and running marketing campaigns. With technological advances and changing consumer behaviour, the scope of digital marketing continues to expand, enabling brands to be more creative and innovative in building connections with their audiences.

### *Consumer behavior in digital marketing*

In digital marketing, consumer behavior refers to consumer actions, decisions, and mindsets when interacting with digital platforms, such as websites, social media, and apps. Consumer behaviour is the result of a variety of factors, including preferences, habits, and influences from the surrounding environment. In digital marketing, an in-depth understanding of consumer behavior can help marketers in designing more effective strategies (Az-Zahra, 2021).

Consumer behavior in digital marketing refers to the way individuals search, evaluate, choose, and use the products or services they find through digital channels. It is influenced by a variety of factors, ranging from personal preferences to the latest social and technological trends. In addition, consumer behavior can also be influenced by psychological factors, such as perceptions of product value, needs, and consumer motivation. By understanding these factors, marketers can optimize content strategies, promotions, and personalization of consumer experiences to better results. In the context of digital marketing in Indonesia, it is important to understand local consumer behavior, language preferences in digital interactions, and emerging consumer trends. Thus, marketers can adjust their strategy to be more relevant and attractive to the Indonesian market.

Some key aspects affect consumer behavior in digital marketing; first, accessibility of information. Consumers have access to unlimited information through the internet. Before making a purchase, they tend to search for reviews, compare prices, and study product specifications online. Second, brand trust. Brands that have a good reputation and are known to have high quality are often consumer preferences. Trust in a brand can be enhanced through interactive digital marketing and authentic content. Third, enriched user experience. Sites and apps with an intuitive user interface and a responsive user experience tend to attract consumers more effectively. Fourth, Personalization. Consumers tend to respond positively to targeted advertising and personalized recommendations based on their past behavioral data and preferences. Fifth, facilities and benefits. Factors such as free shipping costs, an easy return policy, and good customer service can influence online purchase decisions. Sixth, Social Media Impact. Recommendations from influencers, reviews from other users, and discussions in forums can influence consumer decisions. Seventh, FOMO (Fear of Missing Out). Marketing strategies like limited-time bids and flash sales can create a sense of urgency that drives quick purchasing decisions. Eight, Devices and Platforms. Devices used (like smartphones, tablets, or PCs) and platforms (like social media, email, or search engines) also have an impact on the way consumers interact with digital content. Ninth, Consumer Psychology. Psychological aspects such as emotion, perception, and motivation play a major role in the way consumers interact with brands and make purchasing decisions. Ten, Consumer Life Cycle. Consumer life stages (such as students, newlyweds, or retirees) can affect the type of product they are looking for and the digital media they are using. Eleventh, Technology Developments. New technologies like AI, VR, and AR offer new ways for brands to interact with consumers and can change their behavior (Guan, 2023; Mothersbaugh & Hawkins, 2016; Hidayat et al., 2022). Marketers must understand these factors to create campaigns that resonate with their target audience and drive conversions. They also need to constantly monitor trends and adaptations to changing consumer behaviour to remain relevant and effective.

### *Consumer decision-making process*

The consumer decision-making process is the steps a person goes through before, during, and after purchasing a product or service. In the business world, understanding the consumer decision-making process is crucial. This understanding enables companies to understand consumer behaviour and identify factors that influence purchasing decisions. The consumer decision-making process can involve several stages such as problem identification, information search, alternative evaluation, purchase decisions, and post-purchase behavior (Kamkankaew et al, 2022).

The importance of understanding the consumer decision-making process can help companies in designing more effective marketing strategies. By understanding what consumers consider when buying a product or service, companies can direct their marketing efforts to better target. In addition, an in-depth understanding of the consumer decision-making process can help the company develop new products or services that are better suited to the needs of the market. By knowing consumer preferences, the company can present more relevant innovations and market demand.

The decision-making process involves five main stages (Kotler et al., 2013); 1) Identification of Needs. This process begins when the consumer realizes that there is a need or desire to be met. It can be triggered by a variety of factors, including advertising, the introduction of new products, or changes in life situations. (misalnya, pindah rumah, memiliki anak). 2) Information search. Once consumers realize a need or desire, they will search for information to find the most suitable product or service. This process can include online research, asking for suggestions from friends or family, reading reviews, etc. 3) Alternative evaluation. Using the information that has been found, consumers will then evaluate the various products or services available in the market. This involves comparing factors such as price, quality, features, brand reputation, and other reviews. 4) Purchase Decision. After evaluating all available options, consumers then formulate their final decision and make a purchase. 5) Post-purchase. After purchasing and using a product or service, consumers will evaluate their level of satisfaction. If the product or services meet or exceed their expectations, this can lead to brand loyalty and recurring purchases in the future. Note that consumers can return to the previous phase at any time during this process. For example, they can go back to the search for information or alternative evaluation phase after trying to make a purchase decision.

### *The influence of social media and online content*

In the increasingly advanced and evolving digital era, social media and online content have become integral parts of daily life for most people. Social media and online content offer revolutionary ways to communicate, interact, share information, and seek entertainment. From Facebook, Instagram, Twitter, and LinkedIn to YouTube and blogs, social media and online content have changed how individuals interact with the world around them. However, the impact is not always positive. Like two sides of a coin, social media and online content also have side effects that can affect users both individually and societally (Ahmad & Rosli, 2023; Smith, 2011).

In a positive context, social media and online content connect users with a variety of information and provide platforms for discussion, sharing opinions, and interacting with people from different corners of the world. They also facilitate communication and collaboration, strengthen relationships between individuals, and offer opportunities for learning and self-development. Conversely, in a negative context, social media and online content can be sources of misinformation, hoaxes, online bullying, and privacy issues. Some studies also link social media use to an increased risk of mental health problems such as stress, anxiety, and depression.

The dual nature of social media and online content underscores the importance of navigating these platforms responsibly. Users need to be critical of the information they encounter, practice safe online behaviors, and be mindful of their digital well-being. Meanwhile, platforms and policymakers are called upon to enhance the positive aspects of these digital spaces while mitigating the negative impacts, ensuring a healthier online environment for all users.

Overall, it is crucial to have a comprehensive understanding of the influence of social media and online content, and how these technologies can be used most effectively and safely. This objective is achieved through digital education and awareness, both for individual users and for institutions and organizations using social media and online content as part of their strategies.

There are several significant influences of social media and online content, both positively and negatively. Positive aspects include; 1) Global Connectivity. Social media facilitates people's connection with friends, family, and communities without geographic limitations. This allows a wider exchange of ideas and cultures. 2) Access to Information. Online content provides unlimited access to information on various topics, from the latest news to educational tutorials, enhancing individuals' knowledge and skills. 3) Business Opportunities. Social media has become a critical marketing tool for businesses to reach a broader audience, boost brand awareness, and prompt sales. 4) Community Support. Many online communities are formed on social media, offering emotional support, motivation, and advice to members who share similar interests or conditions. However, negative aspects comprise; 1) Privacy Issues. Careless use of social media can pose privacy risks, with personal data potentially unintentionally shared with the public or third parties. 2) Misinformation. The spread of false or hoax information through social media can occur swiftly causing confusion and social issues. 3) Addiction. Excessive use of social media can lead to addiction, disrupt productivity, and negatively impact mental health, such as depression and anxiety. 4) Social



Comparison. Online content often only displays the best aspects of a person's life, leading to social comparisons and feelings of inadequacy among other users (Carrier et al., 2015; Akram & Kumar, 2017; Siddiqui & Singh, 2016).

Thus, the influence of social media and online content depends heavily on how individuals use and respond to it. Despite having many benefits, users need to be aware of potential risks and take steps to use them healthily and responsibly. This includes limiting the time spent online, using privacy settings wisely, and verifying the accuracy of information before sharing it.

## Conclusion

The use of digital content in marketing strategies for electric bikes has proven effective in raising consumer awareness and interest. Marketing strategies that leverage a variety of digital platforms, including social media, blogs, videos, and interactive content, provide new opportunities to reach potential consumers directly and personally. The strategic use of digital content in electric bike marketing not only increases consumer awareness and interest but also promotes transparency, dialogue, and long-term relationships between brands and consumers. Integration between quality content, multi-platform strategies, personalization, and educational-based approaches are key to success in leveraging the power of digital marketing for the growth of the electric bicycle market.

## Acknowledgements

Thank you for helping this manuscript so that it can also be accepted and published in international journals.

## References

- Afianti, Y., Ramadhani, N. A., Rahmi, A. R., & Madiistriyanto, H. (2023). Pemasaran Digital Efektif Dalam Platform Tokopedia: Studi Kasus. *Journal Of Comprehensive Science (Jcs)*, 2(7), 1324-1328.
- Ahmad, N. S., & Rosli, R. (2023). The Role of Social Media Content Marketing (SMCM) as a Digital Marketing Strategy towards the Internal Factors of Consumer Behavior among the Millennials. *Asia-Pacific Journal of Management and Technology (AJMT)*, 4(1), 35-41.
- Akram, W., & Kumar, R. (2017). A study on positive and negative effects of social media on society. *International journal of computer sciences and engineering*, 5(10), 351-354.
- Az-Zahra, N. S. (2021). Implementasi digital marketing sebagai strategi dalam meningkatkan pemasaran UMKM. In *NCOINS: National Conference Of Islamic Natural Science* (Vol. 1, No. 1, pp. 77-88).
- Bailey, J., Miele, A., & Axsen, J. (2015). Is awareness of public charging associated with consumer interest in plug-in electric vehicles?. *Transportation Research Part D: Transport and Environment*, 36, 1-9. <https://doi.org/10.1016/j.trd.2015.02.001>
- Bala, M., & Verma, D. (2018). A critical review of digital marketing. *M. Bala, D. Verma (2018). A Critical Review of Digital Marketing. International Journal of Management, IT & Engineering*, 8(10), 321-339.
- Carrier, L. M., Spradlin, A., Bunce, J. P., & Rosen, L. D. (2015). Virtual empathy: Positive and negative impacts of going online upon empathy in young adults. *Computers in Human Behavior*, 52, 39-48. <https://doi.org/10.1016/j.chb.2015.05.026>
- Chaffey, D., & Ellis-Chadwick, F. (2012). Digital marketing: strategy. *Implementation and*.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing*. Pearson uk.
- Earley, M. A. (2014). A synthesis of the literature on research methods education. *Teaching in Higher Education*, 19(3), 242-253.
- Elliot, T., McLaren, S. J., & Sims, R. (2018). Potential environmental impacts of electric bicycles replacing other transport modes in Wellington, New Zealand. *Sustainable Production and Consumption*, 16, 227-236. <https://doi.org/10.1016/j.spc.2018.08.007>
- Fauzi, A. (2020). *Analisa Konsumsi Daya Motor Listrik pada Sepeda Motor Hybrid dengan Variasi Laju Kecepatan Berbasis Microcontroller* (Doctoral dissertation, Universitas Pancasakti Tegal).
- Guan, Y. (2023). Consumer behavior analysis and marketing strategy optimization in the digital media environment. *Industrial Engineering and Innovation Management*, 6(10), 87-94.
- Hallberg, M., Rasmussen, T. K., & Rich, J. (2021). Modelling the impact of cycle superhighways and electric bicycles. *Transportation research part A: policy and practice*, 149, 397-418. <https://doi.org/10.1016/j.trip.2021.100347>

- Haryanto, H., Sulistyawati, S., Wibisono, K., & Laksono, D. T. (2021). Rancang Bangun Sepeda Listrik 250 Watt Dengan Pengaman NFC (Near Field Communication). *JEECOM Journal of Electrical Engineering and Computer*, 3(1), 22-27.
- Hidayat, M., Salam, R., Hidayat, Y. S., Sutira, A., & Nugrahanti, T. P. (2022). Sustainable Digital Marketing Strategy in the Perspective of Sustainable Development Goals. *Komitmen J. Ilm. Manaj*, 3(2), 100-106.
- Hung, N. B., & Lim, O. (2020). A review of history, development, design and research of electric bicycles. *Applied Energy*, 260, 114323. <https://doi.org/10.1016/j.apenergy.2019.114323>
- Izzati, M. A. (2022). *Analisis Performa Dan Daya Konsumsi Brushless Direct Current Motor 1000 Watt Pada Mobil Listrik Hykorasaki* (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Kamkankaew, P., Sribenjachot, S., Wongmahatlek, J., Phattarowas, V., & Khumwongpin, S. (2022). Reconsidering the Mystery of Digital Marketing Strategy in the Technological Environment: Opportunities and Challenges in Digital Consumer Behavior. *International Journal of Sociologies and Anthropologies Science Reviews*, 2(4), 43-60.
- Kannan, P. K. (2017). Digital marketing: A framework, review and research agenda. *International journal of research in marketing*, 34(1), 22-45. <https://doi.org/10.1016/j.ijresmar.2016.11.006>
- Kiki, D. I., & Hanifi, R. (2022). Simulation Analysis Of Ergonomic Design Of Electric Motorbike Frames For Residential Communities. *TRAKSI*, 22(2), 162-174.
- Kim, J., Kang, S., & Lee, K. H. (2021). Evolution of digital marketing communication: Bibliometric analysis and network visualization from key articles. *Journal of Business Research*, 130, 552-563. <https://doi.org/10.1016/j.jbusres.2019.09.043>
- Kingsnorth, S. (2022). *Digital marketing strategy: an integrated approach to online marketing*. Kogan Page Publishers.
- Kotler, P., Armstrong, G., Harris, L. C., & Piercy, N. (2013). *Principles of Marketing PDF eBook*. Pearson Higher Ed.
- Krishen, A. S., Dwivedi, Y. K., Bindu, N., & Kumar, K. S. (2021). A broad overview of interactive digital marketing: A bibliometric network analysis. *Journal of Business Research*, 131, 183-195. <https://doi.org/10.1016/j.jbusres.2021.03.061>
- Kwiatkowski, M. A., Grzelak-Kostulska, E., & Biegańska, J. (2021). Could it be a bike for everyone? The electric bicycle in Poland. *Energies*, 14(16), 4878.
- Li, Y., Dai, J., & Cui, L. (2020). The impact of digital technologies on economic and environmental performance in the context of industry 4.0: A moderated mediation model. *International Journal of Production Economics*, 229, 107777. <https://doi.org/10.1016/j.ijpe.2020.107777>
- Llopis-Albert, C., Rubio, F., & Valero, F. (2021). Impact of digital transformation on the automotive industry. *Technological forecasting and social change*, 162, 120343. <https://doi.org/10.1016/j.techfore.2020.120343>
- McLoughlin, I. V., Narendra, I. K., Koh, L. H., Nguyen, Q. H., Seshadri, B., Zeng, W., & Yao, C. (2012). Campus mobility for the future: the electric bicycle. *Journal of Transportation Technologies*, 2(01), 1.
- Melović, B., Jocović, M., Dabić, M., Vulić, T. B., & Dudic, B. (2020). The impact of digital transformation and digital marketing on the brand promotion, positioning and electronic business in Montenegro. *Technology in Society*, 63, 101425. <https://doi.org/10.1016/j.techsoc.2020.101425>
- Mothersbaugh, D. L., & Hawkins, D. I. (2016). *Consumer behavior: Building marketing strategy*. McGraw-Hill.
- Muetze, A., & Tan, Y. C. (2007). Electric bicycles-A performance evaluation. *IEEE Industry Applications Magazine*, 13(4), 12-21.
- Murti, A. K., Endrawati, T., Kurniawan, M. S., Sutjiatmo, B. P., & Wicaksono, A. R. A. (2023). Digital marketing strategy for business services: A case study of a financial services company. *International Journal of Business, Economics & Management*, 6(3), 255-262. <https://doi.org/10.21744/ijbem.v6n3.2188>
- Patruti-Baltes, L. (2016). Inbound Marketing-the most important digital marketing strategy. *Bulletin of the Transilvania University of Brasov. Series V: Economic Sciences*, 61-68.
- Popovich, N., Gordon, E., Shao, Z., Xing, Y., Wang, Y., & Handy, S. (2014). Experiences of electric bicycle users in the Sacramento, California area. *Travel Behaviour and Society*, 1(2), 37-44. <https://doi.org/10.1016/j.tbs.2013.10.006>
- Purwanto, W., Yogandi, K. I., Saputra, R. A., Ariati, C., Putra, D. S., & Ikhsan, A. (2023). Exploration of an Electrical Energy Harvesting System Utilizing the Flow of Exhaust Emissions on a Motorcycle. In *2023 International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIMIA)* (pp. 528-532). IEEE.

- Salmeron-Manzano, E., & Manzano-Agugliaro, F. (2018). The electric bicycle: Worldwide research trends. *Energies*, 11(7), 1894.
- Saputra, A. N. A., & Riyanto, I. (2020). Rancang Bangun Sepeda Portable Charging Station 12V 6W. *MAESTRO*, 3(2), 384-393.
- Setiawan, E. A., & Fadhilah, M. (2023). Strategis Promosi Digital Marketing Pada Distributor Keramik Di Yogyakarta. *Jurnal Teknologi Dan Manajemen Industri Terapan*, 2(4), 287-292.
- Siddiqui, S., & Singh, T. (2016). Social media its impact with positive and negative aspects. *International journal of computer applications technology and research*, 5(2), 71-75.
- Siregar, R., Siahaan, H. H., Maulana, A. A., & Jabbaruladli, H. G. Analisis Sistem Mekanik Beserta Unjuk Kerja Sepeda Listrik dengan Metode Reverse Engineering sebagai Sarana Transportasi Ramah Lingkungan. *ROTASI*, 25(3), 9-15.
- Smith, K. T. (2011). Digital marketing strategies that Millennials find appealing, motivating, or just annoying. *Journal of Strategic marketing*, 19(6), 489-499.
- Stilo, L., Segura-Velandia, D., Lugo, H., Conway, P. P., & West, A. A. (2021). Electric bicycles, next generation low carbon transport systems: A survey. *Transportation Research Interdisciplinary Perspectives*, 10, 100347. <https://doi.org/10.1016/j.trip.2021.100347>
- Syahputra, H., & Rahmawati, S. (2021). Pengenalan Teknologi Digital untuk Media Promosi. *Majalah Ilmiah UPI YPTK*, 60-66.
- Ulum, M., Hikmah, M., Ibaidillah, A. F., & Wibisono, K. A. (2021). Rancang Bangun Sepeda Listrik 250 Watt Dengan Mengukur Kecepatan Dan Daya Baterai. *Jurnal JEETech*, 2(1), 8-14.
- Wahyudi, W., Mukrodi, M., Sugiarti, E., Marayasa, I. N., & Mawardi, S. (2022). Mengenal Pemasaran Digital Dan Market Place: Solusi Meningkatkan Penjualan di Masa Pandemi Covid-19. *Jurnal PKM Manajemen Bisnis*, 2(1), 44-53.
- Williams, C. (2007). Research methods. *Journal of Business & Economics Research (JBER)*, 5(3).
- Yang, L., Arnold, N. L., Drape, T., Williams, R. C., Archibald, T., Chapman, B., & Boyer, R. (2021). A survey of United States consumer awareness, purchasing, and handling of mechanically tenderized beef products. *Food Control*, 120, 107505. <https://doi.org/10.1016/j.foodcont.2020.107505>