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Integrated Marketing Communications: Pushing the Boundaries through Digital Technologies

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Abstract:

The evolving nature of Digital Technologies and the continuous diffusion and adoption of innovative technological tools and applications, provide challenging research and business opportunities. Following these evolutions, this study explores the role of Digital Technologies in Integrated Marketing Communications (IMC) in the context of Strategic Marketing Planning. The paper briefly presents the latest developments in the field of IMC through a technological perspective and reviews the dynamics and features of three major technologies (Chatbots, Quick Response codes and Augmented and Virtual Reality) as promising tools and methods for effectively applying IMC initiatives. The paper attempts to provide an initial argumentation regarding the role of these technologies in the design and implementation of IMC. Implications for research and practice are provided throughout the paper.

***Keywords:** Integrated Marketing Communications, Chatbots, QR Codes, Augmented Reality, Virtual Reality*

1. Introduction

Going through a purely digital era, it is considered impossible to achieve wide-ranging marketing goals without the use of modern methods of managing Integrated Marketing Communications (Abashidze, 2017). Advertising, as well as the way companies communicate with consumers, has changed with the widespread use of new Digital Technologies (Lee & Cho, 2020). Moreover, considering the COVID-19 pandemic, the advertising industry is going through a period full of challenges, a period where there is an urgent need for companies to turn their attention to Digital Technologies and fill the gaps that have been created due to the crisis (Taylor, 2020). Although Integrated Marketing Communications (IMC) applications have proven to be effective in various sectors of the economy such as non-profit organizations (Dixon-Todd & Hall, 2016), voluntary tourism (Kattiyapornpong & Yu, 2019), the hospitality industry (Porcu, del Barrio-García, Alcántara-Pilar, & Crespo-Almendros, 2019), the food and beverage industry (Đokić, 2018) etc., providing practical exploitation, the results show that there is still room for improvement in communication goal setting practices (Patti, Hartley, van Dessel, & Baack, 2017). Despite the practical challenges posed by approaching IMC, Laurie & Mortimer (2019) acknowledge that IMC have a strong and positive impact on the brand and its financial performance.

IMC programs are enhanced through the use of Digital Technologies and Information and Communication Technologies (ICT) (Šerić, Gil-Saura, & Ruiz-Molina, 2014). The use and application of ICT, which began in the 1990s, such as e-commerce and ERP, has become essential for the survival and prosperity of businesses (Ibrahim & Jebur, 2019). Indicatively, the dynamic correlation between Digital Technologies and Integrated Marketing Communications are highlighted by (a) the positive impact of IMC programs on increasing the effectiveness of online marketing (Ali & Allan, 2017), (b) the positive correlation of overall marketing with IMC to achieve customer

engagement with brands and increase profitability (Manser Payne, Peltier, & Barger, 2017), (c) the use of new technologies such as augmented reality (AR), artificial intelligence (AI), chatbots and voice assistants which have been incorporated into marketing practices, as a means of attracting customers and enhancing the overall customer experience (Ferreira & Fino, 2020; Moriuchi, Landers, Colton, & Hair, 2020) and (d) the implementation of gamification practices whose primary objectives are perfectly aligned with three key marketing concepts: engagement, brand loyalty and brand awareness (Lucassen & Jansen, 2014).

The current study focuses mainly on three emerging Digital Technologies: Chatbots, QR codes and AR/VR. The objective of this approach is to highlight the developments in consumer-conscious technologies rather than in behind the scenes technologies such as artificial intelligence which is a cornerstone of the rest. This study has a dual purpose. Initially, it intends to highlight the latest developments in the aforementioned technologies and to provide an argumentation on how they can be utilized in the field of Integrated Marketing Communications and on the other hand to motivate scholars and practitioners to further explore their potential.

2. Literature Review

2.1 Chatbots

Implementing chatbot technology in marketing strategies as a communication tool is nowadays widely used by many companies with online presence (Ren, Castro, Acuña, & De Lara, 2019). This technology has helped plenty of companies in “*one-to-one communication*” given them benefits such as communicate on a 24/7 basis, save on personnel costs and also giving them the ability to not miss customers’ requests (Zumstein & Hundertmark, 2018). Also, chatbots helped the users themselves by giving them timely effective assistance or information (Brandtzaeg & Følstad, 2017). Chatbots referred as conversational agents that aim to naturally and meaningfully converse with humans on open domain topics (Wu et al., 2019) or as “*any software application that engages in a dialog with a human using natural language*” (Dale, 2016, p. 813). The first chatbot is believed to be a program called ELIZA developed by a German scientist, Professor Joseph Weizenbaum in 1966 at the Artificial Intelligence Laboratory in MIT. Since that time many different chatbots have been developed - with different features, using various channels - all of them using a certain level of artificial intelligence (Nikhila, Jyoyhi, Mounika, Mr. Reddy, & Dr. Murthy, 2019; Zemčík, 2019).

Although, as Hussain, Sianaki, & Ababneh (2019, p. 946) mentioned, “*current state-of-the art systems are still a long way from being able to have coherent, contextual and natural conversations with humans*”, rapid developments in technological fields brings chatbots performances close to the human average. Adiwardana et al. (2020) presented Meena, a chatbot that scored high (79%) on the SSA – a human evaluation metric that measures both Sensibleness and Specificity Average - 7 units below the Human SSA score (86%), concluding that (p. 6) “*a large end-to-end model can generate almost humanlike chat responses in an open-domain setting*”. With recent developments on the map, businesses can take advantage on boosting their sales through chatbot use, altering in a more efficient way consumers' preferences and purchase decisions (Hildebrand & Bergner, 2019). In addition, chatbots like Meena, when connected to a “text to speech synthesizer”, a technology that Google LLC is presenting remarkably results (Shen et al., 2018), makes it possible to be part of our daily lives in the near future.

2.2 QR Codes

Quick Response codes (QR codes), a technology emerging in the relatively new field of mobile advertising (Schapsis & Chiagouris, 2019) has drawn attention from both researchers and marketers. Since their development in 1994, the QR code -a two-dimensional matrix barcode - (Sang Ryu & Murdock, 2013) was initially used in the auto industry with great efficiency. It has also been adopted and used as a tool in Integrated Marketing Communications (Sago, 2011) presenting significant advantages in interactive advertising (Sibel & Meydanoglu, 2013). QR codes have been proved to be an essential tool for marketing campaigns if certain rules and conditions are taken into account such as defining goals and objectives for using this technology, have a specific target audience, provide added value through their content, make use of the physical locations for placing QR codes to achieve efficiency for ease of scanning, decide the right time for the campaign and be creative in the execution of that (Asare & Asare, 2015). Furthermore, Trivedi's, Teichert's, & Hardeck's (2020) research on the effectiveness of pull-based print

advertisement with QR codes, points out that advertisements can benefit from the use of QR codes, for both low-involvement and high-involvement product categories, also, if certain conditions are met. Market mavenism and consumer innovativeness are also characteristics that QR code users present compared to non-users (Ryu, 2013).

With QR codes becoming colorful, more appealing, accurate and recognizable to the human eye (J. Lee, Wang, Lu, Wang, & Chou, 2019), ever than before, Apple Inc. recently elevated their usability presenting “App Clip Codes” in the Worldwide Developers Conference, June 22, 2020 (“Introducing App Clips,” 2020). App Clip Codes are, essentially, QR codes for Apple’s latest iPhone operating system (iOS 14) whereby tapping on them -using NFC technology incorporated- or scanned by the camera, let users launch an “App Clip”. App Clips are a small part of an app that provides speed and ease of use for the users, projecting only the essential information and allowing them finish one task quickly. App Clips can be used not only for better customer experiences but also for increasing engagement and promoting services and goods. Those recent advances showcase a new era for the usefulness of QR codes in the IMC mix. QR codes also seem to be directly related to a variety of augmented reality applications and various studies show the interaction between these technologies (Bal & Bicen, 2016; Kan, Teng, & Chou, 2009; Li & Si, 2019; Maner, Devasthale, Sonar, & Krishnamurti, 2018; Nguyen, Le, Lai, & Yan, 2019; Ruan & Jeong, 2012; Yeh, Chen, Yang, & Weng, 2018; Zhang & Bai, 2018). However, although this interaction is not something relatively new, with the continuous developments in both these technologies, new applications in various industries are predicted in the coming years.

2.3 Augmented Reality (AR) and Virtual Reality (VR)

Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) - as a combination of AR and VR (Tepper et al., 2017) - are key technologies for the future of marketing (Alcañiz, Bigné, & Guixeres, 2019). They add value to businesses in many ways, such as, providing better, more memorable customer experiences (Flavián, Ibáñez-Sánchez, & Orús, 2019), increasing advertising effectiveness (Leung, Lyu, & Bai, 2020) and improving brand attitude (Rauschnabel, Felix, & Hinsch, 2019). Ferreira & Fino (2020) suggest several implications on how to apply VR technology in an IMC plan apposing the connection between this technology and Integrated Marketing Communications. Industries like tourism and hospitality (Tsai, 2020; Wei, 2019), fast food restaurants (Calvo, 2019) and sports (Goebert & Greenhalgh, 2020) are already benefiting from the use of the latest AR/VR applications.

Although, questions remain regarding the differentiation of augmented and virtual reality and the clarification of their nomenclature (Cant, Cooper, Sussex, & Bogossian, 2019) as also for the definition of mixed reality (Speicher, Hall, & Nebeling, 2019), several definitions of these terms are available. Indicatively, according to the DoD, Augmented Reality is “*A type of virtual reality in which synthetic stimuli are registered with and superimposed on real world objects; often used to make information otherwise imperceptible to human senses perceptible*” (“DoD modeling and simulation glossary,” 2020). Similarly, despite the plethora and diversity in Virtual Reality definitions (Kardong-Edgren, Farra, Alinier, & Young, 2019), Yung & Khoo-Lattimore (2019, p. 2057) refer as the most commonly accepted definition “*the use of computer-generated 3D environment, that the user can navigate and interact with, resulting in real-time simulation of one of more of the user’s five senses*”. Finally, Mixed Reality, as defined by Milgram, Takemura, Utsumi, & Kishino (1995, p. 283), is an environment “*in which real world and virtual world objects are presented together within a single display*”.

In a recent study, Reinhardt, Hillen, & Wolf (2020), based on the belief that AR glasses will soon have smart assistants not only presented by voice but also with visual presentation, embedded visual intelligent virtual assistants into augmented reality glasses. They tested them with various appearances - invisible agent, simplified wireframe humanoid agent, fully textured human agent and detailed human agent – among participants and concluded that real humanoid agents in AR glasses environment are more attractive than the simplified ones for users due to the agents social and communication cues such as eye contact and gaze. Voice smart assistants (Voice Bots) are in the way to abolish traditional consumer decision-making models making optimal choices decisions for the consumer (Klaus & Zaichkowsky, 2020). Converting them into visual smart assistants, in their most attractive version, with up-to-date visual effects techniques like “Consistent Video Depth Estimation” (Luo, Huang, Szeliski, Matzen, & Kopf, 2020), all of which integrated into AR glasses, brands will only be benefited in the future.

3. Concluding Remarks and Implications

This paper presents the prospects Digital Technologies and tools like chatbots, QR codes and AR/VR can have in the Integrated Marketing Communication through their constantly new advancements. Examining these three technologies and looking them through the prism of Integrated Marketing Communications we concluded that it is not implausible Marketing will make use most of the recent advances and capabilities they have to offer, in the near future. Recent advances in the content and techniques described above for each one of these technologies as also the adoption of them even in a combined manner, may increase competitiveness and place Integrated Marketing Communications in the spotlight of the new era. Besides, in the context of Omnichannel Retailing consumers tend to simultaneously use alternative interaction channels (digital and non-digital) in a seamless manner (e.g. simultaneous interaction with one of the above technologies and with the front-line employees either in the physical store or from distance through call centers). Thus, the essence IMC ("*a cross-functional process for planning, executing and monitoring brand communications designed to profitably acquire, retain and grow customers*" - (Strauss & Frost, 2016)) calls for coordination/orchestration, multichannel approach, interactivity, unified communication, etc. To that end, Digital Technologies (e.g. social media, chatbots, QR codes, etc.) appropriately combined with traditional approaches (e.g. outdoor advertising, salesforce in the physical store) can well serve business objectives and effectively materialize the IMC theoretical components.

For scholars, further research is suggested in order to evaluate the results from the implementation of latest technological improvements and tools of these technologies in real life scenarios in the field of Marketing. Indicatively, lab or field experimental designs could well serve towards testing the effects of these technologies on consumer responses. However, while traditionally the measurement of advertising effectiveness entails a high degree of difficulty, Digital Technologies and corresponding tools and metrics (e.g. Marketing Analytics) offer challenging research opportunities towards reliably measuring actual behaviours in terms of advertising effects on consumer responses (e.g. click-to-buy metric, etc.).

For practitioners, the present study aims to provide an initial argumentation towards considering the promising role of these technologies in the context of their Strategic Marketing Planning. However, since the decision regarding the mix of both Digital Technologies and traditional methods that will be employed in the context of IMC initiatives constitutes a strategic decision (i.e. marketing plan strategies and programs), practitioners should carefully consider and document their corresponding choices. For example, the business sector, the culture, the situational factors, etc. are some determinants that should be taken into account in the context of such strategic decision making.

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