The Transformation of the Advertising Industry in the 'Un-tact' Digital Technology Era

Yoo, Seung-Chul[1], Kang, Seung-Mi[2], Truong, Tu Anh [3]

[1]Associate Professor, Division of Communication & Media, Ewha Womans University, Korea
communication@ewha.ac.kr
[2]Doctoral Student, Division of Communication & Media, Ewha Womans University, Korea
seungmk@ewhain.net
[3]Master's Student, Division of Communication & Media, Ewha Womans University, Korea
truongtuanh192ccg27@ewhain.net

Abstract

The advent of the "un-tact 2.0 era," described as a "new normal non-face-to-face social relationship," accelerates the transformation of the living paradigm as a fully digital mediated social relationship. The emergence of these new forms of digital behaviors and mediated relationships significantly influences the industry prospect and consumers' individual lives. Advertising has played a decisive role in moving the formation forces of society, creating a dynamic flow of the capitalist system across races and geographical boundaries. Its role will become more fundamental in the physical contactless environment due to the COVID-19 outbreak. Accordingly, advertising has changed and modified its shape and meaning throughout history to adapt to the dynamic external environment. In this article, we illustrated four primary stages of the evolution in the advertising industry from simple advertising to convergence of advertising. Finally, we also identified the challenges of the present advertising industry and the paradigm transformation of "un-tact 2.0" with various related examples.

1. Introduction

As a loudspeaker of innovation, advertising reflects and changes the industry. The advertising industry is profoundly affected by technological change and leads to technological adjustment more than other sectors. For example, changes in outdoor advertisements on highways reflect the performance improvement of internal combustion engines in cars. As engine performance improves and vehicles speed up, outdoor advertisements' size and installation distance sharply increase. With self-driving vehicles expected soon, how will digitalized outdoor advertisements appear during vehicle-to-vehicle communication in real-time?

In recent years, advertising in crowdfunding platforms is crucial for spreading new technologies. In open crowdfunding platforms such as Kickstarter, where numerous start-ups compete for individual investors, the strong rationale for moving investors' choices is a video advertisement for investor relations (I.R.). Multimedia contents with product introduction distributed mainly on social media profoundly influence the crowdfunding raise for start-ups [1]. The transformation in industries and technologies raises the voice of innovation to inspire

and boost another revolution. All industries have been dramatically changing since the declaration of limiting face-to-face contact in 2020. This paper summarizes the history of the advertising industry regarding the industry's characteristics and discusses how it will change in the future amid non-face-to-face (un-tact) innovation. Finally, we unfold the prospective stories of advertisements.

2. The Evolution of the Advertising Industry: "Simple-Integration-Segmentation-Convergence"

2.1 The Early Period of the Advertising Industry and the Era of Integration

From a macroscopic point of view, the development history of the advertising industry can be summarized as adequate flows in each era, from simple to integration, from segmentation to convergence. Started in 1841 by Volney Palmer in Philadelphia, a new type of service industry called "advertising agency" was limited to the simple "selling ad space" function of intermediary providing the advertising pages of newspapers to advertisers in the early years [2]. Then, the advertising agency 'N. W. Ayer & Son,' established in 1869, first began a modern concept of the advertising agency that offered so-called integrated services. These services included the functions of slogan production and advertising planning.

In 1902, a global advertising agency called McCann Erickson opened an office in New York and entered the early stages of modern advertising. Advertising agencies sharply developed amid the phenomenal growth of mass media, from the first advertising appearance on radio in 1906 to black-and-white T.V. advertisements in 1941. In the era of global industrial revival through World Wars I and II until the early 80s, the advertising agencies aimed to become an integrated advertising agency, known as a full-service advertising agency. Full-service advertising agencies encompassed all the so-called "three functions of advertising" that consist of "media, production, and marketing services." These advertising agencies developed into large communication companies with comprehensive marketing communication capabilities, including events, public relations (P.R.), and various promotion activities. For example, Saatchi & Saatchi, a UK-affiliated global advertising agency that started in 1970, represents integrated advertising agencies in that era [3].

2.2 The Era of Segmentation in the Advertising Industry

With the substantial increase of international trade and rapid globalization of advertising agencies in the 1980s and the emergence of digital media as advertising channels in the 1990s, advertising agencies passed the 'Era of Integration' of serving multiple functions under one umbrella. They now faced the 'Era of Segmentation' in which professional specialization by duties and their third-party outsourcings are prominent features. In the segmentation era, the full-service advertising agency focused on the quality control (Q.C.) function of productions, plans, and media planning/purchasing as a kind of control tower.

The main advantage of this 'Segmentation Era' enables advertising agencies to be equipped with economies of scale and high efficiency and actively adapt to the international marketing environment that has reached the global competition system. On the one hand, management-oriented operation companies, which hold a high degree of "segmentation," became the primary cause of the steep decline in independent viability of advertising agencies. On the other hand, agencies' outsourcing of third parties, ranging from planning, production, and media buying, enables outsourced companies to develop their competencies rapidly [4]. By vastly expanding in the 1980s and 90s, global and local business consulting service companies constantly reinforced their marketing consulting sector and emerged as threatening competitors to traditional advertising agencies. Subsequently, while the advertisers who use marketers from the advertising agencies take on the role of control towers, strengthening the marketing/advertising/public relations department is another challenge for the advertising agencies.

2.3 The Era of Convergence in the Advertising Industry

With the 'Era of Segmentation' crisis mentioned above, advertising agencies sought specialization in this area. Notably, small and medium-sized agencies pursued differentiating strategies through sharp positioning, and large advertising agencies tried to strengthen companies through a spin-off or by operating in-house companies. Whereas digital media began to threaten the competencies of mass media in the 2000s, the "digital advertising agencies" arose to adapt to periodic changes. For example, various digital agencies emerged around 2006, such as Digitas, a well-known advertising agency specializing in digital marketing [5]. In addition, a rapid growth of agencies targeted niche markets where existing advertising agencies still struggle. For instance, The Integer Group, which Omnicom Group acquired in 2001, attracted attention by specializing the agency's capabilities in retail and shopper marketing.

Along with the growth in the scale of the overall market economy, the advertising industry, especially the full-service advertising agencies, faced considerable threats and acute problems due to their financially oriented business growth strategy. As efforts of ad agency specialization increased, beginning in early 2000, ad agencies actively invested in their agency branding. Moreover, they started to buy or merge small creative or digital specialized agencies or launched small independent sub-companies within their agency to strengthen their substantial competence. Whereas mergers and acquisitions improved short-term returns that enhanced the financial outcomes in the past, now we enter the era of "convergence" that focuses on creating synergy by adding specialized small and medium enterprises in new fields. In 2013, 'Project Worldwide' recruited the former CEO of 'Saatchi & Saatchi X' and established a shopper marketing agency called 'Shoptology' within the group [6]. In 2012, it also merged 'Motive,' an experiential marketing company, and a social media marketing specialist called 'Affinitive.'

In sum, since 2010, agencies have transformed into marketing communication groups that combine size and quality with a large number of specialized branches. The role of the advertising agency in the 'Era of Convergence' is to pursue increasing collaboration with heterogeneous fields while retaining expertise and identity. In that sense, the advertising agency obtains the advantages of integration and specialization by establishing a sister company with relatively independent functions. For example, 'OgilvyRED' holds the strategic planning service and consulting function of Ogilvy, and "Disruption Works" is an advertising consulting division of TBWA agency [7].

From 2010 to mid-2010, a period of struggle occurred to discover the identity of an advertising agency. Owing to the ambitious boundaries and complicated frame of competition in the advertising industry [8], the traditional advertising agencies that developed a constitution centered on mass media advertisements for the past 100 years faced a fundamental identity confusion. The transformation of "simple-integration-segmentation-convergence" mentioned earlier has profound implications for the advertising industry after the un-tact paradigm in 2020.

In the 1990s, the functional segmentation of advertising agencies and full-scale outsourcing company operations contributed to short-term financial growth; however, it led to a decline in competency amid the professional field in the long term. The uniqueness of a flexible and creative advertising agency faded through an emphasis on administration and management science. According to a survey of Bedford Group, the average length of the advertising agency-advertiser relationship in 1984 in the United States was 7.2 years, shortening to only 2.5 years in 2013. No matter with whom they worked, advertisers could not find noticeable distinctiveness between agencies despite the steep increase in the number of advertising agencies. Since mid-2010, many digital advertising technology companies focusing on 'advertising technology (ad-tech)' emerged amid the diminished advertising agencies' expertise. In addition, global consulting firms such as Accenture, PwC, IBM, and Deloitte have positioned themselves as new powerhouses in the advertising marketing agency [9]. In fact, as a phenomenon since 2017, all big five business consulting companies ranked in the top 10 advertising agencies in the world. With the advantages of management consulting fundamentals and a keen network with their clients, they acquired large-scale advertisers by merging various small advertising and digital firms. For example, Accenture acquired and joined five influential advertising agencies in 2019,

blurring other consulting companies' movements.

After entering the late 2010s, digital communications operators expanded their power in the advertising industry [10]. In addition to global online platforms such as Google, Facebook, and Amazon, telecommunication network operators such as AT&T, Verizon, and Comcast in North America established advertising agencies through mergers and acquisitions. They attracted advertisers by the synergistic effect with the network business division. Examples include AT&T's Xandr, founded in 2018; Verizon Media, established in 2017; and FreeWheel, which was acquired and merged with Comcast in 2014 [11]. Beyond North America, a similar tendency also occurred in other countries. For instance, SKT in South Korea bought digital advertising company Incross in 2019, while K.T. in South Korea acquired Nasmedia in 2008 and then PlayD in 2016.

In this unpredictable and competitive environment, sizeable global advertising agencies have to pursue "accountability-first" for survival. Omnicom established a new agency of record (AOR), called We Are Unlimited, to provide close services for its extensive global advertiser, McDonald [12]. Another global advertising network, Publicis Groupe, implemented the Chief Client Officer (CCO) system in 2018, declaring that clients are the center of corporate management [13]. Moreover, big international corporations post the common phrase "Customer is king" as a slogan. When the revisions of leading advertising agencies reach this level, the situation becomes more competitive for small agencies.

Table 1. Main features and events of each stage in advertising industry

Type	Features	Main Events
Simple	– Simple "selling ad space" function	– A new type of service industry called "advertising agency" in 1841 by Volney Palmer in Philadelphia
Integration	– A modern concept of the advertising agency that offered so-called integrated services, including the functions of slogan production and advertising planning	– The advertising agency' N. W. Ayer & Son' established in 1869 – In 1902, a global advertising agency called McCann Erickson opened an office in New York.
	– A full-service advertising agency that encompasses all the three functions of advertising that consists of 'media, production, and marketing services'	– Saatchi & Saatchi, a UK-affiliated global advertising agency, started in 1970.
Segmentation	– The quality control (Q.C.) function of productions, plans, and media planning/purchasing	– In the 1980s and 90s, global and local management consulting service companies constantly reinforced their marketing consulting sector
Convergence	– Focuses on creating synergy by adding specialized small and medium enterprises (Hidden Champion) in new fields	– In 2013, 'Project Worldwide' recruited the former CEO of 'Saatchi & Saatchi X' and established a shopper marketing agency called 'Shoptology' within the group
	– The integration and specialization by establishing a sister company that had relatively independent functions with the company	– - 'OgilvyRED' holds the strategic planning service and consulting function of Ogilvy, and "Disruption Works" is an advertising consulting division of TBWA agency

3. The Era of Borderlessness – The Results of Advertising Industry Beyond Boundaries

In previous parts, we examined the flow of modern advertising from the early days to the present from an industrial standpoint. As shown in Table 1, advertising has developed from simple advertising to the stage of convergence. Finally, the un-tact 2.0 environment redefines the entire industry. Remarkably, some industries with little relevance to the media are experiencing mediatization. With the increasing influence of the media in society's diverse systems and cultural fields, media penetrates deep into politics and our daily activities, including consumption. These social changes are mediatization [14].

In the era of borderlessness, electric vehicle companies compete with game companies, and online commerce service companies subsequently emerge as content production and distribution parties. As an innovative company, we expect that Tesla will achieve phenomenal growth of the In-Vehicle Infotainment (IVI) system by releasing various video games to play in cars [15]. Shortly, when vehicles' autonomous driving

technology of level 4 or higher combines with virtual/augmented reality (VR/AR) and rental vehicles become the common tendency of mobility, will cars play a similar role to current gaming centers or internet cafes? At that time, the meaning of outdoor advertising on highways to the advertising industry will be completely different.

Furthermore, the opportunities and challenges of borderlessness beyond industry boundaries keep arising [16]. For example, Coupang, a representative Korean online commerce platform, launches an online streaming video service (OTT: over-the-top) 'Coupang Play' and a live commerce platform 'Coupang Live' where private streamers host their chat rooms in real-time. The number of platforms that allow anyone to become a live advertising professional and generate real-time sales has sharply increased during the accelerating mediatization. How will the advertising industry transform in such an era of borderlessness?

In the un-tact 2.0 environment after COVID-19, content consumption and commerce will change rapidly [17]. Moreover, for the advertising industry to survive in the unpredictable competitive circumstances of the marketing communication business, it is fundamental to add the "depth" of unique expertise and expand its scope across borders by integrating with diverse fields, including information technology, retail, and manufacturing. Many advertising agencies deviated from the concept of traditional advertising and are producing great results by attempting to cross boundaries. We can summarize this change in the following three flows: story, data, and good creatives.

3.1 Monetary Stories: Transmedia Storytelling and Content Monetization

In a book named Convergence Culture [18], MIT professor Henry Jenkins, an expert in transmedia storytelling, claimed that 'participatory culture' is based not only on technology but also on the content consumption process where consumers directly customize their content. In the same book, 'Transmedia Storytelling,' a combination of trans and media, used in the sense of 'across' and 'transcendence,' describes the practice of creating and delivering content in various platforms through story experience that transcends the limitation of the medium [18]. In the multi-screen era that transmits multimedia marketing messages, including advertisements through content or stories, modern consumers are increasingly selective in information exposure. Therefore, it is crucial for advertising agencies to adjust communication approaches to their target consumers. In the transmedia storytelling environment, establishing a reasonable cost base of marketing investments is challenging for advertisers under the complicated interaction between various media types around the story [19].

Today, we live in the age of "Share to survive." According to the last Twitter user statistics, nearly one-fifth of Americans use Twitter and posted 500 million tweets every day in 2020. A survey of Marketing Science Institute in 2013 showed that the customer-initiated content through word-of-mouth was 26.7 times more sales effective than the firm-initiated content of the company. In conclusion, advertisements should stimulate the voluntary communication of consumers by inspiring advertising stories [20]. For instance, in 2016, BBDO collaborated with a convenience store (7 Eleven) for Snickers advertisers and created a remarkable campaign (Hungerithm: hungry-algorithm) [21]. In line with the "You're Not You When You're Hungry" story, the hunger algorithm monitored online mood by analyzing social responses on Twitter and adjusted the price of Snickers bars accordingly in real-time. In other words, the higher the "hanger" (hunger and anger) Tweets, the lower Snickers price.

Consumers' orientation to social participation and the customers' direct influence on the brand steeply increase in the participatory culture and transmedia environment [22]. The entire non-face-to-face transaction accelerated this tendency during the COVID-19 pandemic starting in 2020. In addition to influencers, consumers actively express their opinions and directly share their ideas as content creators and participants beyond the mere audiences of the brand story. Through sophisticated "Integrated Brand Communication (IBC)," the transmedia and participatory culture become more than a textbook that allows one-way direction flow of consumers' opinions [23]. Today, instead of disregarding consumers' diverse and spontaneous thoughts and opinions, it is valid to adopt an approach that moves the brand's philosophy into action and encourages

consumer participation. In 2018, Nike's ad campaign provoked a fierce controversy that triggered intense emotional reactions, such as videos and photos of burning Nike sneakers on social media and even criticism of the president. Paradoxically, it turned numerous supporters into enthusiastic fans at the same time. Acknowledging the diverse opinions of extreme anti-fans and fans enabled Nike to communicate its original meaning and value by reorganizing the brand spirit (Just Do It) in such a big gap. This type of advertising reflects a change of direction from the attention economy of repeated exposure to advertisements to the emotion economy that creates emotional experiences for audiences. In the transmedia era, advertising is encouraged to make a subtle transformation into an active "brand story maker" beyond a "brand storyteller."

Before the expansion of the non-face-to-face environment, advertisers used e-commerce as an alternative channel for offline commerce. Today, the age of e-commerce begins and takes over the retail industry from traditional marketing [24]. In the online environment, consumers are increasingly impatient due to their addictive use of smart mobile devices. To satisfy consumers' impatience, online commerce companies are fiercely competing with compelling-title services such as one-day shipping, early morning delivery, and bullet delivery. The purchase of products and services through mobile phones accelerates the decision-making process and increases tendencies to reduce purchase confusion or minimize cognitive efforts. Therefore, the power of customized digital advertising in purchasing is as influential as the product itself.

Our research highlights that the reaction to the advertising content at the time of purchase leads to prompt sales. Whereas in the past, stimulating purchases was the final point of advertising goals through hierarchical reactions to advertisements, today, mobile-based commerce platforms increasingly provoke immediate reactions. In modern 'commerce communication' that communication itself directly connects to commerce, the role of advertising shifts from creating brand awareness or changing attitudes in the past to triggering more realistic and immediate responses [25]. Likewise, we can apply this concept to the recent growth of live commerce. Amid these substantial changes, it is paramount for the advertising industry to develop content expertise that produces real sales results beyond building brand equity from a long-term perspective.

3.2 Data Creatives: Combining Data Insight and Advertising Strategy

Before the non-face-to-face paradigm, 'big data' has been an emerging topic in all society, including advertising/marketing, that raised doubts about a complex science focusing on consumer analysis. However, big data merged the acute advertising dilemma of "the conflict between advertising as a science and advertising as an art" into an integrated relationship. Accordingly, advertising agencies consider direct sales promotion based on data and creative methods to reach consumers keenly and artistically. In other words, this change proposed the vision of a future advertising agency—"data-centric creative"—as a science [26]. As advertising-related roles such as events, promotions, exhibitions, public relations, consumer research, and data mining specialized independently, advertisers' marketing competencies outperformed agencies. They led to the reformation of integrated advertising agencies' status. Specialized agencies that combined the two aspects of creativity and data turn such a crisis into a market of opportunity.

The big data wave will become an important agenda in the non-face-to-face 2.0 era in the advertising industry. In June 2018, the Interpublic Group of Companies (IPG) acquired Acxiom Marketing Solutions (AMS) business unit from Acxiom, a global consumer data leader, in a $2.3 billion deal to reinforce the big data sector [27]. After acquiring AMS, a large-scale company with 1,800 data scientists and tech engineers, the expectation is that IPG's path will be different from the business model of existing advertising agencies. In the same way, Dentsu (Dentsu Aegis Network) acquired Merkle, a global big data company, in 2016 [28]. In 2013, Havas Media Group and Cognitive Match partnered to propose Dynamic Creative Optimization (DCO) solution, enabling brands to deliver the most optimized online advertisements to target consumers based on consumer data [29]. The DCO technology offers various creative alternatives and shows the most relevant and personalized advertising message based on consumers' profiles at the optimal time. Generally, these global agencies invested in the competitiveness of data analysis power by the collaboration or merger with data specialists and their expertise in creative or media. The movements of leading global agencies reflect their effect on maximizing advertising effect by deeply intervening in consumer and program content based on data

analysis beyond the traditional superficial marketing communication of creating and launching advertisements and creating new businesses.

As mentioned above, despite the dynamic role of big data in the advertising industry, it has not substantially changed the industry. Besides the impact of the global economic recession after the COVID-19 pandemic, agencies have not been able to find appropriate growth models in the era of continuous change. Agencies still face a significant challenge of competing with advertisers who own a large amount of data and advanced analytics competencies. The biggest issue of big data in the advertising/marketing area is that analysis results generated by the pure and hasty collection and analyses of a massive amount of consumer data are inadequate to produce suitable creatives [30, 31]. In other words, the advertisement results are no different from the past despite the application of big data. In 2019, the AI-driven 'Go Back to Africa' campaign that countered the racist message about black people with a meaningful and impactful narrative to promote African tourism stood out as an innovative and creative idea. As a result, the project won 2019's Cannes Lions creative data award and generated various engagements on social media [32]. Accordingly, how to change such a vast amount of data into creative results is a new mission for advertising agencies.

Beyond using big data as the mere marketing slogan of agencies, it is necessary to develop into a "data-creative" specialist that creates "Big Creative" compatible with big data and improves the long-term structure by enhancing expertise. In the era of big data with an increasing information explosion, data and creatives have an indivisible and deliberated relationship. It is a call for advertising agencies that have developed into creative organizations to operate leading campaigns. Now is the time of opportunity for advertising agencies to sparkle with innovation. Advertising agencies need to reorganize themselves as creative organizations adaptable to the era of "data-creative" in which science blossoms as an art.
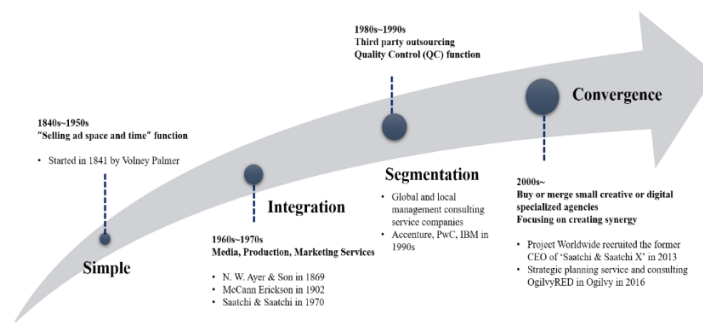

Figure 1. The evolution of advertising industry throughout history

4. Conclusion

In this paper, we discussed the four-stage evolution (Figure 1) and the contributing roles of technology in advertising industry. In the advertising industry where human is the key property, one-day automatic programs, and predictive models will inevitably overshadow the dominant role of advertising professionals. In the era of entire automation, the victory of a machine shows through the sophisticated equipment of 'smartness' that improves cost-efficiency and satisfies consumer demand by providing faster and more accurate service. However, digital technology is still not intelligent and ripe enough, at least not yet. Indeed, it is difficult for machines to dominate the advertising industry since the major target of advertisements is unpredictable consumers. Paradoxically, the challenges of understanding customers become advantageous for advertising professionals. At the same time, it is crucial to consider whether advertising professionals adequately performed the functions of a leader in the advertising industry. Furthermore, as a mover, how has advertising changed the world beyond the role of a mirror merely reflecting society?

It is time for advertising professionals to step away from the number game created by various indexes and

examine the brand and society. Unfortunately, we cannot replace such introspection with artificial intelligence and perform it in real-time. Advertising professionals need to actively learn to overcome the new social challenges of an un-tact environment [33] while maintaining their nature to "create brand voices and actions." If accountability 1.0 is a defensive responsibility focused on the short-term performance under advertisers' requests, accountability 2.0 should be an active one derived from advertising professionals' "creative leader" pride which empowers to move our society. It is fundamental for advertising professionals to fulfill their duty as experts to bring vitality and innovation to consumers' lives and communities with creative content. The advertising agency should position itself as a "professional group that discovers and grows value," which has a vision for the present, past, and future of the brand and reflects the "intrinsic value of advertising."

References

[1]   J. Cha, "Crowdfunding for Video Games: Factors that Influence the Success of and Capital Pledged for Campaigns," *International Journal on Media Management*, Vol. 19, No. 3, pp. 240-259, 2017. DOI: https://doi.org/10.1080/14241277.2017.1331236

[2]   D. R. Holland, "Volney B. Palmer: The Nation's First Advertising Agency Man," *The Pennsylvania Magazine of History and Biography,* Vol. 98, No. 3, pp.353-381, 1974.

[3]   V. Terpstra, "The Evolution of International Marketing," *International Marketing Review,* Vol. 4, No. 2, pp.47-59, 1987. DOI: https://doi.org/10.1108/eb008329

[4]   J. J. Mohr, S. Sengupta, and S. F. Slater, "Mapping the Outsourcing Landscape," *Journal of Business Strategy,* Vol. 32, No. 1, pp.42-50, 2011. DOI: https://doi.org/10.1108/02756661111100319

[5]   J. Sinclair, "Advertising and Media in the Age of the Algorithm," *International Journal of Communication,* Vol. 10, pp.3522-3535, 2016.

[6]   Project Worldwide, Project: Worldwide Launches Shopper Engagement Agency Shoptology, http://www.globenewswire.com/news-release/2013/05/30/1308415/0/en/Project-Worldwide-Launches-Shopper-Engagement-Agency-Shoptology.html

[7]   A. Williams, Ogilvy & Mather launches new consulting arm focused on marketing transformation, https://www.cmo.com.au/article/592379/ogilvy-mather-launch-new-consulting-arm-ogilvyred/

[8]   S. Rodgers and Q. Chen, Q, "Post-Adoption Attitudes to Advertising on the Internet," *Journal of Advertising Research*, Vol. 42, No. 5, pp. 95-104, 2002. DOI: http://doi.org/10.2501/JAR-42-5-95-104

[9]   Ø. D. Fjeldstad, C. C. Snow, R. E. Miles, and C. Lettl, "The Architecture of Collaboration," *Strategic Management Journal*, Vol. 33, No. 6, pp. 734-750, 2012. DOI: https://doi.org/10.1186/s41469-017-0017-y

[10]   A. Athavaley, J. Toonkel, and J. Love, Verizon and AT&T suspend ads from Google over offensive videos, https://www.reuters.com/article/us-verizon-digital-idUSKBN16T2VO

[11]   J. Cope, AT&T Broadband to merge with Comcast in $72B deal, Article from Computerworld, https://www.computerworld.com/article/2586684/at-t-broadband-to-merge-with-comcast-in--72b-deal.html

[12]   L. Stein and J. Wohl, Omnicom launches dedicated McDonald's agency we are unlimited, https://adage.com/article/agency-news/omnicom-launches-mcdonald-s-agency-unlimited/306783

[13]   B&T Magazine, Publicis group hires new chief client officer for Australia & NZ, https://www.bandt.com.au/publicis-groupe-hires-new-chief-client-officer-australia-nz/

[14]   S. Hjarvard, *The Mediatization of Culture and Society*, Routledge, pp. 173, 2013.

[15]   C. Butler, Tesla's plan to leave the auto industry behind on in-car infotainment, Article from CNBC, https://www.cnbc.com/2019/11/23/teslas-plan-to-leave-auto-industry-behind-on-in-car-entertainment.html

[16]   Y. J. Wind, and C. F. Hays, "Research Implications of the "Beyond Advertising" Paradigm: A Model and Roadmap for Creating Value Through all Media and Non-Media Touchpoints," *Journal of Advertising Research*, Vol. 56, No. 2, pp. 142-158, 2016. DOI: http://doi.org/10.2501/JAR-2016-028

[17]   Oxford Business Group, How has Covid-19 Changed Media Consumption? https://oxfordbusinessgroup.com/news/how-has-covid-19-changed-media-consumption

[18]   H. Jenkins, *Convergence culture*, New York University Press, pp.29, 2006.

[19]   A. Phillips, *A Creator's Guide to Transmedia Storytelling: How to Captivate and Engage Audiences Across Multiple Platforms,* New York: McGraw-Hill, pp. 13-19, 2012.

[20]   B. Yang and M. Zisiadis, Transmedia Marketing: Strengthening Multiplatform User Participation Through Storytelling, M.A. Thesis. Umeå University, Sweden, 2014.

[21]   Campaignbrief, Australian campaigns of the decade: Snickers 'Hungerithm'(2016) via clemenger BBDO Melbourne, https://campaignbrief.com/australian-campaigns-of-the-decade%E2%80%88snickers-hungerithm-

2016-via-clemenger-bbdo-melbourne/

[22] N. Granitz and H. Forman, "Building Self-Brand Connections: Exploring Brand Stories Through a Transmedia Perspective," *Journal of Brand Management,* Vol. 22, No. 1, pp. 38-59, 2015. DOI: https://doi.org/10.1057/bm.2015.1

[23] B. E. Barnes, "Integrated Brand Communication Planning: Retail Applications," *Journal of Marketing Communications,* Vol. 7, No. 1, pp. 11-17, 2001. DOI: https://doi.org/10.1080/13527260121813

[24] A. Bhatti, H. Akram, H. M. Basit, A. U. Khan, S. M. Raza, and M. B. Naqvi, "E-Commerce Trends During COVID-19 Pandemic," *International Journal of Future Generation Communication and Networking*, Vol. 13, No. 2, pp. 1449-1452, 2020.

[25] K. Kang, J. Lu, L. Guo, and W. Li, "The Dynamic Effect of Interactivity on Customer Engagement Behavior Through Tie Strength: Evidence from Live Streaming Commerce Platforms," *International Journal of Information Management,* Vol. 56, 102251, 2021. DOI: https://doi.org/10.1016/j.ijinfomgt.2020.102251

[26] C. Zimmermann and C. G. Nolte, "Towards Balancing Privacy and Efficiency: A Principal-Agent Model of Data-Centric Business," in *International Workshop on Security and Trust Management*, pp. 89-104, Sep 2015.

[27] IPG, Interpublic Group Agrees to Acquire Acxiom Marketing Solutions to Lead News Wave of Innovation in Data-Driven Marketing, https://investors.interpublic.com/news-releases/news-release-details/interpublic-group-agrees-acquire-acxiom-marketing-solutions-ams

[28] Merkle, Dentsu Agis Network to acquire a majority stake in Merkle, https://www.merkleinc.com/news-and-events/press-releases/2016/dentsu-aegis-network-acquire-majority-stake-merkle

[29] Mxmindia, Havas Media & Cognitive Match power data-driven creatives, https://www.mxmindia.com/2013/07/havas-media-cognitive-match-power-data-driven-creatives/

[30] E. C. Malthouse and H. Li, "Opportunities for and Pitfalls of Using Big Data in Advertising Research," *Journal of Advertising,* Vol. 46, No. 2, pp. 227-235, 2017. DOI: https://doi.org/10.1080/00913367.2017.1299653

[31] H. Chen and L. Zhou, "The Myth of Big Data: Chinese Advertising Practitioners' Perspective," *International Journal of Advertising,* Vol. 37, No. 4, pp. 633-649, 2018. DOI: https://doi.org/10.1080/02650487.2017.1340865

[32] Netimperative, Cannes Lions Winner: Black & Abroad 'Go back to Africa' scoops top data prize, https://www.netimperative.com/2019/06/25/cannes-lions-winner-black-abroad-go-back-to-africa-scoops-top-data-prize/

[33] J. B. Ahn, "A Study on Predicting Changes of Future Advertising Characteristics and Types after the Corona 19 Pandemic," *International Journal of Internet, Broadcasting and Communication*, Vol. 12, No. 4, pp. 137-147, 2020. DOI: https://doi.org/10.7236/IJIBC.2020.12.4.137