

Impact of Web 2.0 on Media Industry: Opportunities, Challenges, and Emerging Trends

Suleiman GARBA, Abdullahi ADAMU, Safina Sanusi SABO,

Abstract

This paper investigated the impact of Web 2.0 on the media industry, which have led to the democratization of content creation and distribution, as well as the emergence of innovative content delivery methods. Traditional media outlets, such as television, radio, and newspapers, are being challenged by new approaches such as podcasting, webcasting, and streaming, which offer faster, more targeted, and interactive content delivery with a higher degree of customization. The interactive nature of Web 2.0 has also opened up opportunities for content creators to generate revenue through advertising, sponsorships, and subscriptions. However, the adoption of these novel approaches presents both challenges and opportunities, which this paper explores in terms of their applications, benefits, and drawbacks. The study utilized the theoretical framework of technological determinism as its anchor, and employed a conceptual analysis method that drew upon relevant existing literature. The conclusion emphasizes the importance of staying informed about emerging trends and opportunities to maintain a sustainable and audience-focused media landscape. Media professionals and organizations need to adapt to the changing dynamics of the industry by embracing new technologies and exploring innovative ways to engage with their audiences. Among other recommendations, it is advised that the media industry acknowledges and harnesses the potential of Web 2.0 to leverage these opportunities for enhancing content delivery, broadening their audience reach, and creating new revenue streams.

Keywords: *Web 2.0, ICTs, Podcasting, Webcasting, Streaming, Web.*

Introduction

The emergence of Web 2.0 has transformed the media industry, creating new channels and platforms for content distribution, and democratising media production and distribution. Web 2.0 refers to the newer version or generation of the internet. It's like an upgrade that made the internet more interactive and dynamic. In Web 2.0, websites are not just places to read information anymore. They now allow people to actively participate and share their own content. It's all about user involvement and collaboration (O'Reilly, 2005). Traditional media outlets such as television, radio, and newspapers were once the sole means of delivering content to audiences, but the emergence of podcasting, webcasting, and streaming has redefined the concept of broadcast and challenged the traditional gatekeepers of the media industry (Kim & Kim, 2013).

As Kozinets (2010) notes, the advent of Web 2.0 has challenged the traditional gatekeepers of the media industry by democratizing media production and distribution. The emergence of podcasting, webcasting, and streaming has enabled ordinary people to create and distribute content to a global audience without significant financial investment or technical expertise. This has led to a diversification of content and an increase in the number of voices and perspectives represented in the media.

The significance of these innovative approaches lies in their ability to provide faster, more targeted, and more interactive content delivery than traditional media could have ever imagined. Li and Bernoff (2008) argue that these novel approaches have enabled content to be delivered instantly and with a much higher level of customization than was previously possible. Kang (2015) further argues that these approaches have created opportunities for audience participation, feedback, and collaboration, resulting in a more engaged and connected audience.

Moreover, the interactive nature of Web 2.0 has opened doors for a variety of revenue streams for innovative broadcasters and webcasters who can optimize the value of their content. Eisenmann, Parker, and Van Alstyne (2006) note that the interactive nature of Web 2.0 provides opportunities for content creators to monetize their content through advertising, sponsorships, and subscriptions, among other means. This has the potential to create a more sustainable media industry with a greater focus on the needs and preferences of the audience.

In light of these developments, the aim of this paper is to explore the significance, types, applications, and future prospects of the innovative approaches to content delivery in the media industry.

Definition and Characteristics of Web 2.0

Web 2.0 is a term that was first coined in 2004 by Tim O'Reilly, the founder of O'Reilly Media (O'Reilly, 2005). According to O'Reilly, Web 2.0 is a term used to describe the second generation of the World Wide Web, characterized by the transition from static web pages to dynamic and interactive web applications.

Web 2.0 is distinguished by several key characteristics, including user-generated content, social networking, and the use of web applications (O'Reilly, 2005). The term also describes the shift from a web of documents to a web of data, where information is not only published on the web but is also linked and shared in a meaningful way (Anderson, 2007).

Web 2.0 is also characterized by the concept of the long tail, where the internet allows for the distribution of a vast amount of niche content, as opposed to the traditional media model, which focused on a small number of mainstream products (Anderson, 2007). In addition, Web 2.0 is characterized by the use of rich user interfaces, which enable users to interact with web applications in a more intuitive and user-friendly manner (O'Reilly, 2005). Thus, Web 2.0 represents a shift towards a more user-centric and collaborative approach to the web, with an emphasis on sharing, openness, and interactivity (O'Reilly, 2005).

Importance of Information and Communication Technologies (ICTs) in the Media Industry

Information and Communication Technologies (ICTs) have played a significant role in the media industry, transforming the way information is created, distributed, and consumed. According to Ito and Okabe (2005), ICTs have brought about a new paradigm in the media industry, characterised by the emergence of user-generated content, greater interactivity and collaboration, and the convergence of media platforms. This has led to the democratisation of media production and distribution, with individuals and organisations having greater control over the content they create and distribute.

One of the primary contributions of ICTs to the media industry has been the creation of new channels and platforms for content delivery. As noted by Kozinets (2010), traditional media outlets such as radio, television, and newspapers were once the only means of delivering content to audiences. However, the emergence of the internet and ICTs has created new channels and platforms such as podcasts, webcasts, and streaming, which have redefined the concept of broadcast and have led to a diversification of content. Moreover, ICTs have facilitated greater audience participation and engagement, as noted by Kang (2015). With the rise of social media platforms and mobile devices, audiences can now participate in the creation and distributions of content, provide feedback and commentary, and collaborate with content creators. This has led to a more engaged and connected audience, as well as greater diversity in the perspectives and voices represented in the media.

ICTs have also had a significant impact on the revenue models of the media industry. According to Eisenmann, Parker, and Van Alstyne (2006), the interactive nature of Web 2.0 provides opportunities for content creators to monetize their content through advertising, sponsorships, and subscriptions, among

other means. This has opened up new revenue streams for innovative broadcasters and webcasters, leading to a more sustainable media industry.

Worthy of note is that, ICTs have facilitated greater data collection and analysis in the media industry, allowing media organisations to better understand their audience and tailor their content to meet their needs and preferences. As noted by Li and Bernoff (2008), the significance of ICTs lies in their ability to provide faster, more targeted, and more interactive content delivery than traditional media. This has enabled media organisations to collect data on their audience's preferences and behaviour, and to use this data to optimise the value of their content. However, ICTs have had a transformative impact on the media industry, redefining the concept of broadcast, facilitating greater audience engagement and participation, opening up new revenue streams, and enabling greater data collection and analysis.

The Pros and Cons of Traditional Media Content Delivery Methods

According to Kozinets (2010), traditional media outlets such as television, newspapers, and radio were once the only means of delivering content to audiences before the emergence of the internet and digital technologies. Despite the overshadowing effect of digital technologies, traditional media content delivery methods still hold significant importance in the media industry.

One of the main advantages of traditional media content delivery methods is their ability to reach a wide audience. Print media, for example, can reach a large number of readers through newspapers, magazines, and books. Television and radio can also reach a large audience through broadcast networks. According to McQuail (2010), traditional media have a mass reach and are capable of reaching large audiences, particularly those that are geographically dispersed.

Another advantage of traditional media content delivery methods is their reliability and credibility. For instance, newspapers and magazines have built a reputation for accuracy and reliability over time, making them a trusted source of information for many readers (McQuail, 2010). Similarly, television and radio news programs have long been relied upon for up-to-date information and breaking news.

Despite these advantages, traditional media content delivery methods have several limitations. One limitation is the high cost of production and distribution. Print media, for example, requires significant investments in printing equipment, distribution networks, and editorial staff. Similarly, television and radio production requires expensive equipment and skilled technicians. McQuail (2010) notes that traditional media are costly to produce and distribute and are therefore typically dominated by large media conglomerates.

Another limitation of traditional media content delivery methods is their limited interactivity. Traditional media are typically one-way communication channels, with little opportunity for audience participation and feedback. Print media, for example, provides limited opportunities for readers to interact with the content or contribute their own ideas. Similarly, television and radio programming are typically pre-recorded and do not allow for real-time audience feedback or interaction.

Thus, while traditional media content delivery methods have several advantages, including their wide reach and credibility, they are limited by their high cost of production and distribution, as well as their limited interactivity. The emergence of digital technologies has created new opportunities for media production, distribution, and consumption, challenging the dominance of traditional media and providing new avenues for audience engagement and interactivity.

The Emergence of Novel Approaches to Content Delivery

Podcasting, webcasting, and streaming are novel approaches to content delivery that have emerged with the advent of Web 2.0. They have redefined the concept of broadcast and have led to the democratization of media production and distribution.

Podcasting refers to the creation and distribution of audio files, typically in an episodic series, which users can download and listen to on a variety of devices (Russell & Shepherd, 2010). Podcasting offers a platform for a diverse range of voices to create and distribute content to a global audience, without the need for significant financial investment or technical expertise. Examples of popular podcasts include "Serial," "This American Life," and "The Joe Rogan Experience."

Webcasting, on the other hand, refers to the streaming of live audio and video content over the internet (Hsieh & Liang, 2014). It provides a platform for broadcasting events, presentations, and other live content to a global audience, in real-time. Webcasting has become increasingly popular in corporate settings, where it is used for webinars, product launches, and other types of corporate communications. Examples of popular webcasting platforms include Zoom, Google Meet, and Microsoft Teams.

Streaming, in its broadest sense, refers to the delivery of audio and video content over the internet (Duffy, 2018). It has become an increasingly popular means of distributing and consuming media content, with a wide range of streaming platforms available for music, TV shows, movies, and other types of content. Examples of popular streaming platforms include Netflix, Hulu, and Amazon Prime Video. Streaming has also become popular for live events, such as sports matches and concerts, with services like YouTube Live and Twitch providing platforms for live streaming.

The Evolution of Media Delivery: Novel Approaches vs Traditional Methods

Traditional media delivery methods such as print media, television, radio, and film have been the primary means of content delivery for many decades. However, the advent of Web 2.0 has brought about novel approaches to content delivery that have revolutionized the media industry.

According to Kang (2015), traditional media delivery methods are characterized by one-way communication, where the content is created by a few select gatekeepers and delivered to a passive audience. In contrast, novel approaches to content delivery, such as podcasting, webcasting, and streaming, are characterized by two-way communication, where the audience can actively engage with the content and the content creators.

Podcasting, webcasting, and streaming are some of the novel approaches that have redefined the concept of broadcast and have led to the democratization of media production and distribution (Jenkins, 2006). These approaches have created opportunities for a much larger audience in the workplace, home, and around the world, with the potential for audience participation, feedback, and collaboration (Kang, 2015). Moreover, these new approaches have opened doors for a variety of revenue streams for innovative broadcasters and webcasters who can satisfy their audience's needs and optimize the value of their content (Eisenmann, Parker, & Van Alstyne, 2006).

Thus, traditional media delivery methods are limited in their ability to provide audience participation and engagement. They rely heavily on the expertise and resources of a few select gatekeepers, who determine the content that is delivered to the audience (Chaffee & Metzger, 2001). This approach can limit the diversity of voices and perspectives represented in the media, as well as the ability of the audience to engage with and provide feedback on the content.

However, while traditional media delivery methods have played an important role in the media industry, novel approaches to content delivery have brought about significant changes and opportunities for audience engagement and participation.

Advantages and disadvantages associated with each delivery method

Podcasting

According to (Cai & Huang, 2021), podcasting is highly convenient as it offers a flexible and accessible platform for people to consume content anytime and anywhere. Additionally, compared to traditional media outlets, podcasts are relatively inexpensive to produce and distribute, making them a cost-effective option for content creators. However, podcasting also has its limitations, as it lacks visual stimulation and limited monetization options.

Webcasting

As per (Gillmor & Newman, 2010), webcasts offer real-time interaction between the audience and the host, allowing for immediate feedback and engagement, making them highly interactive. Additionally, webcasts can generate revenue through advertising, sponsorships, pay-per-view, and other means, providing greater monetization options. However, webcasting can be challenging in certain locations due to technical issues, and it can be more expensive to produce than podcasts.

Streaming

According to (van der Sar, 2020), streaming is highly convenient and accessible, allowing users to access high-quality media content from anywhere with an internet connection. Additionally, streaming platforms use algorithms to recommend media content based on the user's viewing habits and preferences, providing personalized recommendations. However, streaming platforms may have limited control over the content they offer, leading to issues with censorship and copyright infringement. Additionally, streaming does not allow for permanent ownership of media content, as the content is stored on their servers.

Applications of Emerging Media Approaches

Podcasting, webcasting, and streaming have been utilized in various industries and contexts to deliver content in a targeted and instantaneous manner. One successful implementation of podcasting is the NPR podcast "Serial," which became a cultural phenomenon with millions of downloads. The podcast is a true crime series that tells a single story over the course of several episodes, showcasing how podcasting can cater to niche interests and engage listeners over an extended period of time (Krasodonski-Jones, 2018).

Webcasting has been utilized in various industries, such as education, to deliver real-time content to a remote audience. For example, the University of Southern California used webcasting to deliver lectures to students who were unable to attend classes in person (Wainwright, 2011).

Streaming has revolutionized the entertainment industry, allowing for easy and instant access to high-quality media content. One successful example is Netflix, which has disrupted traditional media delivery methods and has been able to create and distribute its own content directly to consumers (Bielby & Harrington, 2009).

Moreover, the emerging media approaches like podcasting, webcasting, and streaming have opened up new possibilities for businesses and individuals to connect with their target audiences in creative and impactful ways. Here are some additional applications of these approaches:

Marketing: Podcasts and webcasts are an effective way to promote products and services to a targeted audience. Companies can create branded podcasts that showcase their expertise, highlight new product releases, or feature customer success stories. Webcasts can be used to launch new products or provide demonstrations, training, or Q&A sessions. Nareeman and Al-Amarat (2019) argued that podcasts are an effective marketing tool as they allow businesses to reach a targeted audience, build brand awareness, and establish thought leadership. Similarly, Kietzmann and Hermkens (2011) highlighted that webcasts are a useful tool for product demonstrations, training, and Q&A sessions, which can help businesses engage with their customers and generate leads.

Education: In the realm of education, podcasting and webcasting have been widely adopted as a way to deliver educational content. Krasodonski-Jones (2018) notes that podcasting has been particularly effective in delivering educational content to learners who have busy schedules or prefer to learn at their own pace. Similarly, Wainwright (2011) highlights that webcasting can be used to deliver live classes, virtual field trips, or interactive discussions, which can provide students with a more engaging and immersive learning experience.

News and Journalism: In a study on the use of podcasts in journalism, Moragas-Fernandez and Masip (2015) note that podcasts can offer a unique way to deliver news content that is engaging and accessible to audiences. They argue that podcasts can provide in-depth analysis and commentary on news events, as well as feature interviews with newsmakers and experts. Podcasting and webcasting have enabled news organizations to deliver news and current events in real-time. Webcasts can be used to live stream press conferences, breaking news events, and interviews with experts. Podcasts can offer in-depth analysis, interviews with newsmakers, and commentary on current events.

Entertainment: The impact of streaming services on the entertainment industry has been widely discussed in academic literature. A study by Elberse and Gupta (2013) notes that streaming services like Netflix have disrupted traditional media delivery methods and have been able to create and distribute their own content directly to consumers. They argue that this has fundamentally changed the way we consume entertainment. Podcasts have also gained popularity in the entertainment industry, with many comedians, actors, and musicians creating their own podcasts to connect with fans.

Health and Wellness: In the health and wellness industry, a study by Kuo, Liu, and Ma (2013) explores the use of podcasting to deliver health information to consumers. The study notes that podcasts can provide a convenient and accessible way for experts to share information and advice on topics like nutrition, fitness, and mental health. Podcasting and webcasting have become popular in the health and wellness industry. Experts can create podcasts that offer advice on nutrition, fitness, and mental health. Webcasts can be used to deliver live workouts or yoga classes.

The Boundless Potential of Emerging Media Approaches

There is significant potential for further advancements and innovations in podcasting, webcasting, and streaming, as these approaches continue to shape the media landscape. According to Gupta et al. (2020), advancements in artificial intelligence, machine learning, and data analytics are likely to play a crucial role in the future of podcasting, enabling personalized content recommendations and enhanced listener engagement. Similarly, Gao et al. (2021) suggest that advancements in 5G technology will enable faster and more reliable streaming, with increased capacity and reduced latency.

Furthermore, there is significant potential for the integration of these approaches with virtual and augmented reality technologies. As noted by O'Hanlon and O'Hare (2021), virtual and augmented reality could transform the way in which webcasting and streaming are experienced, creating immersive and interactive environments that enable greater audience engagement. Similarly, podcasting could be

enhanced through the use of virtual assistants and other voice-activated technologies, as noted by Kılıç and Kılıç (2019), which would enable more intuitive and interactive listening experiences.

Overall, it is clear that podcasting, webcasting, and streaming will continue to evolve and innovate, driven by advancements in technology and changing audience preferences. As noted by Hulme (2020), the future of these approaches lies in their ability to offer personalized and immersive experiences that enable audiences to engage with media content in new and exciting ways.

Challenges and Opportunities

The challenges and opportunities in podcasting, webcasting, and streaming are influenced by different factors, such as advancements in technology, evolving consumer habits, and transformations in the industry. The following scholarly excerpts provide an assessment of the opportunities and challenges in these domains:

Technological Challenges and Opportunities: New technologies have opened up a whole range of possibilities for audio-visual content, with new formats and business models emerging as a result. These developments have led to an increased need for industry players to innovate and experiment with new approaches to content creation, distribution, and monetization (Hutchins & Rowe, 2019). Emerging technologies such as virtual reality (VR) and augmented reality (AR) are likely to shape the future of streaming and webcasting, allowing for more immersive and interactive experiences for users (Sintonen&Malmelin, 2019).

Consumer Behaviour Challenges and Opportunities: As consumer behaviours continue to shift towards mobile and on-demand consumption, podcasting and streaming services will need to adapt their content offerings and delivery methods to meet changing consumer needs (Lambert & Lovejoy, 2018).Podcasts have become popular among consumers seeking alternative forms of entertainment, including those who want to consume content on the go or in situations where visual media is not practical (Baird &Paraschakis, 2019).

Industry Challenges and Opportunities: The media industry is facing a range of challenges, including declining traditional media revenues, increased competition from digital platforms, and changing consumer expectations. These challenges have created opportunities for innovative and agile players to disrupt traditional models and create new business models (Newman et al., 2019).Webcasting and streaming have enabled the creation of niche markets and the development of new revenue streams for content creators, including subscription-based models, pay-per-view models, and advertising-based models (Napoli et al., 2018).

Overall, while there are various challenges and opportunities in podcasting, webcasting, and streaming, advancements in technology, changing consumer behaviours, and shifting industry landscapes offer exciting possibilities for the future of these mediums.

Theoretical Framework

This study is anchored on the technological determinism theory. Throughout history, several scholars and theorists, such as Karl Marx, Lewis Mumford, Jacques Ellul, and Marshall McLuhan, among others, have put forward the theory of technological determinism. However, it was Thorstein Veblen, an American historian and sociologist, who popularized the concept through his book "The Theory of the Leisure Class," which was published in 1899. Technological determinism is a theory that suggests that technology is the driving force behind social and cultural change. It proposes that technology shapes and influences human behavior, values, and beliefs, rather than the other way around. Technological determinism is the belief that technology drives social and cultural change. In the case of Web 2.0 and its impact on the media industry, technological determinism suggests that the emergence of new content delivery methods

has fundamentally altered the media landscape, democratizing production and distribution and challenging traditional gatekeepers. This theory helps to explain how Web 2.0 has brought about significant changes in the media industry, and why it is important to study the significance and future prospects of these innovative approaches to content delivery.

Methodology

The methodology employed in this study is a conceptual analysis approach using relevant extant literature. By analysing existing literature, such as academic articles, case studies, and industry reports, the study aims to gain insights into the impact of Web 2.0 on the media industry. This approach allows for a comprehensive examination of the subject matter, ensuring a thorough understanding of the opportunities, challenges, and emerging trends associated with Web 2.0.

However, the reason for chosen this methodology is its ability to conduct a comprehensive analysis. By analysing a wide range of literature sources, the study ensures a thorough exploration of the impact of Web 2.0 on the media industry. It considers various perspectives, enabling a comprehensive understanding of the subject matter.

Additionally, the methodology draws upon relevant extant literature, relying on existing knowledge and insights from experts in the field. This strengthens the credibility of the study and ensures it is grounded in established research and industry practices.

Therefore, the chosen methodology of a conceptual analysis approach using relevant extant literature provides a strong basis for understanding the impact of Web 2.0 on the media industry. It allows for a comprehensive exploration of the opportunities, challenges, and emerging trends associated with Web 2.0 technologies in the media landscape.

Conclusion

The emergence of Web 2.0 has brought significant changes to the media industry, challenging traditional gatekeepers, and democratizing content production and distribution. The innovative approaches to content delivery associated with Web 2.0 have enabled faster, more targeted, and more interactive content delivery with a higher level of customization than was previously possible. Additionally, the interactive nature of Web 2.0 has opened up revenue streams for content creators through advertising, sponsorships, and subscriptions, among other means. However, the adoption of these novel approaches is not without challenges, and there are pros and cons associated with both traditional and emerging content delivery methods. The aim of this paper was to investigate the importance, types, implementations, and potential prospects of inventive content delivery approaches in the media industry. The paper employed the theoretical framework of technological determinism to analyze the subject matter. It is evident that the media industry will continue to undergo further transformation, and it is crucial to stay informed about emerging trends and opportunities to sustain an audience-centric and stable media environment.

References

- Anderson, C. (2007). *The Long Tail: Why the Future of Business Is Selling Less of More*. Hyperion.
- Bielby, D. D., & Harrington, C. L. (2009). *Hollywood and the digital revolution*. *Polity*, 41(4), 611-634.
- Baird, R. T., & Paraschakis, D. (2019). *On the go: Podcasting, mobile technologies and creative labour*. In *Digital Labour and Creative Industries* (pp. 155-172). Palgrave Macmillan, Cham.

- Cai, X., & Huang, X. (2021). *The impact of podcasting on radio industry: An empirical study on the US radio stations*. *Telematics and Informatics*, 60, 101525.
- Chaffee, S. H., & Metzger, M. J. (2001). *The end of mass communication?*. *Mass Communication and Society*, 4(4), 365-379.
- Duffy, B. E. (2018). *The media industries: An introduction*. Routledge.
- Eisenmann, T., Parker, G., & Van Alstyne, M. W. (2006). *Strategies for Two-Sided Markets*. *Harvard Business Review*, 84(10), 92–101.
- Elberse, A., & Gupta, S. (2013). *The Hollywood studios' domination of the US movie business*. *Harvard Business School Working Paper*, (13-091), 1-39.
- Gao, Y., Zhang, Z., Li, J., Li, D., & Wang, Y. (2021). *5G-enabled immersive virtual reality for multimedia communications: State of the art, challenges, and opportunities*. *IEEE Network*, 35(1), 190-196.
- Gillmor, D., & Newman, B. (2010). *We the media: Grassroots journalism by the people, for the people*. O'Reilly Media, Inc.
- Van der Sar, E. J. (2020). *Streaming video online: Approaches to recording, distributing, and monetizing content*. Routledge.
- Gupta, R., Agrawal, A., & Jindal, V. (2020). *Artificial intelligence and podcasting: A literature review*. *Journal of Information Science Theory and Practice*, 8(4), 53-64.
- Hsieh, Y. P., & Liang, T. P. (2014). *Webcasting adoption by higher education: An empirical study*. *Computers in Human Behavior*, 30, 574-582.
- Hulme, O. (2020). *The future of podcasting: Opportunities and challenges*. In *Podcasting: New Aural Cultures and Digital Media* (pp. 189-206). Palgrave Macmillan, Cham.
- Hutchins, B., & Rowe, D. (2019). *Podcasting: Considering the evolution of the medium and its association with the word 'radio'*. *Radio Journal: International Studies in Broadcast & Audio Media*, 17(1), 5-19.
- Ito, M., & Okabe, D. (2005). *Technosocial Situations: Emergent Structurings of Mobile Email Use*. In P. Dourish & G. Mark (Eds.), *Proceedings of the 2005 International ACM SIGGROUP Conference on Supporting Group Work - GROUP '05* (p. 51). Association for Computing Machinery.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. NYU press.
- Kang, H. (2015). *Content delivery via webcasting, podcasting, and streaming: the changing face of media*. *International Journal of Contents*, 11(2), 1-9.
- Kang, J. (2015). *The interactive effect of social media and television on political attitudes: An analysis of the 2012 presidential election*. *Computers in Human Behaviour*, 44, 312–320.

- Kietzmann, J. H., & Hermkens, K. (2011). Webcast advertising: An emerging media form's impact on consumer behavior. *Journal of Advertising Research*, 51(4), 609-623.
- Kılıç, B., & Kılıç, İ. (2019). Voice-activated personal assistants in podcasting: Perceptions and behaviors of early adopters. *Journal of Radio & Audio Media*, 26(2), 229-242.
- Kim, Y., & Kim, K. (2013). Understanding the relationship between consumer-generated media (CGM) and traditional media in the luxury brand industry. *Journal of Business Research*, 66(9), 1485-1490.
- Kozinets, R. V. (2010). *Netnography: Doing Ethnographic Research Online*. SAGE Publications.
- Krasodonski-Jones, A. (2018). "Serial" and the rise of the podcast: How a niche storytelling medium became a cultural phenomenon. *Bulletin of the American Society for Information Science and Technology*, 44(1), 12-16.
- Kuo, Y. C., Liu, Y. C., & Ma, C. C. (2013). An exploratory study of the effects of podcasting on the learning engagement of university students. *Computers & Education*, 60(1), 365-372.
- Lambert, A., & Lovejoy, K. (2018). Podcasts: What are they and why should we listen? *Journal of Radio & Audio Media*, 25(2), 170-178.
- Li, C., & Bernoff, J. (2008). *Groundswell: Winning in a World Transformed by Social Technologies*. Harvard Business Press.
- McQuail, D. (2010). *McQuail's Mass Communication Theory (6th ed.)*. Sage Publications.
- Moragas-Fernández, C. M., & Masip, P. (2015). Podcasting in journalism: How audio storytelling is being used by Spanish-speaking media. *Journal of Radio & Audio Media*, 22(2), 226-242.
- Napoli, P. M., Aslama, M., & Johnson, A. (2018). *Media industries in the age of streaming*. In *The Oxford Handbook of the Science of Science Communication* (pp. 491-500). Oxford University Press.
- Nareeman, R., & Al-Amarat, M. (2019). Investigating the use of podcasting in marketing: A literature review. *Journal of Marketing Communications*, 25(3), 248-265.
- Newman, N., Fletcher, R., Kalogeropoulos, A., Levy, D. A. L., & Nielsen, R. K. (2019). *Reuters Institute Digital News Report 2019*. Reuters Institute for the Study of Journalism, University of Oxford.
- O'Hanlon, R., & O'Hare, G. M. (2021). *Virtual reality, augmented reality and mixed reality: A review of the future of digital journalism*. *Digital Journalism*, 9(2), 256-277.
- O'Reilly, T. (2005). *What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software*. *Communications & Strategies*, 65(1), 17-37.
- Russell, D. M., & Shepherd, J. (2010). *Podcasting in higher education: what are the implications for teaching and learning?* *The internet and higher education*, 13(4), 237-241.

Sintonen, S., & Malmelin, N. (2019). *Augmented reality and virtual reality in journalism: A review of the emerging research*. *Digital Journalism*, 7(7), 877-898.

Wainwright, R. (2011). *The USC Distance Education Network: Webcasting, webconferencing, and videoconferencing at the University of Southern California*. In Proceedings of the 9th International Conference on Education and Information Systems, Technologies and Applications (EISTA) (pp. 199-203).

Wainwright, S. (2011). Using webcasts in higher education: A framework for change. *Journal of Asynchronous Learning Networks*, 15(2), 23-32.