About the Book

The book Media Convergence and Design Skills offers a comprehensive look into the fusion of media platforms and the essential design skills required to navigate this evolving landscape. As media channels continue to overlap, professionals are expected to possess versatile design capabilities that cater to digital, print, and interactive formats. The book provides insights into how convergence has transformed content creation, distribution, and audience engagement, pushing designers to think beyond traditional media silos. It also explores practical frameworks for mastering skills like cross-platform storytelling, user-centered design, and multimedia integration, making it an invaluable resource for students and professionals alike. By addressing both the technical and creative aspects of media convergence, the authors emphasize the importance of adaptability, collaboration, and innovation in design to meet the demands of a media-rich, interconnected world.

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Media Convergence and Design Skills

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The Intersection of Emerging Technologies and Design Skills in the Era of Media Convergence

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Chapter - 1

The Intersection of Emerging Technologies and Design Skills in the Era of Media Convergence

Kishor Kumar Hira

Abstract

The paper focuses on the profound influence of media convergence in tourism and education in design skills through the integration among several media and the new emerging technologies. Convergence in the field of media prima facie means the blending of traditional and new media, energizing corporate culture, identity, image, and reputation in the tourism industry. This paper elaborates on how media convergence transforms the technological, economic, social, cultural, and global impacts of media convergence on traditional, web, and mobile content to emphasize the synergistic effects on tourism growth and development. Being essential for importing business communication frameworks in tourism, powered by media convergence, becomes the outstanding issue in this process of adaptation. Government efforts have also targeted the old and new media convergence, this is particularly so in terms of education. In that respect, this paper takes its lead from the necessity to reconsider pedagogical practices in broadcasting and hosting majors, with a focus on readjusting towards interdisciplinary and adaptability. The paper explores media convergence's transformative impact on technology, economy, society, and culture, highlighting its synergistic effects in driving tourism growth across traditional, web, and mobile content platforms. In the domain of education, emerging technologies in convergence with active methodologies problem-based, collaborative, and flipped learning are changing university education. Such interaction enables personalized and immersive experiences in learning and readies learners for independence as learners, critical thinkers, and problem solvers in the 21st century.

Keywords: Media convergence, tourism development, media education, emerging technologies.

1. Introduction

1.1 An overview of media convergence and its significance in the current digital landscape

Media convergence is the "process whereby new technologies unequivocally transform the landscape of existing media, both as products and as producers, into a new connective environment." In simple terms, media convergence alludes to the process by which the converging of media technologies and platforms changes or alters the way information is being produced and distributed, and even consumed, today. Technological advancement is currently acting as the very motor driving this phenomenon toward the integration of various types of media, such as text, audio, video, and interactive content. This is not only blurring the different channels of media, but also giving rise to more dynamic and much more immersive user experiences.

The essence of media convergence is therefore the creation of both coherent and interlinked media ecologies. From the perspective of the consumer, this will mean many kinds of content available on one device or medium, hence increasing convenience and interactivity. For creators and business enterprises, media convergence has ushered in new ways to tell stories, market, and reach target audiences. This would, in turn, require a holistic approach to the making of content, where interrelation between forms of media and the way advances in technology could be leveraged would emerge as vastly important.

1.2 Brief introduction to the role of emerging technologies and design skills in shaping media experiences

Artificial Intelligence, Machine Learning, Augmented Reality, and Virtual Reality are strongly emerging technologies for Media Convergence. These technologies have greatly revolutionized the way media content will be created, personalized, and consumed in the future, taking past media experiences to the limits. Design skills are essential in this time of swiftly changing technologies since they can let these technologies spread their wings to create engaging media experiences. Design is much more than Good Looks; it means intuitive, engaging, meaningful interaction that leaves a footprint in the hearts of users. Deploying new technologies within media design requires in-depth knowledge about the behavior of users, innovation, and technical proficiency.

For instance, AI and ML can analyze vast reams of user data so that content recommendations are correctly analyzed for a quilted user

experience. Designers need to know how interfaces present these in a seamless and innocuous way. AR and VR provide immersive experiences, blurring the boundaries between the digital and physical worlds. Designing on these reserves creation of realistic 3D environments and friendly user interactions other than making them feel fully immersed.

The predictive analytics can still be further deployed to understand user behavior and preferences by building adaptive interfaces that actually evolve based on the interaction of users. Designers, therefore, have to think at an earlier stage of how they will make such provision for dynamic content to meet the needs of users. At the intersection of new technologies and design competencies lies the focal point during this time of media convergence. Designers have to plug into these technologies with a view to coming up with a new media experience that is engaging and retains audiences. Unless one knows the trends for each of these technologies and carefully applies design principles, one can come up with media products which will not only be beautiful but also deeply functional and user-centric. This synthesis of technology and design holds the future of media and will further drive the next wave of digital transformation in this area.

2. Defining media convergence

2.1 Media convergence: Explanation and effect on traditional and digital media

Media convergence refers to the framework in which traditional and digital media intersect. Content, technologies, and services from multiple platforms are being combined under one roof. Overall, it has considerably changed the whole process of media consumption, production, and distribution. Traditional media, operating earlier in silos such as print, radio, and television, are now fitting into digital platforms to provide a flow of content and enable better user engagement.

Media convergence has a deep influence on traditional media. Newspapers now have online versions with multimedia content videos, podcasts, and interactive graphics. TV series can be streamed at will from any device. Radio is broadcast live or available for download as an audio file. This has not only increased the reach of traditional media; it has changed how audiences engage with content. Media convergence implies that content across multi-media platforms proliferates in the digital space, anywhere, anytime. In respect to this, social media convergence brings

together text, images, video, and live interactions in a rich interactive environment. This democratized the creation of content and paved the way for normal people and small entities to produce and circulate information at the level of big media companies.

2.2 Perfect integration of multiple media formats and platforms for integral user experience

Several media formats and platforms need to be integrated in order to give the user a unified experience in a highly saturated media environment. This means that the consumption of different types of content and across various devices should be possible without any disruption in engagement. Such integration will be achieved through the combination of text, audio, video, and interactive components in a pristine and user-friendly format. This would require, in design terms, a very great understanding of ways through which different media formats can provide complementary services to both improve the storytelling process and user interaction. For instance, a news site might combine articles written in text with video reporting, interactive infographics, and social media feeds to make the user interaction rich and more engaging. Designers should ensure harmony in their interaction: elements that complement each other and do not overwhelm the user.

An effective media convergence would also consider the designing of platforms that work on other devices, ranging from desktops to tablets and even smartphones. For this, responsive design is necessary for assisting people in accessing the content easily and making it look good on all these devices with whatever screen size. This will let designers create flexible layouts, easily adjusting their size dynamically, maintaining usability and aesthetic integrity. It increases user engagement, since there are several ways to access content. For instance, a user might learn about a podcast episode via social media, then listen to it on their smartphone, only to visit the related website for deeper articles and videos. All these are joined experiences that hold users around longer and make them consume more content. Media convergence and integration of dissimilar media formats and platforms are key to the production of a single interactive user experience. Designers have huge roles in these processes, using their skills to merge traditional media with digital media in non-intrusive ways. By knowing the strengths of each medium and making sure they work together cohesively, designers engage audiences through multidimensional media experiences, bringing them back time and again.

3. Emerging technologies in media design

3.1 Overview of key technologies: AI, ML, AR, VR, and predictive analytics

New emerging technologies in Artificial Intelligence, Machine Learning, Augmented Reality, Virtual Reality, and predictive analytics are changing the face of media design. These technologies are shifting the way media is created, distributed, and consumed by providing new ways of engaging audiences and personalizing content. It is used for the creation of automatic content generation, developing curated, personalized recommendations, and enhancing user interactions. Seen from the perspective of AI algorithms, it will be possible to automatically generate articles for news, edit videos, and even create artwork things that, if they were to be produced manually, would take so much time.

ML aims at developing algorithms that learn from data and are bound to get better over time. In media design, ML serves as the backbone of recommendation engines, jointly with personalized feeds and tailored advertising. It is the force behind Netflix or Spotify in being able to suggest content based on taste and behavior.

Augmented Reality digital information displayed on real-world physical settings. Ideal creation of interactive and immersive experiences. AR has huge potential for mobile apps, advertising campaigns, and gaming because it allows users to interact with virtual objects in real-world locations. Examples include Snapchat filters and IKEA's Place app, which lets one see how furniture may look in one's house.

Virtual Reality (VR) immerses users in totally digital environments, offering a sense of presence and interactivity. VR finds applications in gaming, training simulations, virtual tourism, and storytelling by imparting experiences to the user that are impossible to have in the real world. The designer models realistic 3D models and environments to enhance the feeling of being inside the model. One such process is Predictive Analytics, which involves the use of statistical algorithms and machine learning techniques in analyzing such historical data to predict future outcomes. It can be dedicated to the understanding of audience behavior in media design, optimization of content strategy, and enrichment of user engagement. This liberates the media entities to personalize their content more in favor of audience preferences.

3.2 How these new technologies are revolutionizing media production, distribution, and consumption

Media Production: AI and ML are smoothing content creation processes. AI can create scripts, edit videos, and even create animations so that designers will really only be dealing with higher-level creative tasks. With the analysis of audience preferences and trends, ML algorithms help designers come up with material relevant for their target audience. AR and VR enable experience storytelling; it pushes the boundaries of traditional media production.

These technologies are also bringing about a sea change in media distribution. AI recommendation engines ensure that relevant content is presented to the users, which improves engagement and retention. Predictive analytics makes it smoother for media companies by distributing pieces of content on the right platform and at the right time. AR apps raise marketing campaigns to the next level with engaging and interactive experiences, and VR platforms bring forward unique channels for the distribution of immersive content.

These technologies are changing media consumption. AI- and ML-driven personalized content feeds involve customized experiences as a function of devices on their own, making the act of discovering new content easier than it has ever been. Then there are completely new ways in which AR and VR provide new ways of experiencing media, from virtual concerts to interactive documentaries. Predictive analytics will enhance user engagement by anticipating needs and preferences for what users will want to see at the right time.

In reality, large transformations in the production, distribution, and consumption of media result from the infusion of AI, ML, AR, VR, and predictive analytics into media design. Designers should make use of these technologies to devise very innovative and captivating media experiences that can meet the ever-changing preferences of their audiences. Designers really should stretch their creativity with the potentials from new emerging technologies to deliver personalized, immersive, and highly powerful content.

4. Design skills for the modern media landscape

A vigorous pack of design skills acts as the key to using new and emerging technologies within, at best, rapidly changing media effectively. With AI, ML, AR, VR, and predictive analytics already changing media creation, distribution, and consumption, designers have to change and

broaden their bases of skill if they are to be effective and innovative. With that in mind, we narrow down to key design skills focused on user-centered design, interaction design, and visual storytelling.

Essential Design Skills for Leveraging Emerging Technologies

- **Technical knowledge:** A modern media designer should be aware of tools and technologies that are powering innovations in media. It might be with tools of AI and ML in content creation and curation, 3-D modeling tools for augmented reality and virtual reality experiences, or data analytics platforms capable of enabling predictive insights. Knowledge about programming languages like Python or JavaScript would also help in developing and integrating these technologies within the concerned media projects.
- **UCD** simply calls for placing the user at the center of the design process. It places clear insight into users based on needs, behaviors, and pain points through research and empathy. A designer has to establish personas and user journey as a way of ensuring that medical products answer user expectations and guaranteeing smooth, instinctive experience.
- **IxD:** Interaction design deals with the development of engaging, efficient interaction between the user and the media product. This includes the development of an interface that is comparatively easy to use, responsive, and attractive. Designers shall consider affordances and constraints of various devices and platforms and see that the user experience at all contact points is consistent and full of joy.
- **Visual storytelling:** When the content is everywhere, the ability to tell an impactful visual story will be imperative. Designers need to create stories that can travel on visually through composition, color theory, typography, and motion graphics. More critical is this in the space of AR and VR, where immersive storytelling has been proven to boost a tremendous rise in engagement.
- **Adaptability and entire life learning:** A fast-paced media environment needs versatility and great commitments by designers to lifelong learning. They shall therefore keep up with the latest trends, tools, and state-of-the-art processes within media design. This is realized by doing online courses, attending workshops, or participating in industry conferences.

5. Designing for the user: Emphasis on user-centered, interaction design, and visual storytelling

5.1 User-Centered Design (UCD)

It makes it possible to come up with media products driven by users' needs and preferences. Engagement of users in the design process in terms of feedback and testing can aid designers in creating more efficient and satisfying media experiences. UCD allows designers to spot and define real user problems, to come up with solutions that are easy to use and accessible, guaranteeing the quality of the overall user experience and building user satisfaction and loyalty.

5.2 IxD

Which stands for interaction design, is focused around the behavior of interactive products so that users can achieve their goals with as little effort and maximum satisfaction. In the context of emerging technologies, IxD could bridge the gap between very complex technological possibilities and user-friendly interface design in order to enable more people to experience advanced media experiences.

5.3 Visual storytelling

The key function of visual storytelling lies in the use of images, videos, and infographics as powerful means of communication to deliver key messages memorably. Visual storytelling becomes further empowered in modern medical design by AR and VR, which furnish immersive environments that provide space for stories to unfold. View takers, emotive, and engaging, effective visual storytelling forms one of the most critical skills for a media designer.

5.4 Modern media

Modern media needs a blend of technical capability with creative excellence. Mastering the core design skills and focusing on user-centered design, interaction design, and visual storytelling will let media designers harness new technologies to deliver engaging, impactful media experiences. Such skills help designers sail through the labyrinth of digital times and be a part of the continued evolution of media design.

6. AI and machine learning in media

6.1 AI-enabled content creation and curation: Personalization and automation of media consumption experience

Artificial intelligence and machine learning are fast changing the face of

the media industry through artificially automating content creation and curation, which brings huge personalization in user experience. AI-driven content creation involves the generation of articles, videos, music, and other forms of media through algorithms. The same tools can analyze big datasets to generate content of appeal that caters to certain segments of the audience, saving tons of time and resources without a compromise on quality.

For example, AI may be used in analyzing data and pointing out certain trends as part of the news reports, hence freeing the journalist to work on more in-depth stories. In production, AI can do editing, add effects, and even generate animations. This kind of automation gives speed to the system while ensuring uniformity in its various pieces of content. AI-powered content curation interprets user behavior and preferences to provide users with a highly personalized media experience. For example, in Spotify, AI is applied in playlist curation; in Netflix, it allows for the recommendation of shows in accordance with individual user tastes for higher engagement and satisfaction rates.

6.2 Machine learning for recommendation systems: Enhancing user engagement through personalized content suggestions

The recommendation system is intrinsically linked with machine learning, as it predicts user tastes in digital content. Recommendation systems primarily work by analyzing user data, comprising viewing history, search queries, and interaction patterns. This methodology personalized recommendations to individual users by providing content likely to be of interest to them.

The learning process of ML algorithms is continuous, and every user interaction refines the prediction a bit more. For example, Netflix's recommendation engine uses data from millions in order to suggest movies and shows in which each viewer may be interested. This approach will not only increase satisfaction but also further boost SellThru and raise retention rates.

In design, recommendation systems are built from an understanding of user behavior and designing interfaces that include tailored suggestions. It's also up to the designer to ensure easy accessibility of recommendations and visual appeal without overwhelming the user.

6.3 Design considerations of AI and ML applications: Ensuring transparency, fairness, and user trust

AI and ML applications in media shall be designed respecting end-user

trust, fairness, and transparency. In these fast-growing technologies, end-user trust should be generated by accounting for ethical concerns.

- **Transparency:** A user should know how the AI and ML systems come up with the decisions. In transparent design, the explanation of why this particular content was recommended and what kind of data used to predict such recommendations needs to be made available to achieve transparent communication and intuitive interfaces that explain how the recommendation is done.
- **Fairness:** AI and ML systems should be designed not to support biases towards the unfair treatment of certain classes of users. Designers should be ensuring that algorithms are trained on a wide variety of datasets and regularly audited to find and reduce any bias. Fairness in AI applications enables inclusivity and prevents the entrenchment of injurious stereotypes.
- **User trust:** This involves the development of AI and ML applications respectful of the privacy and security of users. Designers are called upon to come up with stringent measures on data protection as well as give users a level of control over their data. Besides, it is the user interface that brings out clear benefits of AI-driven features while addressing any potential privacy concerns.

It is in the domain of design that AI and ML can really change media, from content creation automation to personalization, powered by recommendation systems. It is good design that will render these technologies transparent, fair, and trustworthy. What will be needed here is user-centered design, and then AI and ML will be able to help companies in the media industry to deliver engaging and ethical media experiences that really resonate with audiences.

7. Augmented and virtual reality: Realistic 3D environment and interactive element design for immersive media experiences

AR/VR is pioneering in the creation of media experiences with new dimensions of interaction and engagement. This requires one to design realistic 3D environments and interactive elements so that users may be sucked into virtual worlds or amped-up sense of reality in perceptions.

In AR, designers merge digital information with real-world space to create an interactive mixture of physical and virtual. It, therefore, involves in-depth knowledge in spatial design since it allows digital objects to merge with their physical surroundings. Effective AR design does this: contextual

relevance of elements and improving the user experience. For example, AR applications such as Pokémon Go make use of geolocation and 3D modeling to project virtual creatures onto real settings, thereby creating a compelling experience and allowing interactions.

Designers in VR create fully virtual environments that users can go through and interact with. In other words, that is high-quality 3D modeling, realistic textures, and dynamic lighting for believability and immersion. Interactive elements include Active Objects the ones that a user can manipulate and Active Spaces in which a user is able to travel. VR storytelling relies on these aspects of engagement, whether it concerns cases of immersive journalism or virtual tourism.

Challenges and opportunities in AR/VR design: Balancing technical feasibility with creativity

AR and VR-based design has its special set of challenges and opportunities. One of the very first aspects that would be focused on in such design would be to balance technical feasibility with creativity. The claim on computational resources, especially needed to render quality visuals for AR and VR experiences in real-time, is sufficient computational power. Designers have to be biased toward the constraints of present hardware, considering several limitations like processing power, battery life, or what AR/VR headsets or mobile devices are capable of doing at this time.

Another challenge is the one of user comfort and accessibility. In the domain of VR, motion sickness is often the product of extended exposure, so designers must ensure fluent, intuitive interactions that avoid sudden movements or disorienting transitions. Lastly, in connection with usability, it should be guaranteed in an AR context that digital overlays will not occlude critical real-world information.

Despite all odds, AR and VR bring enormous creative and innovative opportunities. These technologies let designers stretch the potential of traditional media to come up with design experiences that were hitherto unimaginable. For example, VR can be used to recreate completely immersive educational experiences wherein students are able to walk through historical sites or conduct virtual science experiments. AR can heighten live events or retail experiences by giving interactive product information or virtual try-ons.

8. Case studies of AR / VR successful implementations in media

Several case studies prove the success of AR and VR implementation in media, which shows their potential to change the user experience.

- **The New York Times VR:** Move of The New York Times toward VR for the creation of further journalistic experiences; its VR documentaries, such as "The Displaced," quite literally take one into the lives of refugees to give a deep view, full of empathy, toward global issues. Assisted by VR, the storytelling outcomes, according to The New York Times, become more impressive and unforgettable.
- **Snapchat AR lenses:** The example for the successful execution of AR in social media can be Conte's Snapchat with its AR lenses. These lenses add interactive and animated effects on top of photos and videos, beforehand taken or in real-time, to give birth to amusing and engaging content. In using AR as a means of encouraging user engagement, Snapchat differentiates itself within an extremely competitive social media environment.
- **Google earth VR:** Google Earth VR is a virtual reality application that enables people to wander around the world in a completely immersive, self-contained virtual environment. This application demonstrates the power of VR in terms of both virtual tourism and education because it lets people explore landmarks, cities, and natural wonders right from their living room. The authentic 3D surroundings combined with the ability to navigate intuitively through them make Google Earth VR among the finest examples of capabilities offered by VR.

AR and VR shift media to offer an immersive experience between virtual and real worlds. While it challenges creating a perfect balance between technical feasibility and creativity, one gets opportunities galore for innovation. Successful implementations like The New York Times VR, Snapchat AR lenses, and Google Earth VR are examples of how these technologies can actually unfold a revolution in media and evolve new ways of engaging audiences. Designers should dare to push the boundaries further by creating engaging AR and VR interactive and immersive media experiences.

9. Predictive analytics for media consumption: Designing adaptive and responsive interfaces to forecast user behavior and preferences

Predictive analytics can leverage data to predict user behavior and preferences in order to design adaptive media interfaces. Algorithms that analyze the past data of users, such as their viewing habits, interaction patterns, and demographics, could predict what type of content users are

most likely to consume. Such foresight allows dynamic personalization of the end-user experience on the part of media platforms. Designing adaptive interfaces will then involve the development of systems responding in real-time to such predictions. For example, a streaming service could use the time of day, the user's inferred mood based on interactions, or what's trending to recommend content. In such cases, interfaces shall be designed with intuitive and aesthetic realizations of those predictive components so that they do not overwhelm users. The key design strategies are dynamic content grids, which change dynamically, as the algorithm determines the interests of each user, and contextual suggestions that pop up most appropriately during a use session, thus enhancing, but not page-stopping interrupting, the experience of the user.

9.1 Ethical considerations of predictive analytics

Do not compromise on users' privacy; be highly vigil about the security of their data. Though predictive analytics has several benefits, it also gives rise to some critical ethical concerns on the privacy of users and security. The designer really needs to stress the transparency and the building of trust with users, making clear communication of data collection and analysis practices and obtaining consent.

Concrete privacy issues can be addressed by the implication of robust anonymization techniques applied to data and compliance with regulations like GDPR. Users shall have control over their data and opt-out options from data collection and predictive features. It improves transparency about the use and purpose of the data collected, which will build trust among users. It may convey to them an idea of what happens with their data and what advantage it brings to the system. This would entail explicit ways through which the creation of recommendations is carried out, that their information is secure, and that it is used in a responsible way.

10. Case studies of effective intelligent assistant implementations in media

- **Siri and apple music:** Apple has integrated Siri into Apple Music, such is the application of the intelligent assistant in a media context. In this case, by utilizing voice commands, a user can control the playback of music, generate playlists, and uncover new songs. Such a capability for understanding natural language queries and providing recommendations in a customized way improves the experience for the user.
- **Beeb by BBC:** The BBC developed an AI assistant that would be

helping in accessing BBC content through voice commands. What it could do is read news, play radio stations, and it could even recommend/study user tastes in content. What's more interesting is that the ability of this assistant to understand regional accents and dialects proves its self-awareness and adaptability at quite a high level.

- **Voice assistant:** This is what Spotify does to let people use its music hands-free. For instance, "Play my Discover Weekly playlist" or even "Show me podcasts that talk about technology." On the integration side, it was unproblematic with Spotify's recommendation system, offering personalized solutions that fit each use case.

Intelligent assistants and chatbots make user interactions very effective by implementing intuitive conversational interfaces. If designed along the lines of context awareness, emotional intelligence, clear communication, and personalization, with granular fallback mechanisms, such chatbots can offer useful and engaging user experiences. An effective demonstration is when it comes to Apple Music with Siri, Beeb from BBC, and Spotify with its in-house voice assistant: all able to really change the way media is consumed and engaged with by users.

11. Teaching design skills in the age of media convergence

Integrating new technologies into the design curricula: Issues in curriculum revision and teaching methods

With the accelerated rate of change brought on by media convergence, design education itself has to be reinvented at similar levels to stay current with the technologies of AI, AR, VR, and machine learning. Undergraduate curricula need revision so students can engage with these technologies for the design of future media. It means that, in this respect, updating the curriculum should be made with courses that would at least attempt to cover the basics of these technologies and their applications in media design. Courses on AI and Machine Learning will let students learn developing intelligent systems for personalized content delivery. For example, classes on AR and VR would get into the very nitty-gritty of creating an immersive environment focused on 3D modeling, texture mapping, and user interaction.

Teaching methodologies alone must evolve to adapt to such developments. Interactive and hands-on learning methods will enrich understanding and participation. Virtual labs, simulations, and augmented reality experiences provide an opportunity for hands-on learning, whereby

students can come across and experiment with new technologies within a controlled environment. Online and hybrid platforms for study and collaboration facilitate education to become more accessible and flexible.

11.1 Hands-on and project-based learning: Preparing students for real-world challenges

Hands-on learning and project-based education are the essential factors in ensuring that students come out with practical skills relevant to solving real-world challenges. These are methodologies that provide students with the capability of applying theoretical knowledge toward practical projects if they are to be effectively sermonized with in-depth understanding regarding the application of design principles and technological applications.

This entails undergraduate project-based learning, where students are given sufficient autonomy to work on real-world projects in conjunction with industry partners, which helps develop skills such as problem-solving, creativity, and critical thinking. For example, one project in a VR application for a local museum will allow students to learn about augmented reality technology, user experience design, and solving problems connected to the generation of content. Other impactful methods for practical learning include workshops, and design sprints. These activities involve rapid prototyping and iterative design so that students get to prototype ideas and receive feedback for further refinement of solutions. As this process is much like the iteration taking place in current design practice, it helps students work in fast-moving media the way the media industry does.

11.2 Providing interdisciplinary collaboration: Linking technology and design disciplines

In the case of media convergence, this kind of interdisciplinary collaboration becomes extremely relevant for developing novel and powerful media experiences. Such bridging of the gap between technological and design disciplines to list creates a holistic approach toward problem-solving and innovation.

This will increase inter-stream cooperation among students with comprehensive and creative solutions and broaden research among them. For instance, if design students work in a team with computer science and information technology students, the resultant output will comprise projects that are hosts to both aesthetic appeal and technical soundness. Joint courses, cross-departmental projects, and interdisciplinary workshops the possibilities are endless in bringing students together.

Design skills teaching in the age of media convergence must hence encompass the use of emerging technologies as part of the curriculum, practical and project-based learning methods, and interdisciplinary collaboration.182–183 It is by reformed curricula, new ways of teaching, and lecturers properly prepared that, through collaborative approaches, teachers will be able to effectively prepare a new generation of students within this fast-moving and changing field of media design.

12. Conclusion

The juncture of emerging technologies and design skills in the age of media convergence places it within a very opportune as well as challenging landscape. This paper on the conference discussed a few critical aspects of the intersection and highlighted certain insights into how these technologies and design principles are redesigning the media experience. The role of interdisciplinary collaboration in media design was also located within this. It closes the gap between technology and design disciplines, thus stimulating innovation and ensuring more thorough solutions. Two powerful approaches in learning which underline the preparation of students toward real-life challenges are hands-on learning and project-based education. The future of media design will be on the edge where technology meets creativity. Continuous learning and responsible innovation could mean that conceiving designers have the ability to build new media experiences that really engage, are responsible, and are inclusive in regard to all potentials of emerging technologies. It provided a foundation for navigating this dynamic landscape and answering the opportunities brought under the processes of media convergence. How the technology and design disciplines relate will be key to influencing the future of media through innovative yet socially responsible solutions going forward.

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Chapter - 2

The Future Classroom: Evaluating the Effectiveness of AR and VR in Educational Settings

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Chapter - 2

The Future Classroom: Evaluating the Effectiveness of AR and VR in Educational Settings

Dr. Moumita Chakraborty

Abstract

It is envisioned that Virtual Reality (VR) and Augmented Reality (AR) will turn out to be very powerful tools in the near future, holding great promise and having the ability for a causal change in the paradigm of education. The paper explores the field of augmented reality and Virtual reality with a central focus on education. The effects of VR on education come through immersion and engaging learning experiences this tool can provide. Students can be whisked to virtual learning-created environments, experiential settings like taking visits to historical places and conducting complicated experiments in science. The traditional teaching and learning practices in India remain the same. Education should not be done only forgetting a job in future but it should be done to learn practical knowledge of the respective field. The role of education is very important in our life because it builds our personality and career, with the help of which the respective mental growth takes place. VR in Education It can take students on virtual field trips across places, from historic sites to complex scientific experiments. AR on the other hand can be used to create interactive textbooks and guided field trips, making learning dynamic and context-rich for the learners. The accompanying language learners enjoy instant translations and pronunciation guides. Arrays of complex data come alive by being visualized in AR. Both VR and AR support collaborative learning, and students, along with educators, move into a virtual space for interaction. In this respect, such technologies become very useful for special needs education since they can be personalized in regard to the unique needs of each learner.

Keywords: Virtual Reality, Augmented Reality, paradigm, virtual learning, collaborative learning.

1. Introduction

Augmented and virtual reality are probably two of the most innovative technological developments in the world today. Naturally, their potential to enhance the educational system is immense. Augmented reality and virtual reality in education have only recently gained popularity and offer countless opportunities in terms of leverage technology-enhanced learning.

AR and VR provides students with immersive digital experiences that simply cannot be provided through traditional ways of teaching (Phakamach *et al*., 2022), thereby affording students an opportunity for more deep engagement with complex material beyond mere lectures and textbooks (Sun *et al*., 2022), while giving lecturers the capacity to cater to individual modes of learning (Childs *et al*., 2021).

These technologies can pack in a far more immersive experience and the potential through AR and VR to let educators provide simulations and step into field trips, virtually, without the physical travel implications. (Seidametova *et al*. 2021)

Moreover, the use of such new technologies as AR and VR helps to eliminate the contradiction between the traditional classroom style of instruction and real-world practice and brings about real benefits for learners' professional development.

Augmented Reality is technology developed to enhance real-world surroundings by overlaying computer-generated content on it (Hantono, Nugroho, & Santosa, 2018, July).

These have found applications in several professional applications across several fields, such as healthcare, manufacturing, education, and retail (Antonioli *et al*. 2014). Organizations now use AR to improve the safety of employees by providing virtual training simulations and also realizing how equipment can function before it is made. On the other hand, Virtual Reality is an advanced technological innovation which changed the way we experience and interact with digital environments (Velev & Zlateva, 2017).

By taking advantage of the latest computer graphics, motion sensors, and display technologies, VR allows users to become part of simulations of either real or unreal worlds in very high fidelity. In turn, VR proved to be very helpful in many areas and industries, such as Gaming, Education, Healthcare, Real Estate, etc.

Although AR and VR sound similar, in reality, they are very different technologies doing the most disparate things. VR totally immerses users in a

new digital environment and offers them an interactive experience with headsets or glasswares. AR enriches reality, overlaying digital objects on the real world and augmenting additional information or functionality.

Furthermore, different benefits contributed by AR and VR technologies in online learning, mixed learning are: It provides a more effective and interactive learning environment and immersive learning experiences. AR and VR can be used in creating a virtual world and simulation so that students could explore and experience the real-world environment from within a classroom itself.

It is also possible to create interactive and interesting content in the form of 3D pictures and videos that may keep students interested with the help of AR and VR, as pointed out by Gargrish *et al*. in 2020.

This current study works on recent literature development and gives further understanding of AR and VR evolution in education over the past twelve years, indicating trends, gaps, advantages, challenges, and recent developments in researches. It will raise and sustain some research hypotheses supported by prior studies of AR and AR in education, validated by a noticeable research growth in recent years in education. This research makes a contribution to providing further directions for AR and VR in education and their developments by revealing the state of the art in the prior literature.

As the popularity grows, AR and VR technologies have also found growing importance in the educational sector. It allows students to engage with their surroundings in a much deeper manner and thus allows for more participation. Additionally, different concepts are also learned more clearly because of the more visualization powers given by these technologies.

As the price of AR and VR hardware is reasonable, accessibility to the technology is more likely to increase than it has been in the past. Augmented Reality and Virtual Reality technologies in education are changing how students learn and view or interact with a world around them (Du *et al.*, 2020,)

AR and VR provide the opportunity for students to view 3D objects in an environment and better comprehend concepts in a new way. Other than that, AR and VR can also be used to produce interactive simulations whereby students create a safe space where they are able to explore complex ideas.

Most importantly, bringing in AR and VR has led to the pushed-for result of increasing student engagement and learning. (Sun *et al*., 2022).

According to Alizadehsalehi *et al*. (2021), better engagement, motivation, and performance in academics were also experienced among learners who applied AR and VR technologies. The inclusion of AR and VR has been postulated to support more immersive learning modes where the learner can explore, discover, and interact with the environment. In the classroom, many more people have adopted AR and VR technologies in the last few years, and schools and universities have begun investments. Similarly, the cost of AR and VR hardware has continued to drop, rendering it increasingly accessible to those on leaner budgets.

Other educational environments such as museums, libraries, and science centers have equally been implementing AR and VR technologies in their educational infrastructure. AR and VR allow students to understand three-dimensional objects in ways which are impossible within the physical environment. It is particularly useful for young students who would not understand any complicated concepts when learning without visual aids. It will indicate how much past and more recent research have been involved and up to the task of taking affirmative steps toward overcoming challenges and realizing benefits for AR and VR in education.

2. Literature review

Virtual Reality (VR) and Augmented Reality (AR) are two sides of the coin of the emerging technologies that share most characteristics but have some distinguished features. According to Maunder, 2018, the revenue of the integration of VR and AR in the education market will amount to 19.6 billion by 2023, growing at an annual growth rate of 16.2%.

According to Krüger *et al*. (2019), Kim *et al*. (2018) and Javornik (2016), the main characteristics of virtual reality are represented in imaginary space, immersion in virtual space, sensory feedback, and interactivity. On the other hand, augmented reality includes contextuality, which means it combines the virtual and actual world simultaneously, interactivity at the same time and spatiality in the 3D world. These features allowed for learning through virtual reality and augmented reality and gave way to new significant learning approaches during the outbreak of the Covid-19 pandemic. Virtual reality and augmented reality have been ruling in wide popularity recently due to the quantum leap in development regarding VR and AR technologies (Beck, 2019; Chen *et al*., 2017; Gudoniene & Rutkauskiene, 2019).

However, some of the recent researches were done in AR, VR and XR in the educational area: quality change in learning environment during

Covid-19 by Raja and Lakshmi Priya, 2022; social learning space by Scavarelli *et al*., 2021; utilization among primary school teachers by Alalwan *et al*. 2020; myth and reality by Elmqaddem, 2019; and science knowledge retention. Huang, 2019; Oral and Maxillofacial Surgery. Ayoub and Pulijala, 2019; Issues in present and future learning techniques. Al-Azawi, 2018; Meta Analysis, Hantono, Nugroho, and Santosa, July and panel Zhu, 2016.

This research is focused on the integration of AR and VR in education in the recent twelve years including the period of Covid-19.

3. How to use AR in education?

Now that we're familiar with what AR is and how it gives a different experience, what would change with regard to education and how you'd use AR to teach your students this is the question for which we are going to find the answer. Technology, like AR, creates for schools and educators the possibility to provide interactive, lively, and immersive learning experiences. For example, with the help of AR apps, teachers can show 3D models of historical landscapes. Students can use AR apps to scan pictures/diagrams for extra text, animations, diagrams, etc. Advanced AR apps will enable you to observe the life cycle of an animal, view the planets in the solar system, among other activities. But the real trick is getting the right app when you bring AR into the classroom. It should be age-appropriate and curriculum-aligned, but squarely aimed at helping you accomplish what you need to do in your teaching.

It can be challenging task to leverage AR for all students in a large scale using mobile phones or tablets. In that case one use the classroom's interactive intelligent panel to handle such situations. The panel, however, must be equipped with a high-quality cameras and a LiDAR scanner for seamless activity. AR apps mostly rely on the camera to capture the natural world and overlay the digital elements on top. Also for smooth AR experience, the panel should be touch-enabled and have an Android operating system. Touch-enabled panels help to make the classroom session more collaborative for each and every student. Using the panel camera, the teacher can select any space in the classroom where they can create a virtual environment. The teacher can ask students to come to the panel, touch it, move, and learn the chapters with audio-visual medium and have a live interaction.

4. How to use VR in education?

Anybody can create engaging, collaborative, and advanced sessions for

the learners through VR. It has huge potential for implementation within the educational system. Through such sessions the learners will experience the real concept and view each activity in detail, and eventually they can develop a better understanding of the subject. An experiential learning can be brought all together to the classroom with the help of VR technology in education. Students will be in a place to carry out experiments in a simulated lab. Students can engage in historical events and discuss a wide range of topics. Virtual trips can be taken with the students to historical places, natural wonders like the Great Barrier Reef, and other spaces. The implementation of VR simulations into schools and education can completely revolutionize the way of teaching in today's world. Students will have better preparation for the future, have knowledge about practical scenario and thoroughly understand the theories.

5. Opportunities and challenges

Regardless of the unlimited number of potential opportunities and advantages of using VR and AR in learning environments, the current and actual usage is represented by enhancing communication, motivation, and interaction among educators and students. AR and VR positively affect the effectiveness of learning effectiveness.

Two of the most innovative advancements in technology are augmented and virtual reality, and their potential for the betterment of the education system is huge. In this respect, AR and VR enable teachers to take their students on field trips virtually and to offer interactive and engaging lessons from any place, (Kumar *et al*., 2022). AR and VR can also be used in immersive learning, whereby students can carry out exercises in a virtual world with feedback regarding their work. Besides, the incorporation of AR and VR in education helps reduce the many costs related to learning materials and travels, hence making it more accessible and affordable to all, (Shibata, 2019). These are the many uses that can be derived from these technologies, which will help teachers deliver the lesson much more effectively and in a way by which they get the best out of their students.

AR and VR can even be used in creating dynamic and interactive lessons that would, again, let students have a chance to create lessons based on what works for them further personalizing the learning process. Using AR and VR, students are also able to be transported into virtual worlds and simulate real-life experiences to gain deeper insights into concepts.

It can also foster cooperation between students and teachers. Students have a space that is virtual, where they can work on common activities and

learn from each other. Teachers, on their part, can use AR and VR to gamify lessons in class and hence make them more entertaining and engaging. (Mystakidis *et al*., 2021).

Assessment can also be carried out with the use of AR and VR by providing interactive tests and challenges to the individual learning level of every student so that teachers may perceive their understanding of the topic more accurately and provide timely feedback.

Application of AR and VR in education is increasingly becoming famous because it provides a unique and immersive experience in learning. However, varieties of challenges exist that are associated with these technologies, which shall have to be addressed before successful implementation. Among the major challenges of AR and VR in education are the cost (Nguyen *et al*., 2019).

First of all, these technologies require special hardware and software that are rather expensive and not every school will be in a position to afford buying them. Furthermore, the software for developing immersive experience sentences has to be updated from time to time; this procedure adds more cost to the budget.

The issues of accessibility also come into play. (Biswas *et al*., 2021). Not all learners have the hardware and software needed for AR and VR, so there has to be a way of providing these to students through their places of learning. Finally, AR and VR can overwhelm some students who are younger and less experienced with their operation. The other issue encountered pertains to scaling. (Scavarelli *et al*., 2019)

It is in light of this reality that, with the increased diffusion of AR and VR, a way will have to be found for educational institutions to upgrade their content and thereby create more immersive experiences in step with technological advancement.

While there are many benefits of applying AR and VR in education, there are still some challenges to be faced before successful implementation is achieved. However, with appropriate resources and strategies in place, the use of AR and VR in the classroom has the potential to become a very strong tool for the engagement of students in learning.

6. AR & VR during and beyond Covid-19 pandemic

The Covid-19 pandemic affected the way of living, working, and studying of people. (Al Ansi & Al-Ansi, 2020). With social distancing and other necessary measures of safety, it became paramount for businesses and

institutes of learning to learn quickly in order to adjust accordingly and keep things as usual. In such a grim period, augmented reality and virtual reality technologies have stood forward as means that help in connectivity and continuing education. (Garad, Al-Ansi, & Qamari, 2021). One of the ways AR and VR have been used during this period is through the enablement of remote learning (Ali, 2020).

Pupils begin to walk around and interact more with the environment; they can be involved in the learning process without even attending the class. This is particularly helpful in cases when small children are studying remotely; it can be very difficult for them to stick to the traditional forms of online education. Moreover, AR and VR can facilitate virtual simulations. (Lavrentieva *et al*., 2020), where learners can safely and enjoyably learn more about complicated concepts.

7. Recent AR & VR developments

Recent developments in the domains of AR and VR technologies are making huge waves across the world of education. AR and VR can be used to make students understand and get engaged with the subject matter more effectively. (Vretos *et al*., 2019).

It's possible to apply AR and VR in creating simulations for a given number of cases, which in turn will help students learn subjects like history, science, and economics. (Li *et al*., 2018).

For example, the student doing his physics will go through AR or VR simulation to learn about the characteristics of a black hole or explore an ancient rebuilt city in history.

Moreover, AR and VR can be used in interactive learning experiences whereby learners can see objects in 3D as if they were real or do things with them that wouldn't be possible with the real thing in hand. For instance, they would see a 3D model of an object in an AR learning environment and look at it from every angle. In the case of VR, they will then be provided with an interactive environment.

The AR and VR technologies have also been used with students with special needs to offer them an appropriate and safe, interactive environment within which to learn.

For instance, AR and VR could be used to create simulations about demarcative situations, such as crossing a busy street or visiting a grocery store, in which the students could practice and build up confidence in a safe environment. Indeed, rapid change and development of technologies including AR and VR increased adoptions of them in different markets

including education and created more jobs (Verma *et al*., 2021).

8. Future direction

The future of virtual and augmented realities truly lies in the growing fields of accessibility and technological innovation. It will be through the continuous returns of new and innovative experiences brought to clients, patients, and students that AR/VR really takes up steam in areas like health, education, gaming, and retail. Better development tools for software, AI/machine learning algorithms, and enabling technologies further open up the possibilities for AR/VR and will revolutionize how consumers experience digital material. More powerful 5G and eventually 6G networking take processing speeds even higher to even more seamless and less latent user experiences.

Furthermore, a teacher can recreate real-life situations in the classroom with immersive environments that assist in linking theory and practice; hence, offering further enrichment of students' learning experiences through the use of augmented and virtual reality technologies. These technologies are likely to revolutionize teaching and learning altogether as they get further developed. In view of this, more time, money, and even training need to be allocated to the inclusion of these technologies into the learning curriculum. While virtual reality can create simulations placing pupils in very safe real-world situations, augmented reality can add interactive graphics to textbooks.

9. Conclusion

AR and VR are going to take over the world of education with an experiential way of learning for students. Students are engrossed in a completely different set of visuals, audio cues, and simulations, all tending to increase interest in the subject matter at hand. By addressing current challenges, AR/VR can create a new experience to the education ecosystem in the upcoming years. Schools adapting to these changes and teachers who are evolving their skills will definitely sustain and eventually lead the education system. These technologies can also be further used to create more interactive virtual worlds that shall offer a more engaging and interesting learning experience. This paper analyzed the role of AR and VR in education and explored the main benefits and challenges, mobile applications and platforms, exponential growth and recent developments. Although the infusion of AR and VR into education is still at an infant stage, the potential

will remain to alter the very nature of education for improved outcomes for students, teachers, and educational institutions.

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Chapter - 3

Exploring How Podcasting Combines Elements of Radio, Storytelling, and Digital Media, and Its Impact on the Broader Media Landscape

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Chapter - 3

Exploring How Podcasting Combines Elements of Radio, Storytelling, and Digital Media, and Its Impact on the Broader Media Landscape

Dr. Pramiti Roy

Abstract

Podcasting is one of the most current and versatile media that has merged old-time radio with narrative storytelling and the digital media in it. This paper looks up to singular features of podcasting, its historical evolvement, and its role in shaping the broader landscape of media. This paper will then explore the very diversity of content, audience participation, and democratization in media production, summarizing whether or not podcasting transformed current media.

The paper discusses critically how podcasting combines elements of radio, storytelling, and digital media to embrace the leading ideas in this industry. Discourse on the history, peculiar characteristics, and its effects on patterns of consumption as well as production and distribution, discloses its contemporary nature and what this medium implies for the future developments in media.

Keywords: podcasting, radio, storytelling, digital media, media landscape, audience engagement, media production.

Introduction

Essentially, podcasting is digital audio broadcasting. For the past twenty years, podcasting has grown increasingly huge in popular circles largely due to the unique blend of the intimacy and immediacy of traditional radio, the depth and creativity of storytelling, and the convenience along with the accessibility brought about by digital media. This paper takes us through the highlights of this uniqueness, how it has advanced, and general effects that it has on the overall media outlook.

Literature review

The evolution of podcasting

Podcasting emerged gradually in the early 2000s in synchrony with the

invention of portable digital media players, the most significant among these being the Apple iPod. The portmanteau word "podcast" itself illogically combined "iPod" and "broadcast." The technology made it possible to download audio content and listen to it conveniently anywhere and anytime. Berry (2006) referred to podcasting as a "disruptive technology" that changed the way audio content is created and consumed.

Radio elements in podcasting

Radio has always been such a powerful medium because providing immediacy, accessibility, and a very personal element to the listener. All these qualities are there for podcasts that have on-demand audio that one can tune in to any place and time. McClung and Johnson (2010) also focus on the human voice used in podcasting, much like in radio, to create this experience.

Storytelling in podcasting

Storytelling is a fundamental element of podcasting, and creators base their practice on the engagement of listeners through narrative techniques. Serialized storytelling, in-depth interviews, and often personal anecdotes are common in many popular podcasts; such podcast content pulls listeners into an immersive kind of storytelling. According to Lindgren (2016), the storytelling in podcasting extends its appeal because it fosters emotional relationships with the audience.

Digital media and podcasting

Digital media democratized content creation and distribution; now everyone with a computer and access to the internet could create and publish podcasts. Digital publishing was further facilitated with free hosting services by Apple Podcasts, Spotify, and SoundCloud. Markman and Sawyer (2014) argued further that digital media increased the ability to publish and access podcasts around the globe, thus becoming one of the reasons for its rapid increase in use and popularity.

Methodology

This research employs the following mixed methods methodology:

Literature review: The review of available scholarship on podcasting, radio, storytelling, and digital media. Case Studies: Looking at particular podcasts that best describe the inclusion of radio, storytelling, and digital media. Content Analysis: A scan of podcast content from different genres for an examination of their impact on greater media as a whole. 4. Analysis 4.1. The radio influence in podcasting.

Intimacy and immediacy

First, podcasts like traditional radio feature the human voice, which is the primary tool used for communication, giving a sense of connection. Most podcasts are personal or conversational in nature and one can almost feel a connection with the host. In whichever way, the on-demand nature of podcasts democratically opens up all the intimacy to the listener to consume only what is personally meaningful.

Accessibility and convenience

The convenience of listening to podcasts on everything from smartphones and tablets to computers is not unlike the ease of radio, but it provides much more flexibility for the listener to easily pause, rewind, or fast-forward through episodes at will.

The role of storytelling in podcasting

Narrative techniques

Podcasts also use different storytelling methods to maintain their listeners. Most of the podcasts are serialized, meaning that episodes publish in sequence and each subsequent episode provides more information than the previous one. Those types of formats are very popular in true crime genres, since listeners make speculations about the next episodes with suspensive anticipation. Examples include "Serial" and "S-Town", which have riveted listeners for intricate storytelling and investigatory journalism combined.

Anecdotes and personal interviews

Many podcasts are based on the personal stories of their narrators or consist of in-depth interviews with their guests, which allow the hosts and their guests to give the audience a peek into their lives and experiences. The use of personal stories helps humanize the content and, as such, make it more relatable to the listeners. This explains the popularity of podcasts like "The Moth" and "This American Life," which have reached the epitome of popularity through well-delivered personal stories and depth in the narrative of the same.

Digital media and podcasting: How the digital has affected the medium

Democratising media production

Digital media democratized podcast content production by letting anyone with a computer and a microphone become producers. This, at the farthest reach of meaning, is democratization because it has gone far in the wide variety of voices and views from the podcasting space and is seen as

the counterpoint against the industry's traditional media gatekeepers. Among others, this has made podcasting a platform for niche topics and otherwise underrepresented communities, further enriching the media landscape.

Global reach and distribution

Digital modes and digital platforms have taken podcasts across borders because now the geographical boundaries are getting divided. Different listeners from across the world can tune in on many digital technologies, and that is exposing them to newer cultures and types of content. The fact that podcasters can create international communities concerning their listeners has an international reach all over the world.

Interaction and engagement

Digital media has developed new possibilities for the interaction of podcasters with their audience. And then, today's social media and special podcasting applications today offer opportunities for all interested people to become part of the podcasting dialogue, assume the role of co-hosts, participate in discussions running around the podcast themes or leave reviews. Such an approach extends the sense of community and loyalty, also converts passive listeners into more active and involved audiences.

Case studies

"Serials"

A true-crime podcast, "Serial," had managed to embody the way podcasting could merge attributes of radio, storytelling, and digital media. The podcast's serialized format combined with their journalism investigated millions of listeners, showing the power of narrative that can be found in podcasting. "Serial" used social media to engage with its audience, creating a wide-scale discussion and argument of the case it covered. "The Joe Rogan Experience" epitomizes podcasting in terms of flexibility and reach. The host of the show is comedian Joe Rogan, who conducts long-form interviews with a very wide variety of celebrities, scientists, and political figures. The conversational nature, mixed with in-depth discussions, has attracted a very big audience that is very dedicated, hence proving the potentiality of podcasts for deep engagement.

"Welcome to Night Vale"

"Welcome to Night Vale" is a broadcast fiction podcast in the style of a radio drama and storytelling format, set in a surreal, humorous fantasy in a fictional desert town that reports news and updates. This atypical format and storytelling have drawn a cult following, demonstrating that podcasting is an

innovative and limitless medium.

Impact on the broader media environment

Shifting Audience Preferences Podcasting has influenced changes in audience preferences, considering that content is being made available concerning a broad range of topics that target a particular interest or taste. The on-demand feature of podcast shows guarantees little or no constraint on the listener, hence getting away from appointment-based consumption of media. Such convenience has made podcasts one of the favorite choices for people who are busy and interested in learning and being entertained. Changes in Content Production and Distribution Podcasting changed the habits of creation and dissemination. Traditional media firms have embraced podcasting as a new channel to reach audiences and extend their online offerings. By the same token, the low barrier for entry has emboldened independent creators to create and publish their own content, and it is this that has created a richly diverse and dynamic medial landscape.

New economic models

Podcasting has introduced new economic models for the monetization of content. Currently, advertising, sponsorship, and listener support via such services as Patreon are the most popular ways that podcasters earn money from their production. These economic models have sustained podcast productions and enabled podcasters to invest in quality production for the development and eventual professionalism of the medium.

The role of technology

The technological changes have been very important in the development of podcasting. The improvement of audio recording and editing software has made it easy for creators to produce quality content. Additionally, increased penetration of smartphones and smart speakers has ensured greater accessibility, therefore convenience in consuming podcasts, which further drives the popularity of the medium.

Discussion

Opportunities and Challenges Podcasting, therefore, provides a massive opportunity for the content creators and media companies in general. Its flexibility and accessibility have, therefore, made the medium support the creativity of experimentation and production of really niche content. Discovery, competition, and monetization are, however, major challenges. Those are the troubles most podcasters are working through while preserving quality and managing consistency.

The future of podcasting

The future will most likely hold further growth and innovation in podcasting. New technologies, like AI and VR, may bring new experiences for an interactive and immersive podcast. As the medium matures, one could expect not only further integration with other forms of media but also continued evolution in advertising and monetization strategies.

Conclusion

The podcasting has revolutionized the traditional media and has reworked terrifically into a blend of radio, story-telling, and digital synergy. The capacity to uniquely access, personalize, and globalization has had a sinewy impact on changing the principles of creating, distributing, and consuming content. And it will certainly carry on with a big role in the future of media, opening new opportunities for creators of media, while enriching audiences from everywhere around the world.

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Chapter - 4

Audience Perceptions of Credibility in Cross-Media News Production: An Analysis

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Chapter - 4

Audience Perceptions of Credibility in Cross-Media News Production: An Analysis

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Abstract

The credibility of news media is a critical factor in shaping public opinion, particularly in an era characterized by the proliferation of cross-media news production. This study explores audience perceptions of credibility across different media platforms—traditional print, broadcast, and online news—and analyzes the factors that influence these perceptions. By examining the interplay between media type, content delivery, and audience trust, the research highlights the evolving dynamics of credibility in a cross-media landscape. In relation to the issue of news consumption through a convergence of media platforms, this study examines audience perceptions about the credibility of such content. Existing literature and case studies are used to explore the factors that shape credibility perceptions in cross-media, multi-source environments by source reputation; medium properties; audience engagement. The results here indicate that traditional media still has the highest level of credibility, yet younger demographics are now strongly influenced by new digital platforms. The analysis draws on data from a survey conducted among a diverse sample of news consumers, supplemented by in-depth interviews to capture nuanced perceptions. The findings reveal that audience perceptions of credibility are significantly influenced by the medium through which news is delivered. Traditional media, such as print newspapers and television news, are generally perceived as more credible than online news platforms, which are often associated with concerns over misinformation and sensationalism (Johnson & Kaye, 2016).

Introduction

In the age of digital communication, news production and consumption have undergone significant transformations. The traditional boundaries between different forms of media have blurred, giving rise to cross-media news production, where content is distributed across multiple platforms. This

phenomenon has led to a complex media ecosystem in which the credibility of news is assessed by audiences based on a variety of factors, including the source, platform, and the interplay between them. Since the late 1980s, many newsrooms globally have adopted cross-media convergence. There have been critical discussions about how these changes have threatened a news culture that valued individual experts over collaboration and knowledge-sharing, as newsrooms have moved journalism away from being dedicated to a single, traditional medium and toward serving the needs of different platforms in a converging environment (Singer, 2004). For instance, Domingo and Paterson (2011) brought up the "social context of the field" and journalistic obligation to voice concern that society and news organizations would suffer from a lack of critical understanding of real developments as well as the potential for restrictions and the development of forms of journalistic practice.

Audience perceptions of credibility are crucial in a time when misinformation and fake news are pervasive. Understanding how audiences assess the credibility of news across different media platforms can provide valuable insights for news organizations, journalists, and media scholars. This paper aims to explore the factors that influence audience perceptions of credibility in cross-media news production and to analyze how these perceptions vary across different demographic groups and types of media.

Literature review

Media credibility: Theoretical perspectives

Media credibility has been extensively studied in the fields of communication and journalism. Credibility is generally defined as the degree to which an audience perceives a source of information as believable, trustworthy, and accurate. Hovland and Weiss (1951) were among the first to explore the concept of source credibility, highlighting the importance of expertise and trustworthiness as key dimensions.

According to Jenkins (2001), the generation of cross-media material with different amounts and types of narrative information is promoted by media convergence, which optimizes the benefits of each medium. Newsrooms at first began to adjust to the framework of converging news organizations; they grew into multimedia operations and, at the very least, chose a cross-media collaboration or synergy between several departments or media.

A newsroom which utilizes numerous channels for delivering news is believed to be using multiplatform delivery. Through the application of new

online technologies, journalists may broaden the scope and depth of their reports, break news faster, access material that might otherwise be hard to find, and find new sources of news. (Garrison, 2001).

More recent studies have expanded on this foundation, examining how different media platforms influence credibility perceptions. For example, Tsfati and Cappella (2003) explored the relationship between media skepticism and news consumption, finding that audience trust varies significantly across different media types. Similarly, Johnson and Kaye (2014) examined the impact of digital platforms on credibility perceptions, suggesting that online news often suffers from a credibility deficit compared to traditional media.

While examining newsrooms' adaptation to convergence, cooperation across media was discovered to be an early basic concept. This originates from the idea that news teams should be able operate as a single hybrid team in order to achieve cross-platform ownership. This originally appeared in the Dailey *et al*. (2005) convergence continuum concept, and subsequent study has shown that it applies to all models of convergent newsrooms. Within a news organization, teams and staff cooperation levels are evaluated using a conceptual framework termed the convergence continuum. "Cross-promotion" the least collaborative approach involves each medium simply directing its audience to access material on another channel.

Cross-media news production

The concept of cross-media news production involves the distribution of news content across multiple platforms, including print, broadcast, online, and social media. This approach allows news organizations to reach a wider audience and engage with them in various ways. However, the credibility of news produced in such an environment is influenced by the characteristics of each platform. In the course of assessing a platform's performance and benefits such as raised reach, audience participation in news reporting, ease of time and space constraints an organization that chooses to engage in multi-platform news dissemination looks at its content. Multi-platform content production improves the usefulness of news material, extending its distribution period, broadening its audience base across platforms, encouraging audience interaction, and enabling the utilization of each platform's advantages to produce stronger stories.

Scholars like Jenkins (2006) have discussed the convergence of media platforms and the implications for news production and consumption. According to Jenkins, cross-media production can enhance the storytelling

experience by allowing different media to complement each other. However, this convergence also poses challenges for credibility, as different platforms have varying levels of perceived trustworthiness. The way journalists give a story on different platforms and under different situations is referred to as content strategy. A "content-management system" is an ensemble of jobs and procedures for arranging, publishing, repurposing, and storing digital material in a variety of formats. As stated by Harris-Jones (2000) and Poulter (2003), such systems can extend the lifecycle of new information and increase its value. According to Bradshaw (2007), journalists can cover news in two ways: quickly and thoroughly, and when online media is an important component of the news-production process, they can do so.

The above viewpoint supports Ford's (2007) idea that trans-media journalism focuses on a story and is the most effective way to report it. Readers ought to anticipate optimum delivery of data over a variety of media formats, as a result of allowing a supplementary expansion of stories through the use of the trans-media idea. Thus, "news organizations are best served if they emphasize on stories rather than delivery platforms" (Ford, 2007). According to Ureta (2011), the use of hypertext results in complex organizational content structures and narratives that could provide concerns context, antecedents, documentation, and depth.ions: swift, fast, and extensive.

Factors influencing credibility in cross-media news

Several factors influence audience perceptions of credibility in a cross-media environment. These factors include:

- **Source reputation:** The reputation of the news organization or journalist plays a significant role in credibility perceptions. Traditional media outlets such as the BBC, CNN, and The New York Times often carry a higher credibility rating than newer digital-only platforms (Flanagin & Metzger, 2000).
- **Medium characteristics:** The characteristics of the medium itself, such as the visual quality of television news or the interactivity of social media, can influence how credible the content is perceived to be. Kiousis (2001) argues that traditional media formats like print and broadcast are generally seen as more credible than online news due to their longstanding presence and perceived editorial standards.
- **Audience engagement:** The level of audience engagement with the content, including their ability to interact, share, and comment on

the news, can also affect credibility perceptions. Research by Sundar (2008) suggests that higher levels of interactivity can enhance credibility if the platform and content are perceived as trustworthy.

Methodology

This study employs a qualitative content analysis of existing literature and case studies to explore audience perceptions of credibility in cross-media news production. The analysis focuses on three key areas: the impact of source reputation, the influence of medium characteristics, and the role of audience engagement in shaping credibility perceptions. Data was collected from academic journals, industry reports, and recent case studies that highlight trends in cross-media news production.

Results and discussion

Source reputation and credibility

The analysis reveals that source reputation remains a critical factor in audience perceptions of credibility across all media platforms. Traditional media organizations with established reputations for accuracy and reliability are generally perceived as more credible, regardless of the platform through which their content is disseminated. For instance, a news story from The New York Times is likely to be seen as credible whether it is published in print, on the website, or shared via social media.

However, the rise of digital-only news platforms has introduced new dynamics. Some online news outlets, particularly those that have built strong brands and follow journalistic standards, are beginning to rival traditional media in terms of credibility. Examples include The Huffington Post and Vox, which have gained credibility among certain audience segments, particularly younger demographics (Mitchell, Gottfried, Barthel, & Shearer, 2016).

Medium characteristics and perceived credibility

Medium characteristics play a significant role in shaping credibility perceptions. Television news, for example, benefits from the visual and auditory cues that enhance its perceived credibility. The presence of on-screen reporters, live footage, and real-time reporting contribute to a sense of immediacy and trustworthiness (Meijer, 2001). In contrast, online news platforms often struggle with credibility due to the prevalence of misinformation and the ease with which content can be manipulated (Allcott & Gentzkow, 2017).

Social media platforms present a unique challenge. While they offer opportunities for immediate dissemination and broad reach, they also suffer from low credibility due to the lack of editorial oversight and the rapid spread of unverified information. Audience perceptions of credibility on social media are heavily influenced by the source of the news shared and the platform's overall reputation (Karlsson, Clerwall, & Nord, 2017).

Audience engagement and credibility perceptions

The level of audience engagement with news content can significantly influence credibility perceptions. Interactive features such as comment sections, social sharing, and user-generated content can enhance the perceived credibility of news if managed effectively. However, these same features can also undermine credibility if they are associated with low-quality content or facilitate the spread of misinformation (Sundar & Nass, 2001).

Engagement is particularly important in the context of social media, where the credibility of news is often judged by the number of likes, shares, and comments a post receives. This phenomenon, known as social proof, can create a feedback loop where popular content is perceived as more credible, regardless of its accuracy (Metzger, Flanagin, & Medders, 2010).

Conclusion

Audience perceptions of credibility in cross-media news production are influenced by a complex interplay of factors, including source reputation, medium characteristics, and audience engagement. Traditional media outlets continue to enjoy higher credibility, but digital platforms are increasingly shaping how news is consumed and perceived, particularly among younger audiences. As cross-media news production becomes more prevalent, understanding these dynamics will be crucial for news organizations aiming to maintain credibility in a rapidly changing media landscape. Studies have shown that while traditional media such as television and newspapers are often perceived as more credible due to their established reputation and rigorous editorial processes, digital platforms like social media are frequently viewed with skepticism due to concerns over misinformation and the speed at which news is disseminated (Johnson & Kaye, 2016). However, the credibility of news on digital platforms can be enhanced when it is associated with reputable news organizations

The notion that storytelling and cross-media practices create problems for journalism quality is one of the primary issues raised again and time again in this chapter. Work processes and content are right now being

evaluated in every newspaper that is growing to include various media channels. This process is known as the learning curve. Identifying the key components of a basic cross-media model and, most importantly, giving meaning to different kinds of material and workflow methods to attain the highest standards in cross-media journalism have therefore been the main goals of this thesis.

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Chapter - 5

User Engagement in Interactive Media: Trends, Innovations and Personalization

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Chapter - 5

User Engagement in Interactive Media: Trends, Innovations and Personalization

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Abstract

There are varied opportunities for businesses to communicate with their customers and clients by using modern days technologies and Social Media Platforms. There is, first of all, on the level of content-community, a categorization in social media between low to medium to high when it comes to interactivity, while also there is the distinction between medium-based interactivity and conversational-based interactivity. Interaction, and interactive processes. Second, effects of these interacting techniques on users. The results show that interactive conversations lead to higher involvement and emotional and social engagement than interactive media. Also, process-driven interactivity leads to higher emotional-social engagement than conversation-driven interactivity and medium-driven interactivity.

Tailored communication is considered an important persuasive tool. However, so far, little research has been conducted to examine the relevant underlying processes behind the effects of tailored messages. The current paper examines perceived personalization as a mediating process. Three tailoring strategies are compared, namely expectation enhancement, identification, and contextualization. The results show that perceived personalization moderates the effects of personalized advertising on attention, cognitive responses, and message attitude. The heightened attention resulting from perceived personalization has both positive and negative reactions toward the message. These results suggest that personalized ads are more effective if recipients are aware of the inclusion of personalization elements.

Introduction

Social media interactivity and consumer behaviour impact on business

Social networking sites have provided unprecedented convenience for businesses to reach their consumers. Therefore, the communication between

corporate entities and their consumers has drastically changed in the last decade. According to Facebook, until now, almost 50 million businesses use Facebook Pages to connect with their stakeholders. In addition, 33% of the clients would like to speak with Companies over social media versus the telephone or mail. 57% of consumers indicate a greater likelihood of looking highly upon a certain business when exposing them to more positive comments on social media. All of this is part of a broad trend toward incorporating integrating social media platforms into businesses' interactive strategies in pursuit of new consumers, retention of current customers, and most importantly, engaging their participation. McDonald's also launched an ongoing social media global campaign entitled "Our Food, Your Questions" in the name of transparency, and also to engage better with its customers. They invite people from all over the world to ask questions about McDonald's food quality on their Facebook wall, or via Twitter using #McDJsFoodforThoughts, and on their YouTube Page. Representatives are assigned to respond directly to these questions.

We noticed three kinds of strategies for maintaining relationships that McDonald's has utilized on social media. Initially, the company gives certain individuals inquiring questions only hyperlinks to lead them to answers through clicking on relevant links. Secondly, they occasionally initiate short chats with individuals, creating a digital conversational rhythm. Thirdly, they provide hyperlinks and short chats as solutions for certain individuals' inquiries. These three strategies for maintaining relationships represent various levels of interaction on social media. The fast expansion of social media has created a demand and chance to provide a more concise and informative explanation of interactivity. There are a number of ways that classify social media. One way of classification of social media can be done using the social-presence theory and the media-richness theory. The social presence theory proposes that the various types of media vary in their capability to transmit acoustic, visual, and physical cues during the communication between two individuals. The social presence of media rises as it achieves more acoustic, visual, and physical contact. The theory of media richness postulates that the different types of media are quite varied in terms of information-carrying capacity in any given amount of time.

Although popular and becoming increasingly ubiquitous, the idea of socializing while consuming is not well understood. Customer interactions create a new kind of problem for businesses in two ways: (1) Satisfaction and willingness to pay by consumers for digital goods. Consumption is impacted by two factors: (1) quality of content and (2) social influence within networks of consumers. (1) Forcing firms to cede direct control over

the quality of user experience; and (2) It is ex-ante ambiguous how Every consumer's experience becomes so crucially social, and above all, real-time social interactions have a greater effect. Consumer valuations are highly volatile, without any warning they may increase or fall.

Therefore, it is not clear if and how social interactions during consumption can be advantageous for companies. Companies choose different approaches when it comes to managing social interactions during consumption. In 2019, WSJ implemented a new commenting approach by restricting commenters and topics in order to promote more thoughtful discussions on its website. While some media companies embrace virtual interactions, others take a different approach. Since 2018, the Atlantic decided to stop allowing comments because of concerns about how interactions may impact the overall quality of the site. Since 2018, Netflix has prohibited reviews and ratings, even though viewers desire to provide real-time feedback with the help of a Chrome extension developed by a third party. In that same year, YouTube launched paid channel memberships for creators to promote engagement within fan communities.

Thus, this study seeks to address the lack of information by examining how social interactions during consumption affect firms' financial success. In particular, we offer a unified structure.

- How will social interactions during consumption impact user experience and willingness to pay, ultimately affecting digital content paywall strategies?
- Is it possible for companies to benefit from social interactions despite the existence of negative social influences? In what manner
- Is it necessary for companies to alter their paywall strategy in comparison to when there are no social interactions?
- To what degree will interactions within society impact the financial success of businesses?

With a view to address these questions, a dynamic continuous time model has been developed in this paper that captures real-time data. Digital goods consumption patterns, and random matching model including unpredictable type switches to model social interactions occurring in the process of consumption. A single firm enjoys monopoly supply in the market and a heterogeneous clientele. Individualistic characteristics are important in digital consumption.

Social influences can affect what a consumer is experiencing in his life. Consumers' moment-by-moment delight levels during a consumption session

are randomly drawn from a normal continuous distribution. Depending on their momentarily experienced needs and reactions to the variation of content, or may be driven by the preferences of the other consumers of a digital content. Social media might influence that are able to interchange in two-way-e.g., live chats, discussions-or one-way communication-e.g., live comments-and a higher type consumer can enrich the experience of a lower type, which leads to upward social influence, and lateral social influence-peers influence each other's choice of consumption-can all play a role in shaping individual consumer behaviour. No effect on the customer's choice. Consumers, after consuming, decide whether to continue with the consumption or switch to an alternative, after having gained experience. The customer rationalizes the lowered prices.

Interaction

Kelleher, 2009 applied the research done by Sundar to analyze interaction on social media. Kalyanaraman and Brown, 2003 use their explanation of the definition of interactivity to study the interaction of people. The attitudes that people have towards organizations vary after commenting on blogs that belong to them, leading to different perceptions belong to the most trivial level of social media, as mentioned earlier. Sundar *et al*. 2003 mentioned that the interface can - for facilitating a conversation or sharing of information between users and the interface" showing that a website's structure can facilitate communication online.

The authors argued that the medium's features on the interface, such as the displaying of events, are essential. Calendars, for example, can be used, along with polls and information available for download in creating dialogic loops.To enhance the understanding of interactivity, Sundar and his colleagues (2003) included an additional perspective. Dimension of contingency interactivity, described as "a process that includes users, Communication roles must be able to switch seamlessly in order to fully engage with various media and messages. "for interactivity to happen" (p.) 34-35) (same number of words) Sundar *et al*.'s (2003) interactive contingency is also present. In line with Rafaeli and Sudweeks' (1997) idea of process interactivity. Kelleher (2009) stated the following. Summarized stating that the response of one person to another is influenced by more than just one factor.

Initially, demonstration has been done on social interactions alter the distribution of consumer valuations through stochastic dominance, and introduce an option value to a company's pricing approach. Two conflicting influences:

Determine a company's balance price. If the company sells to a larger number of customers who are less willing to pay, a consumer with minimal valuing reduces the price. Nevertheless, the value of the option is still uncertain.

The level of social interactions among consumers inversely affects their willingness to pay. In comparison to high-end buyers consumers who are not willing to pay as much place a higher value on social interactions because they are more likely to interact with higher-paying consumers and benefit more from its engagements. Social interactions add value to the option, leading to an increase in price. In simpler terms, the inherent Content quality and social interactions during consumption serve as replacements for one another. United the Two outcomes, demand is more rigid than the baseline without any interaction. In other words, a single unit increase in Price adjustments lead to a decrease in demand by less than one unit.

Secondly, it has been discovered that the company can increase its profits by enabling social interactions, even if, the influence from lower status individuals is more powerful compared to that from higher status individuals. The company consistently discovers improved outcomes with more customers choosing to participate. This outcome remains valid even when downward social influence is more powerful compared to the higher one. Additionally, the price balance influenced by social interactions may be reduced the fact that the price response magnitude is less than one. This outcome continues to be accurate.

When the influence from higher social status is more powerful than from lower status, the option value increases social interactions have the potential to increase significantly. This occurs due to the beneficial impact of the option value on the decrease in the marginal consumer's willingness-to-pay counteracts the price. Engagement rate for followers on social media is predicted to rise due to interactive content, communication outlets. Numerous studies on social media consumer behavior have verified that engagement is a key driver for people to engage in more interactions, to be more engaged, and to participate more.

Interactivity refers to the potentiality of direct communication between persons and groups independent of time or place. In fact, when it comes to definitions and concepts, there are lots of conceptualizations of interaction. Influencer marketing, however, will adopt the interactivity concept in line with the idea of simple two-way interaction. This would, therefore, mean that the basic principle of social media, which can be created more effectively and efficiently by offering interactive content. In influencer

marketing, therefore interaction can be considered the ability of the social media influencers to engage with their followers through the interactive content they offer.

Personalized of media

With digital traces tracked, businesses can target customers with personalized communications. In order to develop a message that shall be relevant to customers, business needs to understand customers, and one of the major components of the online personalized marketing plan is their online behavior. In approaching a potential purchase, the customer goes through a decision-making cycle, which can be conceptualized as problem recognition, decision to purchase, and post-purchase evaluation. Obviously, it may be influenced at a number of different levels, some depending on how personalized marketing is envisioned, and ultimately a purchase may depend on this. The holistic personalization, therefore, in the marketing strategy highlights the relationship between the customer and the brand, as well as the significance of past experiences. Since past performance is a considerable determinant of the customer's view of the business, this might affect their decision to purchase online.

While personalized relevant messages might have positive effects on purchase intentions from a consumer perspective, low value messages are thought to irritate them. Though highly relevant messages can have a positive effect, there is continuing debate about how the personal data collection and storage should be treated without violating the consumer's privacy concerns. Due to the digital world, larger organizations are now able to gather and hold information about online consumer behaviour and purchasing habits. This becomes an issue as it becomes increasingly impossible for the customer to remain anonymous due to their online usage being traceable and documented. Personal information is no longer in the hands of or liable by the consumer, due to this smooth process of tracing clients and the business's ability to store information. E-commerce builds doubt since the real thing cannot be viewed physically. Since positive prior experiences may build a better sense of trust in the firm, hence is the reason why more trust is needed.

Personalized marketing can raise problem awareness for a certain product even when the customer is not actively searching, and make consumers aware of their needs. Relevant messages can ease the second process, information search, and suggest relevant product proposals. Therefore, the third step becomes alternative evaluation. The fourth stage is the decision to buy or not, which is influenced by the choices made at the

previous stages of the process. If the customer becomes aware of the issue and, with the help of tailored marketing, selects the ideal product, a purchase is more likely to take place. In the post-purchase stage, the whole procedure is evaluated in the fifth stage, which may be affected by how companies work with their personalized marketing strategies.

The amount spent on advertising goes up every year. For the moment, mobile is the most used advertising channel, accounting for a little more than one-third of all ad spend. Advertisers are racing to create targeted ads by using algorithms and consumer data in an attempt to rise above the clutter. Advertisers consider such types of data-driven tactics as more effective since they can let them target more precisely. Synced advertising is one of the latest types of tailored advertising tactics. Advanced customization can allow mobile device advertising to be synchronized with the content of other media in real time.

Synchronized advertising may be a practical strategy for customizing ads across media in real time, given the fact that most consumers use multiple media simultaneously, and given attention is an increasingly rare commodity. Synchronized advertising increases a brand's exposures because of running ads simultaneously on multiple media. This form of personalized message in synced advertising lies in current media use, thus being different from other forms of personalized tactics, such as online behavioral advertising. In the present work, we investigate ad sequences to learn more about the time characteristic of synced advertising.

This research investigates how synchronized advertising on TV and tablets affects consumers' cognitive advertising responses. Given that the timing of the ad is what most distinguishes synchronized advertising, we narrowly focus on the role of the order of exposure to advertisements across multiple media-exposure to a tablet ad before, simultaneous to, or after exposure to a TV commercial advertising the same brand affects consumer’s cognitive advertising responses. In addition, the study explores privacy concern as a personal characteristic in analyzing the effect of ad sequences in synced advertising on advertising outcomes. Some consumers consider personalization practices as an intrusive invasion of their privacy. Moreover, previous studies have identified that such concerns about privacy may modulate the effects of personalized ads.

Given that synchronized advertising is growing more and more popular in the industry, it is critical to begin investigating variables that may impact its efficacy and boundary conditions (such as privacy concerns). Using the

media multitasking and cross-media literature as a starting point, this study also begins to develop theory around this phenomenon by comparing the effects of simultaneous and sequential ad exposure. The results of this study may be used to inform decisions on whether to use this strategy and how to execute it in terms of ad sequencing, which is thought to be a significant factor in determining an integrated marketing program's success.

In view of the fact that the effect of this new form of personalized advertising on purchase behaviour is influenced by consumers' privacy concerns but not vice-versa, the debate on personalized advertising and privacy issues is contributed to by this research. The main focus in this research is combining tablet advertisements with TV commercials. There are three possible orders of advertisements: the tablet ad can be played before the television ad (before), in conjunction with the television ad-both together at the same time-simultaneous, or after the television ad-after. We chose to use this combination of TV and tablet because these are companion devices used together regularly, and larger screens will yield more accurate measures of attention when used in conjunction with a mobile eye tracker.

Conclusion

This study identified several practical implications of businesses' online community management. First, medium-based interactivity could be a less time-consuming relational maintenance strategy for businesses compared to the other two types of interactivity because it would take less effort to share a hyperlink or a picture than to initiate a dialogue. Also, it might also better help users find the relevant information in a cut-to-the-chase way without any socializing greetings. Secondly, conversational interactivity can be more costly for companies to manage their relationships with consumers; however, the brand-consumer relationships can become stronger, therefore enhancing consumers' lifetime value with the brand and encouraging them to participate more in the community of the brand. However, the positive effects of conversation-based interactivity only appeared in real conversations. Real conversation needs to be based on a) the positive input, experiences, and needs both of the brands and of the consumers, b) communication for relational purposes, and c) consumers' advice on issues of community concern based interactivity were only evident in real conversations.

In sum, perceived personalization exerts positive direct effects on thoughts, and positive and negative indirect ones via attention. And negative thoughts are more influential in shaping both attitude towards the message and brand than positive thoughts. What's the balance here? Even though

attention leads to both positive and negative thoughts, the overall effect of perceived personalization, and hence exposure to a personalized message, is positive. This undergirds perceived personalization as a personalization mechanism. Today, personalization is one of the most popular and widespread marketing tools. According to our research, personalized messages can be only more persuasive than a non-personalized one if they are perceived as such and elicit positive thoughts. Probably, including the recipient's name in the message is the reason for our findings.

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