

# CONSUMER BEHAVIOR IN THE DIGITAL AGE

*Jose Ramon Saura*<sup>1</sup>

*Ana Reyes-Menendez*<sup>2</sup>

*Nelson de Matos*<sup>3</sup>

*Marisol B. Correia*<sup>4</sup>

*Pedro Palos-Sanchez*<sup>5</sup>

## ABSTRACT

In recent decades, the Internet, evolving technologies, and social media have led to the evolution of consumer behavior. The changes in customer behavior driven by digital developments provide many opportunities and challenges that businesses also need to deal with online. The better companies know about the behavior of their customers, the easier they can engage with them using strategies such as content marketing, User Experience (UX), influencers marketing, User-Generated Content (UGC), or Electronic Word of Mouth (eWOM). These strategies are essential to get more sales and to develop businesses online, as such strategies increase the engagement with users and influence their behavior. This Special Edition of J OSD focuses on the analysis of consumer behavior in the digital age and, by doing so, contributes to extant knowledge about digital marketing strategies, online consumer behavior, and new digital business models such as mobile applications or shared economy.

Keywords: Consumer Behavior, Digital Age, Digital Strategies, Digital Business.

JEL Classification: M3, M31, M37

## 1. INTRODUCTION

In the last decade, Internet strategies have rapidly evolved. In response to the challenges of today's new era, users have adapted their behavior on the Internet (Urban, Sultan, & Qualls, 2000). These changes have led to the development of new user habits and behaviors in a digital environment that is increasingly characterized by personalized strategies to attract new users (Reyes-Menendez, Saura, & Filipe, 2019).

In a digital ecosystem where companies need to understand their users and consumers online, the fundamental basis of business models that operate on the Internet should include the strategies such as user experience (UX), influencer marketing, user-generated content (UGC), or electronic word of mouth (eWom) (Saura, 2020).

The data generated by users as a result of their activity in their profiles on social networks, websites, digital platforms, or interactions with multimedia elements that belong to the digital marketing strategies of companies create data points that offer important

---

<sup>1</sup> Rey Juan Carlos University, Madrid, Spain (joseramon.saura@urjc.es)

<sup>2</sup> Rey Juan Carlos University, Madrid, Spain (ana.reyes@urjc.es)

<sup>3</sup> Research Centre for Tourism, Sustainability and Well-being (CinTurs), School of Management, Hospitality and Tourism (ESGHT), University of Algarve, Faro, Portugal (nmmatos@ualg.pt)

<sup>4</sup> School of Management, Hospitality and Tourism (ESGHT), Universidade do Algarve & Centre for Tourism Research, Development and Innovation (CiTUR) & Research Centre for Tourism, Sustainability and Well-being (CinTurs) & CEG-IST, Instituto Superior Técnico, Universidade de Lisboa, Portugal (mcorreia@ualg.pt)

<sup>5</sup> University of Seville, Seville, Spain (ppalos@us.es)

information about demographics, geographical data, interests, or lifestyle habits of users (Dwivedi, Johnson, Wilkie, & De Araujo-Gil, 2019). All these data must be analyzed by companies in order to appropriately segment advertising and propose digital segmentation strategies that can adapt to user behavior in this digital ecosystem (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011).

Based on the analysis of such data and Internet user behavior, companies have increasingly sought to understand the factors that influence users' online decision making. These factors can be determined by the influences among users on the Internet, reviews or opinions, personal experiences of close friends, and a multitude of other factors and interactions that can occur in digital environments such as social networks (Gursoy, 2019).

In addition, there is evidence that users' customer journey is changing over time, as customer behavior is getting increasingly influenced by digital advertising and the ease of making purchases in digital environments. The ease of using e-commerce websites has dramatically evolved in the last decade (Demmers, Weltevreden, & van Dolen, 2020). In this context, it becomes imperative to know how these changes in user behavior should be adapted—both from the point of view of users themselves, i.e. taking into account factors related to privacy and data processing of their data, and from the point of view of companies which must adapt their digital strategies to capture and generate leads to retain the customers online (Herhausen, Kleinlercher, Verhoef, Emrich, & Rudolph, 2019; Grewal & Roggeveen, 2020).

Accordingly, the role of factors such as UGC and eWOM has been extensively investigated in the literature (Reyes-Menendez et al., 2020). Regarding UGC, companies can use this type of content to understand the main user concerns, as well as to analyze their comments, opinions, attitudes, or any other online actions. This type of content is publicly generated by users and is free from bias caused by companies (Krumm, Davies, & Narayanaswami, 2008).

The analysis of such content allows companies to better understand the trends in user communities that focus on companies' products and services (Naaman, 2012). Following this line of research, companies can identify user communities and, within these, find opinion leaders who can become influencers (and thus help companies to promote their products and services). Likewise, in recent years, eWOM has become one of the main strategies to both attract and retain users. Users feel comfortable using social networks and their profiles on multimedia platforms to generate video, music, or any other type of multimedia content (Amato, Castiglione, Moscato, Picariello, & Sperli, 2018).

In these ecosystems, users are influenced by getting more followers or generating greater engagement in user communities. Opinions of other users—for instance, expressed through reviews and comments—also play a fundamental role in user decisions (Cheng & Jin, 2019). From the companies' perspective, a strategy must be developed to generate positive opinions about the company's products and services on the Internet, so that users can identify a positive reputation relative to the company and its products and services on the Internet (Smith, 2011).

In this context, this special issue aims to explore the factors that influence user behavior in the digital age, with a specific focus on the main digital marketing techniques used to promote various types of content published by online users.

## **2. HOW HAS CONSUMER BEHAVIOR CHANGED IN THE DIGITAL AGE?**

### **2.1 Social Media and Purchasing Behavior**

In a study on buying behavior of users in Malaysian restaurants by analyzing social networks, Jeetesh, Konar and Balasubramanian (2020) find that, in recent years, the restaurant industry and social networks have seen an increase in the generation of digital data and publicly accessible information. Based on the results, the authors argued that social networks can influence consumer pre-purchase behavior and online purchase decisions.

Focusing on the Malaysia restaurant industry, and specifically the food sector, the authors investigate the role of eWOM and its relationship with social media and online marketing communities. Specifically, Jeetesh et al. (2020) explore whether greater accessibility to information and the online ordering system can stimulate consumer purchasing behavior.

The results of applying the PLS-SEM analysis methodology to analyze the data of 270 consumers over three months suggest that eWOM, social media advertising, and online ordering systems are central factors that determine user buying behavior. At the same time, the opinions of other users on the Internet are not found to significantly influence user purchase decisions in the restaurant and leisure sectors.

This evidence suggests that companies should focus on the control and management of opinions and reviews that users make online about their products, taking into account the specific sector where they operate. Said differently, it is not enough to have a well-designed digital platform: on top of that, the product or service itself should also ensure a good user experience.

Consequently, while negative user opinions and comments can significantly affect online companies' strategy, a well-designed digital platform is not the key to increase purchases. Although it is true that according to Jeetesh et al. (2020), these actions do not influence users pre-purchase behavior, but it influences the opinion that users have about the product buying process.

### **2.2 Mobile Application Using Eye Tracking**

Žiaran, Antolín and Lacaci (2020) argue that, in order to study user behavior on the Internet, companies should adapt their strategies to include mobile applications. Mobile applications, understood as a new channel, have led many users and consumers to change their behavior in the digital ecosystem, as a mobile phone is a new purchase medium.

Žiaran et al. (2020) aim to analyze the differences between the responses to a questionnaire where eye-tracking was used to compare the results against the stimuli presented in the questionnaire.

The results of this study demonstrate that it is possible to predict user responses by simply observing the items shown in the questionnaire. The results of this study can be used in mobile applications to improve both the design of such applications and user experience.

Implications are presented focused on measuring the relevance that biometric metrics approach has on user behavior analysis to create or design future mobile applications. The results of this study highlight the importance of avoiding distractions in ecosystems where there is a lot of "noise" to implement marketing strategies, while we are on move for example, using mobile phones.

The results reported by Žiaran et al. (2020) can help improve navigation aspects related to user visualization and concentration, as well as provide a deeper understanding of how users browse the Internet and how user behavior can be modified. The iconographic and visual elements identified in this study can define companies' identity strategies, as well as guide the design of their platforms and profiles on social networks.

In conclusion, Žiaran and co-authors (2020) emphasize a strong connection between explicit and implicit metrics. The results empirically demonstrate that it is possible to predict user response to a simple questionnaire where the situation of the questions is visually analyzed on a mobile phone by the users. The understanding of how the user experience can be improved if we focus on visual navigation elements in mobile applications is thus analyzed.

### 2.3 Digital Marketing and Sharing Economy

Polanco-Diges and Debasa (2020) highlight the importance of new shared economy platforms. These platforms are focused on understanding and influencing user behavior. There are different digital strategies to attract and retain users who enjoy this type of platforms. In their systematic literature review, Polanco-Diges and Debasa (2020) analyze the strategies, techniques and tactics implemented on collaborative economy platforms and obtain added value from the analysis of the data generated by users.

The authors show that the shared economy platforms influence online user behavior and explain how digital platforms connect the supply and demand capacity of Internet users. Likewise, these types of platforms offer transactions related to the acquisition and rental of properties and collaborative ways of establishing relationships online. Through the use of such platforms, brands can generate experiences to create consumer trust and emotional rapport between users and companies.

Seeking to understand how users develop their behaviors and actions online, Polanco-Diges and Debasa (2020) review a total of 13 relevant articles on collaborative economy and digital marketing. Based on the results of the review, eight digital marketing strategies are defined—namely, UX (User Experience), SEM (Search Engine Marketing), SEO (Search Engine Optimization), SMM (Social Media Marketing), Freemium strategies, content marketing, CRM (Customer Relationship Management), or influencer marketing. The authors also identify and analyze 12 key factors needed to understand user behavior on shared economy platforms.

Focusing on UGC and eWOM, Polanco-Diges and Debasa's (2020) study provides a comprehensive review of the techniques and key factors needed to understand the impact of digital marketing and shared economy platforms on user behavior.

### 2.4 Digital Marketing and Fashion Industry

Furthermore, using an exploratory approach, Muniesa and Giménez (2020) investigate digital marketing strategies in the fashion industry and measure their effectiveness. This study also analyzes how fashion brands use digital media and social media to retain their consumers.

The authors indicate that companies must create quality content to define and analyze specific audiences. In the fashion sector, the most active generation is millennials, so fashion brands should use digital media and social networks to retain their consumers. An effective digital strategy that is frequently used in the fashion industry is influencer marketing.

Through influencers in the fashion sector, brands try to change user opinions about their products and services. Through the content that influencers share via digital channels, brands generate trust towards them among consumers.

In their study, Muniesa and Giménez (2020) review a total of 11 articles on digital marketing in the fashion industry focusing on online user behavior. The authors analyze different options to develop digital marketing strategies focused on user loyalty by investing in influencers and other digital strategies so that to increase engagement.

Based on the results, Muniesa and Giménez (2020) argue that one of the ways to effectively transfer a message from a brand to its customers is creativity. Creativity increases the fame of brands, so communications must be made spontaneously and through appropriate channels.

According to Muniesa and Giménez (2020), the most frequently used tools in the fashion sector to retain users and to influence their behavior on the Internet are SEO and SEM, as well as channels such as Instagram, Facebook, and Twitter. The authors also highlight the importance of such information systems as CRM to manage customer data, the use of QR codes to convey to users the channels through which companies are developing their strategies, and Big Data analysis to understand how users generate content. The paper concludes with the identification of the different influences that can affect users.

## **2.5 Online Risky Behaviors**

In their study on adolescents' risky behavior on the Internet and parental mediation, Agapito and Brito (2020) compare the reports on adolescent students of 7<sup>o</sup> and 12<sup>o</sup> grades in Portuguese schools. The authors identify and analyze available defense mechanisms to control the behavior of online users, as well as discuss psychological and digital tools that parents may use to control their children's online activity.

Agapito and Brito (2020) mostly focus on age and gender as factors that can determine user behavior on the Internet, both to consume content and to find or identify relevant content. The authors also argue that, from the perspectives of parents, there are risks associated with gender in terms of conversations and negotiations that can be difficult with children and adolescents to establish guidelines for Internet use. Accordingly, Agapito and Brito (2020) propose parental mediations for situations when there is a risk of negative online behavior, e.g. cyber bullying.

In this case, parents should play an important role in the mediation between new media and multimedia supports and the content that their children enjoy. In addition, authors discuss the knowledge that parents have of the Internet and their children's use of technological tools. From this perspective, Agapito and Brito (2020) try to explore the beliefs that Portuguese parents have about the risks of adolescents' online behavior.

The study concludes with an outline of important theoretical implications for future research on the prevention of risky online behaviors among adolescents, the ways in which parents may control such negative behaviors on the Internet, as well as the ways in which parents can evaluate the type of multimedia content enjoyed by their children.

## **3. CONCLUSION**

This special edition provides an in-depth look into user behavior in the digital age. Through the use of different methodologies, the contributions to this volume aim to understand how users behave on the Internet. It is important to indicate that the behavior of users on the Internet is linked to the actions that users carry out through the digital channels in which they invest their time.

The results of the studies in this special issue illustrate that user online actions vary depending on the industry. Pre-purchase and post-purchase user behavior, as well as user engagement and interactions among users in communities on the Internet are essential factors to be understood in this ecosystem.

Data management and protection are major challenges that companies should adequately respond to so that users feel safe when browsing digital platforms.

In future research, it would be necessary to analyze how users make decisions on the Internet, as well as what digital marketing techniques are perceived as safer by users.

## ACKNOWLEDGEMENTS

This paper is financed by National Funds provided by FCT- Foundation for Science and Technology through project UIDB/04020/2020.

## REFERENCES

- Agapito, D., & Brito, Q. P. (2020). A dyadic approach to adolescents' online risky behaviours and parental mediation. *Journal of Spatial and Organizational Dynamics*, 8(3), 244-266.
- Amato, F., Castiglione, A., Moscato, V., Picariello, A., & Sperli, G. (2018). Multimedia summarization using social media content. *Multimedia Tools and Applications*, 77(14), 17803-17827. doi: 10.1007/s11042-017-5556-2
- Cheng, M., & Jin, X. (2019). What do Airbnb users care about? An analysis of online review comments. *International Journal of Hospitality Management*, 76, 58-70. doi: 10.1016/j.ijhm.2018.04.004
- Demmers, J., Weltevreden, J. W., & van Dolen, W. M. (2020). Consumer Engagement with Brand Posts on Social Media in Consecutive Stages of the Customer Journey. *International Journal of Electronic Commerce*, 24(1), 53-77. doi: 10.1080/10864415.2019.1683701
- Dwivedi, A., Johnson, L. W., Wilkie, D. C., & De Araujo-Gil, L. (2019). Consumer emotional brand attachment with social media brands and social media brand equity. *European Journal of Marketing*, 53(6), 1176-1204. doi: 10.1108/EJM-09-2016-0511
- Grewal, D., & Roggeveen, A. L. (2020). Understanding retail experiences and customer journey management. *Journal of Retailing*, 96(1), 3-8. doi: 10.1016/j.jretai.2020.02.002
- Gursoy, D. (2019). A critical review of determinants of information search behavior and utilization of online reviews in decision making process (invited paper for 'luminaries' special issue of International Journal of Hospitality Management). *International Journal of Hospitality Management*, 76(B), 53-60. doi: 10.1016/j.ijhm.2018.06.003
- Herhausen, D., Kleinlercher, K., Verhoef, P. C., Emrich, O., & Rudolph, T. (2019). Loyalty formation for different customer journey segments. *Journal of Retailing*, 95(3), 9-29. doi: 10.1016/j.jretai.2019.05.001
- Jeetesh, K., Konar, R., & Balasubramanian, K. (2020). The impact of Social Media on Consumers' purchasing behaviour in Malaysian Restaurants. *Journal of Spatial and Organizational Dynamics*, 8(3), 197-216.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251. doi: 10.1016/j.bushor.2011.01.005
- Krumm, J., Davies, N., & Narayanaswami, C. (2008). User-generated content. *IEEE Pervasive Computing*, 7(4), 10-11. doi: 10.1109/MPRV.2008.85
- Muniesa, R. L., & Giménez, C. G. (2020). The importance of the loyalty of fashion brandsthrough digital marketing. *Journal of Spatial and Organizational Dynamics*, 8(3), 230-243.
- Naaman, M. (2012). Social multimedia: highlighting opportunities for search and mining of multimedia data in social media applications. *Multimedia Tools and Applications*, 56(1), 9-34. doi: 10.1007/s11042-010-0538-7
- Polanco-Diges, L., & Debasa, F. (2020). The use of Digital Marketing Strategies in the Sharing Economy: A literature Review. *Journal of Spatial and Organizational Dynamics*, 8(3), 217-229.

- Reyes-Menendez A., Saura, J. R., & Filipe, F. (2019). The importance of behavioral data to identify online fake reviews for tourism businesses: a systematic review. *PeerJ Computer Science*, 5, Article e219. doi: 10.7717/peerj-cs.219
- Reyes-Menendez, A., Saura, J. R., & Stephen, B. T. (2020). Exploring Key Indicators of Social Identity in the #MeToo Era: Using Discourse Analysis in UGC. *International Journal of Information Management*, 54, 102-129. doi: 10.1016/j.ijinfomgt.2020.102129
- Saura, J. R. (2020). Using Data Sciences in Digital Marketing: Framework, Methods, and Performance Metrics. *Journal of Innovation and Knowledge*, 1(2020). doi: 10.1016/j.jik.2020.08.001
- Smith, K. T. (2011). Digital marketing strategies that Millennials find appealing, motivating, or just annoying. *Journal of Strategic Marketing*, 19(6), 489-499. doi: 10.1080/0965254X.2011.581383
- Urban, G. L., Sultan, F., & Qualls, W. J. (2000). Placing trust at the center of your Internet strategy. *MIT Sloan Management Review*, 42(1), 39-48.