

ETHICS, MARKETING AND TECHNOLOGY: A CASE STUDY IN HIGHER EDUCATION IN SPAIN

Mario Arias-Oliva, Teresa Pintado Blanco, Antonio Pérez-Portabella, Araceli Rodríguez Merayo

Complutense University of Madrid (Spain), Complutense University of Madrid (Spain),
Universitat Rovira i Virgili (Spain), Universitat Rovira i Virgili (Spain)

mario.arias@ucm.es; tpintado@ucm.es; antonio.perezportabella@urv.cat;
araceli.rodriguez@urv.cat

ABSTRACT

Digital marketing is an emerging discipline. The application of all technological disruptions in the marketing field is transforming both the research and professional arenas. Technology provokes a revolution in traditional marketing strategies and techniques, arising many ethical concerns. Our research question is the following: are business schools teaching the ethical implications of digital marketing? The first section of the it is introduced with some examples the importance of the ethical considerations in digital marketing. It continues with the proposed methodology to analyse the ethical digital marketing competencies that future professionals are acquiring in Spain. Our findings show that there is an important gap in marketing Master's degrees with regard to the ethical aspects of digital marketing.

INTRODUCTION: WHY IS IMPORTANT ETHICAL ISSUES IN DIGITAL MARKETING EDUCATION?

The American Marketing Association (AMA, 2017) defines marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large", focusing on obtaining value for organizations' stakeholders; likewise, in the "AMA Statement of Ethics" (AMA, n.d.) it promotes the highest standard of professional ethical norms and values, focused on what is desirable, important and morally proper. All this reveals that ethics has become of great relevance to the marketing discipline.

The technological impact of Information and Communication Technologies on marketing over the last decades is enormous. Our paper focuses on the analysis of higher education in Spain, specifically about how ethical issues in digital marketing are integrated in curricula and competences.

In this section we will introduce the importance of the ethical aspects in digital marketing. It would be difficult and not relevant to our educational purpose to list the specific areas of ethical impact when using new digital tools in marketing, as this paper does not intend to create an ethical taxonomy of digital marketing. Due to this constraint, we ground the relevance of our paper with some examples that point out the importance of ethics in digital marketing, justifying why ethics should be included in the curricula of higher education for future marketing professionals.

Impact of digital tools on marketing can be classified in two broad categories:

- Impact on traditional marketing tools and strategies such as segmentation, positioning, pricing, product, promotion, etc.
- Impact on new marketing tools and strategies such as SEO, SEM, Big Data, etc.

Pricing strategies are an excellent example of technological disruption in marketing. Pricing is analysed and taught in any marketing course all over the world. All marketing handbooks incorporate a pricing chapter (e.g. Kotler & Armstrong, 2018; Kerin & Hartley, 2019; Marshall & Johnston, 2015) or specific books and papers can be found among the recommended references (e.g. Schindler, 2012; Baker Benmark, Chopra, Kohli, 2018; Simchi-Levi, 2017; Liozu, 2019). But technology is transforming the pricing strategies. Marketing pricing strategies are moving from a static way of fixing prices to dynamic pricing, where prices can be now personalized for specific segments, microsegments or even for each specific customer. The price discrimination was detected in online environments in 2010. Amazon was showing different prices for the same product. In 2012, the Wall Street Journal found that prices were different based on the geographic location of customers (Mattioli, 2012). From this discrimination in prices, the new technologies have opened new amazing possibilities for dynamic pricing. The creation of dynamic prices is done by an algorithm that can change price every second depending on the location, demand, time or any other criteria defined in the algorithm. These techniques were born in one of the first electronic markets, the GDS (Global Distribution Systems) in the air travel industry (Schmid, 1994). Since then, it has been applied in many other sectors such as the energy sector (Goutam, & Krishnendranath, 2017), online advertisement auctions (Google, 2020) or public transport services such as Uber (Martin, 2019).

In the previous examples, the combination of traditional pricing policies with the possibilities of new technologies opens important opportunities in marketing, but some problems and ethical concerns arise as well. According to Veeraraghavan (2016), the use of dynamic pricing could anger frequent customers, or provoke a shift in demand towards the very last-minute bargain. In a piece of research about the effects of a dynamic pricing strategy for a concert ticket, it was shown that a significant last-minute discount creates controversy: some people find it favourable, many others hate it, and some of the customers consider it as a right practice. In the case of Uber, the price is changing constantly looking for the maximum price that the consumer is willing to pay. The algorithm establishes a price based on where you are, what time it is, how many people are demanding the service, the day of the week and the month, and also on your historical records using the Uber app (Martin, 2019). But Uber goes further and knows that on a rainy day a consumer is more likely to accept a higher price than on a sunny day, or that a key variable to accept a higher price is the level of battery of your Smartphone (Kosoff, 2016). When the battery is very low, the probability of accepting a higher price is very high because the user can miss the connectivity of their device. Using all these digital marketing strategies, companies have the ability to collect, keep and use information on consumer behaviours not in favour of their customers, but in their own interest (Calo & Rosenblat, 2017).

The price can be different depending on the operating system of your device. According to Kingsley-Hughes (2012), the online travel agency Orbiz showed different hotels and different prices to Mac users than to other users with other operative systems (e.g. Linux or Windows). Based on their records, they knew that Mac users spent 30 percent more per night for a hotel room than Windows users. Offers and prices were different for customers accessing from Mac or other devices. These techniques are known as price steering and price discrimination (Hannak, Soeller, Lazer, Mislove & Wilson, 2014). Price steering occurs when different products are shown to the customer (or the order of showing products is different for each customer) depending on their profile, and it becomes a usual strategy in online environments. Pemberton, Stonehouse & Barber (2001) pointed out their concerns in the air travel industry. GDS creates an "halo effect" which makes customers usually choose products that appear in the first position of the screen. A consumer usually does not ask for a hundred flights before choosing the best option in a flight, he/she asks for a few combinations and decides. That "halo effect" allows companies to control the system and manipulate it, showing on the first screen the options of the airlines that own the GDS. Companies alter competition with unethical behaviour.

Business has all the information about both individual customer preferences and aggregated customer preferences. But customers know nothing about the information that the companies have and use in their own interest. For instance, whether the company must sell products fast because a new version is going to be launched soon. This asymmetry in the information creates important differences.

The need to manage data ethically was discussed as early as the 1990s. The 21st century illuminated the way to multiple ethical codes: Institute of Electrical and Electronics and Association for Computing Machinery are the most important. But self-regulation is not enough. Couldry & Turow (2014) conclude that incorporating big data into personalized marketing and content production threatens the ecology of social relationships. Therefore, the misuse of mass information could be a democratic threat. There are many economic incentives in controlling big data. The companies at the top positions in global stock market valuations 2020 are technology intensive: Microsoft, Apple, Amazon, Amazon, Alphabet, Alibaba, Facebook, or Tencent.

The Facebook and Cambridge Analytica gate demonstrated the need to regulate the use of private data in Europe. But the lobby CCIA Europe (@CCIAEurope) advocate for a free and open Internet in Europe and is against the European regulation and tries to exert influence on the European institutions as Transparency International reports.

Data is an essential part of technology-intensive business models. The dynamics of data flows can shape political communities, influence democratic elections, and build or destroy reputations, individual and group self-concepts (Islam, 2021). Price discrimination and health prediction (e.g., insurance policies) could become ethically problematic if people are denied access to essential goods or services based on their income or lifestyle (Favaretto et al., 2019). Experts point out that incorporating big data into personalized marketing threatens the ecology of connections that bind citizens and groups because it influences their information and empathy (Couldry & Turow, 2014). Studies shows the communicative power of new media in promoting ethical causes (Banaji & Buckingham, 2009).

The Internet of Things brings countless benefits to people's well-being, health care and productive advances in industry, but the Artificial Intelligence (AI) must also serve democracy and human rights but will not serve the public good without strong rules in place (Nemitz, 2018).

The media influences social norms, consumer choices, or ethical consumption. The debate is whether social media should follow the market trend ethically, which does; or it must exempt that ethics from the social patterns on which it exerts influence (Lekakis, 2014). The use of Big Data must be carried out under ethical criteria: it is necessary to assess the profound impact that actions arising from its observation have on the object analysed itself (Boyd & Crawford, 2012)

The accumulation of digital power, which shapes the development and deployment of AI as well as the debate on its regulation, is based on four sources of power (Nemitz, 2018): (1) money being the classic tool of influence on politics and markets; (2) these corporations increasingly control the infrastructures of public discourse and the digital environment decisive for elections; (3) the mega corporations know more about us than ourselves; (4) these corporations are dominating development and systems integration into usable Artificial Intelligence services.

Ethical implications arise from the use of personal data to make decisions—whether policies, planning, or resource allocation—that affect entire populations based on the data of a few (Crawford et al., 2014). Crawford et al. describes ‘marketing comfort’ as the link between marketing ethics and consumer comfort (2020:7).

Consumers perceive information collected about themselves such as exchange of online services, goods, or something more of value (Ashworth & Free, 2006). The risks and benefits perceived by

consumers from using social media relate to their convenience to sellers who use their publicly available social media data (Jacobson et al., 2020).

Some of the conditions of trust, especially security and privacy, are fundamental human needs and are preconditions for the development of autonomous moral humans (Ahearne et al., 2005).

The intense relationship between e-commerce and trust has been profusely studied (Maximilien & Singh, 2005; Tomlinson & Mayer, 2009). Trust is the basis to forging and maintain long-term e-commerce relationships (Sharma & Lijuan, 2014), and as increase transaction complexity makes conditions more uncertain –as is in computer-mediated business– the need of trust increases. E-commerce ethics was a direct influencing factor of trust, security and privacy and loyalty (Sharma & Lijuan, 2014).

TRAINING THE FUTURE DIGITAL MARKETING PROFESSIONALS IN ETHICS

Learning responsibility to the community is more than just mere voluntarism, it is necessary. This formative intention should be incorporated into the academic curriculum corpus and university culture (Buxarras & Esteban, 2004). In the age of technique learning profession is in danger of not reaching the necessary depth in their professional scope. The university student can easily become a piece that has lost the meaning of his work, can become one more terminal of the production system (Castells, 1998). University institutions are committed to the construction of the professional in all its fields: techniques, attitudes, and responsibilities. Comprehensive training is increasingly needed to enable teachers to face an uncertain and complex society and the new profiles of students arriving at the university (Montes & Suárez, 2016). The digital necessity in marketing education has increased in four new areas chronically under-taught in universities (Crittenden & Crittenden, 2015; Moscoso Pozo et al., 2017): search engine optimization, social media, marketing software skills, and online-lead generations strategies.

Fourali (2009) described the process of developing best practice standards for social marketing in the United Kingdom by the Marketing and Sales Standards Setting Board (MIC): Used existing standards and identify the specific needs there may be for social marketers.

The integration of ethical training in the university requires a change in the teaching culture of teachers: ethical training should be provided to future professionals to know the duties and obligations in the practice of the profession (González Pérez et al., 2014). If a professional is legitimized as an expert, professional competence is not sufficient, it is necessary to make the commitments he/she shares with his/her colleagues (Bolívar, 2005).

In recent years, Corporate Social Responsibility (CSR) has been incorporated into university curriculums (Manuel Larrán et al., 2014). The new Marketing DNA (Harrigan & Hulbert, 2011) incorporates the new digital reality of communication and commerce. The corporate digital responsibility (CDR) culture relates to digital responsibility and embodies shared values from which specific CDR standards are derived that then lead to specific behaviours (Lobschat et al., 2021).

Based on previous findings and examples, we question how ethical those new marketing tools and techniques are? Does a business using all these techniques inform their consumers? To what extent is ethical to control the market in the company's own interest? Making aware of ethical aspects to future digital marketing professionals is a must. This research explores how ethical aspects of digital marketing are integrated into marketing higher education.

METHOD

Sample selection

A wide variety of university master's degrees are currently being offered in Spain in marketing that include specific content in this subject, or that are shared with other related areas. According to the data provided by the Spanish Ministry of Science, Innovation and Universities (20 April 2021), 157 Master's degrees are offered based on searches for the following keywords in their titles: "marketing", "communication", "advertising", "consumer", "commercial" and "trade", according to the distribution presented in Table 1; however, the terms "communication", "commercial" and "trade" in other areas that have not been taken into account (e.g., Master's degrees in telecommunications). Likewise, the terms "market", "marketing" and "consumer" were searched, but the results were already included in the previous searches, while the terms "distribution" and "marketing" did not produce any results.

Table 1. University master's degrees offered in the area of marketing.

Key word in the title of the master's degree	No. of university master's degrees	Type of university (public/private)	Online programs	Taught in a foreign language
Marketing	63	31 public / 32 private	18	12
Communication	70	38 public / 32 private	23	4
Advertising	8	3 public / 5 private	3	0
Consumer	4	2 public / 2 private	0	2
Commercial	7	1 public / 6 private	4	1
Trade	5	2 public / 3 private	1	0
TOTAL	157	77 public / 80 private	49	19

Source: self elaboration based on Spanish Ministry of Science, Innovation and Universities (20 April 2021). <https://www.educacion.gob.es/notasdecorte/busquedaSimple.action>)

As can be seen in Table 1, the Master's degrees are similarly distributed between public and private universities. Most of the 157 Master's degrees face-to-face format, with only 49 degrees offered exclusively online. Considering that the methodological approach of the research is qualitative, we select for the exploratory research five Masters that focus specifically in digital marketing. The selected sample can be seen in Table 2.

Table 2. Sample selected.

Master	University
Digital Marketing Management	University of Málaga (UMA)
Digital Marketing	University of Mondragon (UMO)
Digital Marketing Analysis	University of Murcia (UM)
Digital Marketing	Open University of Catalonia (UOC)
Social Media and Strategic Management	Open University of Catalonia (UOC)

Source: self-elaboration.

For each of the selected sample Masters, we analyze the Official Guide that Master used to approve the program in the Official Spanish Government Office (ANECA, Agencia Nacional de Evaluación de la Calidad y Acreditación). A Content Analysis method was used. Content analysis "is a research tool used to determine the presence of certain words, themes, or concepts within some given qualitative data (i.e. text). Using content analysis, researchers can quantify and analyze the presence, meanings and

relationships of such certain words, themes, or concepts” (Columbia Public Health, 2021). In content analysis we focus on competencies. The OCDE in its Definition and Selection of competences (OCDE, 2002: 4) defines a competence as “the ability to respond to demands or carry out tasks successfully and consistently with cognitive and non-cognitive dimensions”. Within this general framework, we can define transversal competences as those skills related to personal development, which appear in all domains of professional and academic performance (González and Wagenaar, 2003). It is a very complex know-how, which is why it is necessary to specify more specific learning outcomes. In contrast to these competences, we find the specific competences that refer to those skills that are necessary for the performance of the work in question. Within the transversal competences, which are those offered by the Spanish Universities to all degrees, we find the basic competences that are common to all degrees at the same MECES level and are established in section 3.3 (Master's degree) by Royal Decree 861/2010, of 2 July, and in article 5 of Royal Decree 99/2011. A competence is therefore a set of learning outcomes. A learning outcome is a written statement of what the learner is expected to be able to do at the end of a module, subject or course.

Our research focuses on Official Guides of each Master program, focusing on how ethics is integrated into competences definitions. We analyzed as well if ethical aspects are in other parts of the Master program such as subjects, learning outcomes, references or other descriptions.

Results

In this study, we have analysed a sample of 5 university Master's degrees in digital marketing in order to check the mentions of the word "ethics" or "ethical" in the different contents of their Verification Reports (guides presented for program approval to Spanish Government responsible agency). As can be seen in Table 3, there are a few contents related to these terms: the largest number of mentions is found in the learning outcomes (4 mentions over 3 Master's degrees) and in the publications included in the report (4 mentions, although 3 refer to the same publication). The remaining mentions are found in a justification, in subjects and their descriptors, and in specific headings or in other sections of lesser relevance.

Tabla 3. Frequencies of terms related to ethic.

	Subject	Subject heading	Subject description	Learning outcome	Publication	Descriptions	Others
Digital Marketing Management (UMA)	0	0	0	1	0	0	0
Digital Marketing (UMO)	1	2	0	0	1	0	3
Digital Marketing Analysis (UM)	1	1	2	0	0	0	1
Digital Marketing (UOC)	0	0	0	1	0	0	0
Social Media and Strategic Management (UOC)	0	1	0	2	3	1	2

Source: self-elaboration based on content analysis results

However, the importance of ethics in the Master's degrees can be seen mainly in the mentions that ethical related terms have in the competences. Table 4 shows that the frequencies in which the term "ethics" or "ethical" appears on competences of selected Masters. It is included 10 occasions in all the degrees analyzed, always as a basic competence, and occasionally as a general, transversal or specific competence.

Table 4. Frequency of ethic related terms in the competencies of the Verification Reports.

Number of competencies					
Masters	Basic	General	Transversal	Specific	Total
Digital Marketing Management (UMA)	1	1	0	1	3
Digital Marketing (UMO)	1	0	0	0	1
Digital Marketing Analysis (UM)	1	0	0	1	2
Digital Marketing (UOC)	1	0	1	0	2
Social Media and Strategic Management (UOC)	1	0	0	1	2

Source: self-elaboration based on content analysis results

But these competences mentioned are repeated on multiple occasions throughout the Verification Reports, as shown in Table 5. Thus, in the first degree analysed (UMA) it can be seen that a total of 3 different competences appear (Table 4), although these are repeated a total of 41 times (Table 5), therefore, the competences that include ethic related terms are not varied, although they are very often repeated.

Table 5. Frequency of ethic related terms in competencies.

Competencies					
Masters	Basic	General	Transversal	Specific	Total
Digital Marketing Management (UMA)	25	15	1	0	41
Digital Marketing (UMO)	1	0	0	0	1
Digital Marketing Analysis (UM)	4	0	0	5	9
Digital Marketing (UOC)	5	-	7	-	12
Social Media and Strategic Management (UOC)	3	0	0	5	8

Source: self-elaboration based on content analysis results

CONCLUSIONS

The results of our study reveal that in the sample of Master's degrees analysed there is no a generalized integration of ethics in digital marketing studies in Spain, answering our research question (are business schools teaching the ethical implications of digital marketing?) we find that ethics is only incorporated occasionally in the analysed cases. This finding contrasts with the literature reviewed, which mentioned the intention to include academic content on responsibility into the academic curriculum corpus and university culture (Buxarrais & Esteban, 2004) and the need to train professionals prepared to apply the corporate digital responsibility (CDR) (Lobschat et al., 2021). However, ethics appears timidly in the degree competencies, and it is foreseeable that in the future its use will be of greater interest to higher education institutions and will be transferred to a greater number of degree competencies.

The main limitation of our study is the use of a limited sample of Master's degrees, although the aim was not to carry out an extensive work, but to an exploratory study in the field, doing as a very first approach to know the situation of ethics in Master's degrees in Spain. On the other hand, our work has focused on the analysis of the content analysis of Verified Reports that serve for the implementation of the degrees, although it would be interesting to study other complementary materials and methods to verify the application of ethics in the usual teaching, although in this case it would be necessary to have the support of the university institutions to obtain more information. Likewise, the ethical training in the university requires a change in the teaching culture of teachers (Gozálvez Pérez et al., 2014), although in this first phase of our study we have not contacted them, contemplating it as a later objective.

The future lines of our work can be oriented to the analysis of a larger number of Masters, to expand the sample and obtain more conclusive results. Likewise, the analysis could include other educational levels that teach digital content in the field of marketing (Degrees, Vocational Training, among others), and even carry out a comparative study between them. Finally, a line of great interest would be the analysis of specific information from educational institutions, as well as a study among teachers to analyse how they apply ethics in the delivery of their teaching and how it is transferred to the learning outcomes of students.

ACKNOWLEDGEMENTS

Work produced within the FLOASS project - Learning Outcomes and Learning Analytics in Higher Education: An Action Framework from Sustainable Assessment (Resultados y analíticas de aprendizaje en la educación superior: un marco de acción desde la evaluación sostenible), funded by the Ministry of Science, Innovation and Universities in the Spanish R+D+i Programme Focussed on Challenges to Society and the European Regional Development Fund (Ref. RTI2018-093630 -B -100) and by the innovation project ACCRAM – Análisis de la Calidad de las Competencias y Resultados de Aprendizaje de los Másteres (Ref. INDOC19-07GI1926), funded by the Call for Teaching Innovation Projects of the Rovira i Virgili University (URV).

KEYWORDS: digital marketing, ethical marketing, higher education, ethical competences.

REFERENCES

- Ahearne, M., Bhattacharya, C. B., & Gruen, T. (2005). Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing. *Journal of Applied Psychology*, 90(3), 574–585. <https://doi.org/10.1037/0021-9010.90.3.574>
- American Marketing Association – AMA (2017). *Definitions of marketing*. <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>
- American Marketing Association – AMA (n.d.). *Codes of Conduct | AMA Statement of Ethics*. <https://www.ama.org/codes-of-conduct/>
- Ashworth, L., & Free, C. (2006). Marketing dataveillance and digital privacy: Using theories of justice to understand consumers' online privacy concerns. *Journal of Business Ethics*, 67(2), 107–123. <https://doi.org/10.1007/s10551-006-9007-7>
- Baker, W., Benmark, G., Chopra, M., & Kohli, S. (2018). Master the Challenges of Multichannel Pricing. *MIT Sloan Management Review*, 60(1), 1-5.
- Banaji, S., & Buckingham, D. (2009). THE CIVIC SELL. *Information, Communication & Society*, 12(8), 1197–1223. <https://doi.org/10.1080/13691180802687621>
- Bolivar, A. (2005). El lugar de la ética profesional en la formación universitaria. *Revista Mexicana de Investigación Educativa*, 10, 93–123. Retrieved online from <http://www.comie.org.mx/documentos/rmie/v10/n24/pdf/rmiev10n24scB06n01es.pdf>
- Boyd, D., & Crawford, K. (2012). Critical questions for big data - Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication and Society*, 15(5), 662–679.
- Buxarrais, M. R., & Esteban, F. (2004). el aprendizaje ético y la formación univeristaria: Más allá de la casualidad. *Teoría de La Educación*, 16(May), 91–108. <https://gredos.usal.es/handle/10366/71927>
- Calo, R., & Rosenblat, A. (2017). The taking economy: Uber, information, and power. *Columbia Law Review*, 117, 1623. Retrieved online from <https://columbialawreview.org/content/the-taking-economy-uber-information-and-power/>
- Castells, M. (1998). *La era de la información: economía, sociedad y cultura Volumen III*. Alianza.
- Columbia Public Health (2021). Content Analysis. Retrieved online from <https://www.publichealth.columbia.edu/research/population-health-methods/content-analysis>
- Couldry, N., & Turow, J. (2014). Advertising, big data, and the clearance of the public realm: Marketers' new approaches to the content subsidy. *International Journal of Communication*, 8(1), 1710–1726. http://repository.upenn.edu/asc_papers/413
- Crawford, K., Miltner, K., & Gray, M. L. (2014). Critiquing Big Data: Politics, Ethics, Epistemology. Special Section Introduction. *International Journal of Communication 2* (Vol. 8, Issue 1). <https://doi.org/10.1080/10511259900084631>
- Crittenden, V., & Crittenden, W. (2015). Digital and social media marketing in business education: Implications for the marketing curriculum. *Journal of Marketing Education*, 37(2), 71–75. <https://doi.org/10.1177/0273475315588111>
- Favaretto, M., De Clercq, E., & Elger, B. S. (2019). Big Data and discrimination: perils, promises and solutions. A systematic review. *Journal of Big Data*, 6(1). <https://doi.org/10.1186/s40537-019-0177-4>

- Fieser, James: Ethic. Disponible en: Internet Encyclopedia of Philosophy (IEP). Recuperado de: <https://iep.utm.edu/ethic/>
- Fourali, C. (2009). Developing world-class social marketing standards: A step in the right direction for a more socially responsible marketing profession. *Social Marketing Quarterly* (Vol. 15, Issue 2, pp. 14–24). <https://doi.org/10.1080/15245000902957334>
- González, C. & Wangenaar, R. (2003). Tuning educational structures in Europe. España: Universidad de Deusto.
- Google (2020). Dynamic Pricing Model For Online Advertising. Google Patent. Retrieved from <https://patents.google.com/patent/US20110166927A1/en>
- Goutam, D. & Krishnendranath, M. (2017). A literature review on dynamic pricing of electricity, *Journal of the Operational Research Society*, 68:10, 1131-1145. <https://doi.org/10.1057/s41274-016-0149-4>
- Gozálviz Pérez, V., García-Ruiz, R., & Aguaded-Gómez, J. I. (2014). La universidad como espacio de aprendizaje ético. In *rieoei.org* (Vol. 79, Issue 1).
- Hannak, A., Soeller, G., Lazer, D., Mislove, A., & Wilson, C. (2014). Measuring price discrimination and steering on e-commerce web sites. In *Proceedings of the 2014 conference on internet measurement conference, November 2014* (pp. 305-318).
- Harrigan, P., & Hulbert, B. (2011). How can marketing academics serve marketing practice? the new marketing DNA as a model for marketing education. *Journal of Marketing Education*, 33(3), 253–272. <https://doi.org/10.1177/0273475311420234>
- Islam, G. (2021). Business Ethics and Quantification: Towards an Ethics of Numbers. *Journal of Business Ethics*, Taylor 2020. <https://doi.org/10.1007/s10551-020-04694-z>
- Jacobson, J., Gruzd, A., & Hernández-García, Á. (2020). Social media marketing: Who is watching the watchers? *Journal of Retailing and Consumer Services*, 53, 1–12. <https://doi.org/10.1016/j.jretconser.2019.03.001>
- Kerin R.A., Hartley S.W. (2019). *Marketing*. McGraw Hill Education. 14th Edition.
- Kingsley-Hughes, A. (2012). Mac Users Have Money to Spare, Says Orbitz. *Forbes*, Jun. 26. Retrieved online from <https://www.forbes.com/sites/adriankingsleyhughes/2012/06/26/mac-users-have-money-to-spare-says-orbitz/?sh=23b538952d59>
- Kosoff, M. (2016). You're more likely to accept Uber's surge pricing when your phone's about to die. Uber's head of economic research tells all. *Vanity Fair*, May 2016. Retrieved online from <https://www.vanityfair.com/news/2016/05/uber-surge-pricing-low-phone-battery>
- Kotler P. & Armstrong G. (2018). *Principios de marketing*. Pearson (17ª edición). Madrid.
- Lekakis, E. J. (2014). ICTs and ethical consumption: The political and market futures of fair trade. *Futures*, 62, 164–172. <https://doi.org/10.1016/j.futures.2014.04.005>
- Liozu, S. M. (2019). Make pricing power a strategic priority for your business. *Business Horizons*, 62(1), 117-128.
- Lobschat, L., Mueller, B., Eggers, F., Brandimarte, L., Diefenbach, S., Kroschke, M., & Wirtz, J. (2021). Corporate digital responsibility. *Journal of Business Research*, 122(July 2018), 875–888. <https://doi.org/10.1016/j.jbusres.2019.10.006>
- Manuel Larrán, J., Andrades Peña, F. J., & Muriel de los Reyes, M. J. (2014). La responsabilidad social corporativa en las titulaciones de empresa y marketing ofertadas por las universidades españolas.

- Esic Market Economics and Business Journal*, 45(1), 121–146.
https://www.esic.edu/documentos/revistas/esicmk/140217_163642_E.pdf
- Marshall G.W. & Johnston M. W. (2015) *Marketing Management*. McGraw Hill Education. 2nd Edition.
- Martin N. (2019). Uber Charges More If They Think You're Willing To Pay More. *Forbes*, Mar 30, 2019, 12:58pm. Retrieved from <https://www.forbes.com/sites/nicolemartin1/2019/03/30/uber-charges-more-if-they-think-youre-willing-to-pay-more/?sh=6a52775b7365>
- Mattioli D. (2012). On Orbitz, Mac Users Steered to Pricier Hotels. *The Wall Street Journal*, Ag. 23, 2012. Retrieved online from <https://www.wsj.com/articles/SB10001424052702304458604577488822667325882>
- Maximilien, E. M., & Singh, M. P. (2005). Agent-based trust model involving multiple qualities. *Proceedings of the International Conference on Autonomous Agents*, 653–660. <https://doi.org/10.1145/1082473.1082552>
- Montes, D. A., & Suárez, C. I. (2016). La formación docente universitaria: Claves formativas de universidades españolas. *Revista Electronica de Investigacion Educativa*, 18(3), 53–61. http://www.scielo.org.mx.sabidi.urv.cat/scielo.php?pid=S1607-40412016000300004&script=sci_arttext
- Moscoso Pozo, M. M., Ruiz Zambrano, A., & Aragundi García, L. I. (2017). La educación y la formación profesional del marketing. Su abordaje desde una perspectiva ética compleja. *Didasc@lia: Didáctica y Educación*, VIII (4), 1–8.
- Nemitz, P. (2018). Constitutional democracy and technology in the age of artificial intelligence. In *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* (Vol. 376, Issue 2133). <https://doi.org/10.1098/rsta.2018.0089>
- OCDE (2019): Estrategia de competencias de la OCDE 2019. Competencias para construir un futuro mejor. Fundación Santillana.
- OCDE. (2002). Definition and Selection of Competences (DESECO). Retrieved online from <https://www.oecd.org/education/skills-beyond-school/definitionandselectionofcompetenciesdeseco.htm>
- Pemberton, J. D., Stonehouse, G. H., & Barber, C. E. (2001). Competing with CRS-generated information in the airline industry. *Journal of Strategic Information Systems*, 10(1), 59-76.
- Schindler R.M. (2012). *Pricing Strategies: A Marketing Approach*. Sage publications.
- Schmid, B. (1994). Electronic markets in tourism. In *Information and Communications Technologies in Tourism* (pp. 1-8). Springer, Vienna.
- Sharma, G., & Lijuan, W. (2014). Ethical perspectives on e-commerce: An empirical investigation. *Internet Research*, 24(4), 414–435. <https://doi.org/10.1108/IntR-07-2013-0162>
- Simchi-Levi, D. (2017). The new frontier of price optimization. *MIT Sloan Management Review*, 59(1), 22.
- Spanish Ministry of Science, Innovation and Universities (20 April 2021). Retrieved online from <https://www.educacion.gob.es/notasdecorte/busquedaSimple.action>
- Tomlinson, E. C., & Mayer, R. C. (2009). The role of causal attribution dimensions in trust repair. *Academy of Management Review* (Vol. 34, Issue 1, pp. 85–104). Academy of Management. <https://doi.org/10.5465/AMR.2009.35713291>

Veeraraghavan S. (2016). The Price Is Pliant: The Risks and Rewards of Dynamic Pricing. Interview at Knowledge@Wharton, University of Pennsylvania. Retrieved from <https://knowledge.wharton.upenn.edu/article/price-pliant-considering-risks-rewards-dynamic-pricing>