

33rd RSEP International Conference on Economics, Finance and Business
23-24 November 2024, UNIVERSITY OF WASHINGTON ROME CENTER, Rome, Italy

Pricing and information transparency in the age of multichannel retail

Jelena Franjković

Asst Prof., Department of Marketing, Faculty of Economics and Business in Osijek, J.J. Strossmayer University of Osijek, Croatia

E-mail: jelena.franjkovic@efos.hr

Davor Dujak

Prof., Department of Marketing, Faculty of Economics and Business in Osijek, J.J. Strossmayer University of Osijek, Croatia

E-mail: davor.dujak@efos.hr

Ana Živković

Asst Prof., Department of Management, Organisation and Entrepreneurship, Faculty of Economics and Business in Osijek, J.J. Strossmayer University of Osijek, Croatia

E-mail: ana.zivkovic@efos.hr

DOI: <https://doi.org/10.19275/RSEPCONFERENCES276>

Abstract

Multichannel grocery retail is still developing due to mostly logistics challenges and the specificity of the products they are selling. Although consumers are slower in accepting online channels for grocery purchases, their behavior is changing and adapting to new channels for other purposes. Online communication channels are frequently used for weekly or monthly purchase planning, through which consumers gather information about the offer and prices. This paper aims to research the importance and challenges of pricing and information transparency in multichannel retail. A preliminary study conducted on consumers indicates that consumers of all ages tend to search for information through different media channels. Consumers do not find online channels to be completely transparent and easy to use as a source of information and prices, which creates opportunities for multichannel strategy improvements. Further, middle-aged consumers use online channels to save time and effort to access useful information and prices. There are many opportunities for grocery retailers to improve their digital communication strategy through mobile apps and influencers to attract younger consumers.

Keywords: information transparency, grocery sector, multichannel retail, pricing, consumer behavior

Jel codes: M31, L81



The articles on the RSEP Conferences website are bear Creative Commons Licenses either CC BY or CC BY-NC-ND licenses that allow the articles to be immediately, freely, and permanently available on-line for everyone to read, download, and share.

1. Introduction

The Internet and smartphones have changed the usual ways of informing consumers about prices (Somervoori, 2014), sought-after, competitive, or alternative products for individual retailers, and competition if the information is available. Modern consumers often encounter products and brands for the first time in an online environment. Therefore, it is necessary to interact with them through digital channels to achieve a stronger connection with the retailer brand, not just through the usual promotional pathways (Baird, 2016).

Contemporary retail comes in many forms because consumers want to shop anywhere and anytime. Many retailers combine and provide consumers with several ways to make their purchases. They are most often considered multichannel (on the way to omnichannel), although, with the development of technology, most of them have the characteristics of omnichannel retail. Berman and Thelen (2018) overviewed the differences between multichannel and omnichannel retail. The differences are based on the company's strategy and consumer behavior characteristics. The primary difference between multichannel and omnichannel sales or marketing is the level of integration of different channels. Integration is not present in multichannel sales, while in omnichannel sales, it is present in almost all aspects, including price. They point out that consumer behavior and technological changes encourage companies to move from multichannel to omnichannel business. It is most often attributed to smartphones' presence in everyday life and the use of numerous social networks and applications for mobile payments, e-coupons, e-wallets, and services based on location.

On the other hand, low prices of everyday consumer goods (in absolute amount) and logistics requirements for the delivery of food products, such as frozen products, slow down the development of online retail. In addition, these are products that consumers are often not ready to wait for, and in the case of online shopping, they usually expect delivery on the same or the next day. Grocery retail still lags behind other product categories such as clothing, electronics, and furniture. Richter (2018) states that in 2016, in the US market, where online retail is highly developed, the share of food and alcohol products purchased online was 2%. Although COVID-19 pandemic encouraged (or forced) many consumers to buy groceries online for the first time, which also influenced the decision of retailers to step into online retail (Badenhop & Frasquet, 2021), in many countries, online channel in the grocery sector is still slowly developing. Simmons et al. (2022) report in McKinsey analysis about projected shares of online grocery in 2030. In countries that represent leaders in online grocery, such as United Kingdom, France or Sweden, the conservative forecasts vary between 11 and 17 %, while optimistic forecasts are between 18 and 30%. In countries with less developed online channels, such as Germany, Spain or Poland, the conservative forecasts vary only between 4 and 6 %, while optimistic forecasts are between 9 and 12%. This means that physical stores, in the short term, will still have a significant role in retailers' business and consumer buying. However, the influence has to be on digital, i.e. multichannel communication.

Digitalization has made the market more transparent – allowing companies to reach information on their competitors and customers, and automating their pricing (Vomberg, 2021). However, the transparency goes in both directions. It is also much easier for consumers to explore and compare the prices of various retailers' offers.

This paper aims to explore the state of development and challenges of multichannel retailing and pricing. Since online sales channels among grocery retailers are not highly developed, the following aim is to determine through primary research the consumers' perspective of retailers' offerings and price information availability through multichannel communication. It is expected that the search for offers and prices online could precede the consumers' preferences in purchasing groceries online.

Based on the previous, the following research questions are stated:

- 1) To what extent has digitalization brought the much-desired transparency of retailers' offers and prices from a consumer perspective?
- 2) Are older consumers lagging behind younger ones in searching for retailers' offers and prices through online channels?

2. Literature Review

The online channel does not serve retailers exclusively for sales but plays a vital role in informing consumers. It allows high-speed distribution of information and reduces costs compared to the physical distribution of information, most often through promotional catalogs. This increase in transparency also makes it easier, faster, and more comprehensive for consumers to be informed about prices. Finally, it is easier for consumers to compare different retailers. Pozzi (2013) emphasizes that modern technology and especially the development of e-commerce have contributed to increasing the transparency of prices and making them easier to compare among

retailers and different sales channels. Also, through digital channels and informing about the value for money, consumers have numerous reviews from other consumers where they can get an impression of the quality of the product, retailer services, or overall experience of buying from retailers.

All of this can be related to shopping in physical stores or online stores, the experience of delivering products, or picking up products at a physical location after online shopping. The latter emphasizes the intertwining of channels in many buying and selling experiences, whether pre-purchase information, purchase, or post-purchase situations. Consumers' shopping in several channels has emerged as a key change in consumer behavior. Many retailers in all channels have led to more significant price dispersion, i.e., more significant differences in prices of the same or similar products within and between different channels. This has resulted in more straightforward consumer perceptions of market inefficiencies and differences among retailers (Bolton et al., 2010).

Akturk et al. (2018) find store delivery as one of the most commonly used forms of omnichannel retail, where consumers start shopping online and finish purchasing in a physical store. Interestingly, they point out the example of jewellery retailers whose online sales decreased after introducing the possibility of delivery to the store and increased sales in physical stores. However, this is a particular industry. The authors believe that the high prices of individual products and uncertainty about home delivery, where products are often left unattended until someone comes home from work, have a role. Nevertheless, this omnichannel retail model can reduce or eliminate the delivery price, which consumers are often unwilling to pay (Gümüs et al., 2013).

Bolton et al. (2010) point out that with the development of technology and supply chain management, retailers have reduced overall costs and increased efficiency but only later adopted and implemented optimization models for products, prices, and revenues. A software model of price optimization based on previous sales and price data, competitive prices, gravity demographics, inventories, and promotional activities predicts consumer demand for an individual product. This is a kind of cultural change for retailers, but it is believed that because some factors are not considered, it can lead to consumer confusion regarding prices within one product line and loss of market share.

Given that retailer promotional catalogs are still considered one of the key marketing tools in their efforts to inform and attract consumers, Ziliani and Ieva (2015) highlight their transformation into digital forms as an essential part of shopper marketing in the digital environment. In many languages, the word "flyer" is one of the most often used words in simple searches through the Google search engine. It is also worth mentioning intermediaries in the digital environment who, in the form of specialized websites or applications, combine retailers' offers in one place and make it easier for consumers to be informed about them.

There are well-known informative websites on the many markets that gather the current offers of most of the leading grocery retailers in one place. They enable consumers to easily search for the best offers by retailers or product categories based on current promotional catalogs. One application performed with the slogan "Catalogs, discounts, and promotions are entering the 21st century! From now on, discounts will find you!" It can also provide a price comparison if the same product is advertised in a promotional catalog at multiple retailers, clearly showing the price differences for the same product. This confirms that part of these specialized websites or applications is a tool that makes it easier for consumers to buy at the lowest prices and compare prices (Ziliani & Ieva, 2015).

Some applications also consider geolocation and suggest which stores are closest to the consumer. Ziliani and Ieva (2015) state that some retailers take advantage of the digital environment to provide better information to consumers and make it easier for them to find what they are interested in - for example, based on product category, brand, or discount intensity, provide shopping lists, recipes in the form of videos using QR codes and develop their mobile applications.

Lower prices, i.e., more competitive offer than in physical stores, is the most common reason to buy products online. Furtherly, the most important reasons are the ability to buy 24 hours a day, the fact that you do not need to go to the store, and, interestingly, the easier comparison of different offers (Statista, 2018). Since consumers do not have to go to the store, the product must reach them. Although product prices are lower in the online channel, the overall cost may be higher than when shipping costs are added in a physical store. Interestingly, the most influential world retailer, Walmart, charged higher prices for online purchases to increase in-store traffic (Baker et al., 2018).

Regarding multichannel or exclusively online retailers, average prices are higher for multichannel, regardless of whether delivery is already included or not (Ancarani & Shankar, 2004). Therefore, numerous opportunities and price differences motivate consumers to play with the various options that arise from multiple sales/information channels. After using showrooming, researching products, prices, offers, and other characteristics in physical stores, and the final purchase through online channels, consumers are increasingly inclined to webrooming, the reverse situation in which they research online but shop in a physical store (Schiessl et al., 2023; Akturk et al.,

2018). This trend favors grocery retailers, given that most of them do not have developed e-commerce, especially in Croatia. Providing product and pricing information through digital channels would greatly facilitate retailers' communication about their brand and offering. The availability of pricing information would increase retailers' transparency and credibility and help create a positive price image.

Kumar et al. (2017) go further in their recommendations for modern retailers. They believe that further use of mobile technology and attracting consumers to stores based on their location or special promotional discounts for online shopping and taking orders in the store increased the number of visits to the store, thus the possibility of impulsive shopping among consumers. Accenture (2018) presents data from its research that as many as 49% of consumers who buy groceries online pick up those groceries in the store. It would be enough for retailers who want to enter the online sales channel to start an online store without delivery, i.e., only with the possibility to buy and pick up in the store.

Thanks to the development of technology, transparency is significantly greater in many aspects of the market, and the same happens in terms of prices, information about them, and their comparisons. Kumar et al. (2017) believe this transparency will be even more pronounced in the future and see personalized pricing and digital coupons as a direction in achieving profitability for retailers. However, technological advances are also experiencing a refutation in terms of transparency, such as Amazon's "Dash buttons". The model, which Amazon successfully implemented in the United States in 2015 and expanded to the European markets of the United Kingdom, Austria, and Germany in 2016, received a court ruling that it did not provide consumers with enough information about purchases. According to their rules, substitute or higher-priced product can also be delivered to consumers (Lomas, 2019). Namely, Dash buttons work so that consumers paste them in various places in the household, depending on the product type and location of use. By pressing them, the product is automatically ordered. A German court has ruled that consumers are not sufficiently informed about a product's order and price (Poltz et al., 2019), violating consumers' information rights in Germany.

3. Data & Methodology

This chapter gives the research methodology and sample description, followed by descriptive research results.

3.1. Research methodology

The primary research was conducted on a convenient sample of 303 respondents in Croatia. A highly structured questionnaire was used as the research instrument, both an online version through Google Forms template and a paper version. Targeted respondents were the leading persons in charge of household grocery store purchases.

The main goal of the primary research was to explore the consumer perspective on the retailers' offerings and prices information availability through multichannel communication. The obtained data were analysed using the statistical software package IBM SPSS 23.0. The sample description can be seen in Table 1.

Table 1. Sample description

		n	%
Gender	Total	303	100
	Male	93	30.7
	Female	210	69.3
Age	Total	301	100
	18-31	132	43.6
	32-45	48	15.8
	46-59	78	25.7
	60 and more	43	14.2
Education	Total	303	100
	Primary school	8	2.6
	High school	142	46.9
	Faculty and higher	153	50.5
Monthly income of all members of the household	Total	302	100
	Less than 800.00 €	86	28.5
	801.00 – 1,600.00 €	150	49.7
	1,601.00 € and more	66	21.8
Employment status	Total	303	100
	Employed	188	62.0
	Unemployed	31	10.2
	Student	56	18.5
	Retired	28	9.2

Source: own work

3.2 Research Results

Figure 1 shows the results of respondents' opinions on the availability of information provided to them by retailers through various channels. It covers, in general, the level of availability of information, as well as the level of availability on the Internet, then the ease of finding special prices and weekly catalogs of retailers on the Internet, as well as mobile applications and social networks.



Figure 1. Respondents' opinion on the availability of retailer information through contemporary channels
Source: author's research

The results in Figure 1 indicate that respondents have the best opinion of the availability of weekly catalogs, both in print and online. View on the availability of information about the retailer and its offer on the Internet is somewhat weaker than the general availability of information and the ease of finding promotional prices for products on the Internet. Respondents generally do not think that online information retrieval takes a little time, and they have the weakest opinion about retailers' mobile applications as a source of information. At the same time, social networks are not notably recognized as a good source.

As the DZS (2018) data also indicate an increase in computer use among older age groups, these statements were analyzed by age group. The results are shown in Figure 2.

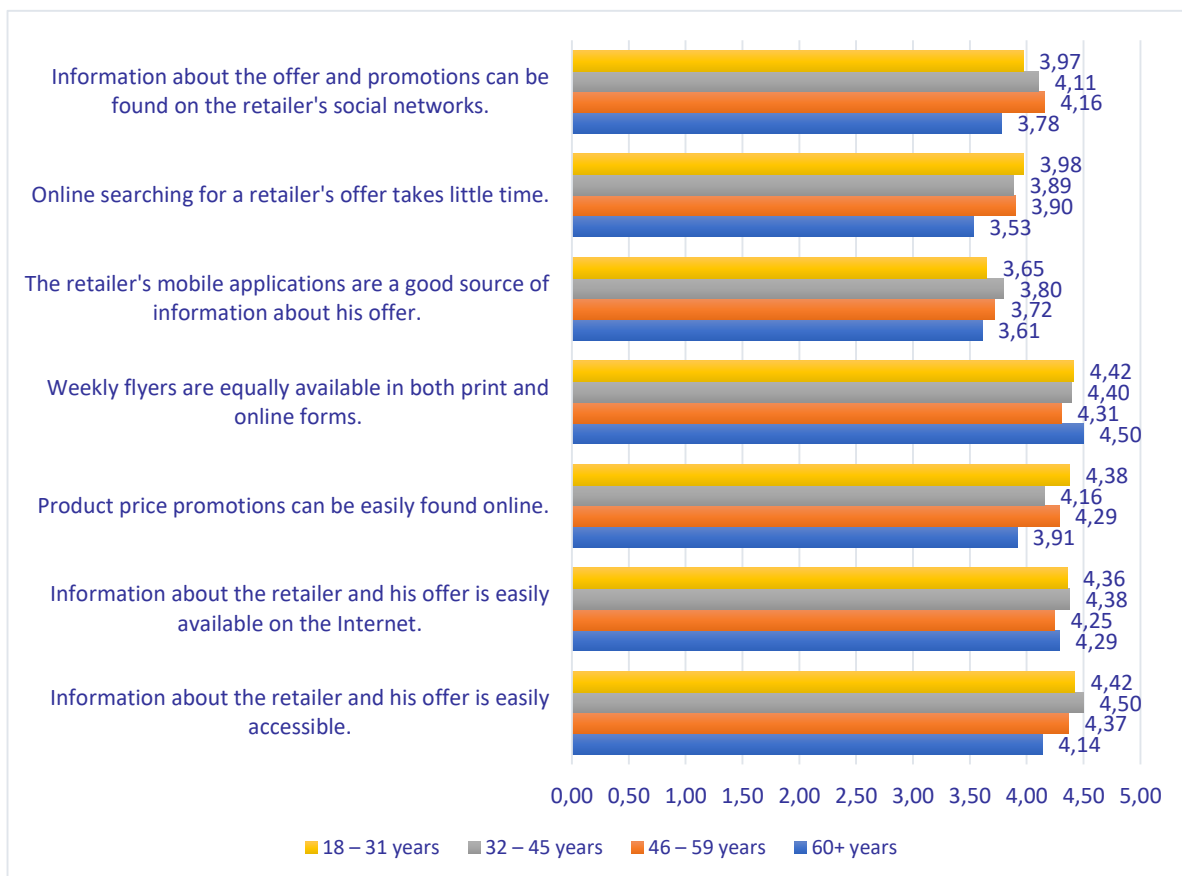


Figure 2. Respondents' opinion on the availability of retailer information by age group
Source: author's research

Figure 2 shows that younger age groups have a better opinion of the availability of information through various channels. In comparison, older age groups have a better view of the availability of weekly catalogs, which can probably be attributed to the fact that printed catalogs come to the doorstep. In general, younger age groups have easier access to information than older age groups, which is undoubtedly expected given that the younger generations have grown up in an age of intensive technology development and are much easier to use. However, it can be pointed out that the age group of 46 to 59 has the best opinion on finding information about the offer and promotions of retailers through social networks, and they have an excellent opinion on the ease of finding promotional prices on the Internet. Mobile applications are less well recognized among all age groups, which are not yet recognized among consumers in grocery retail, such as clothing.

4. Discussion

Technological advances have made it easier for consumers to track and compare prices, which imposes on retailers constant research and experimentation on influencing consumer perception of prices. Trends in the use of modern channels for shopping and information are evident in the Croatian market, especially among younger users, but older users should not be ignored. To answer the first research question, it can be concluded that consumers do not find online channels completely transparent and easy to use as a source of offers and prices, especially regarding retailers' mobile applications. They generally do not think that online information retrieval takes a little time. The transparency is much higher, but it could be significantly improved. This depends on both retailers and consumers and their willingness and ability to use available tools. Further, to answer the second research question - the results showed that informing consumers about the offer and prices through digital channels is not only for the younger and slightly older generations, indicating that marginally older consumers are not in a significant lag. For example, it was pointed out that respondents between the ages of 46 and 59 consider social networks to be a good source of information about the offer and prices of retailers. It can be assumed that this age group does not use the Internet for predominantly entertainment purposes such as watching videos, music, or similar content, unlike younger age groups, but seeks to use time and save effort to access helpful information, such as decision-making and what they will buy. Younger age groups, which are perhaps less involved in retail activities with groceries, retailers could attract and win over through modern communication channels and thus, to some extent, provide consumers with their future contemporary shopping channels.

One way to highlight the use of influencers is to reach out to younger consumers through social media, such as Aldi, in some markets. So far, only a few retailers of predominantly food products in Croatia offer the possibility of online shopping and click-and-collect services. It can be expected that other leading retailers in the market will soon follow this path. Given the complexity of delivery when buying products from this type of retailer (often mainly food products that require temperature and the necessary large amount spent to make delivery cost-effective), it would be advisable for retailers to start developing click-and-collect first. Consumers can very well accept this type of service because it provides partial convenience provided by online shopping - quick creation and saving of previous shopping lists, a quick overview of special prices in specific categories, shopping from the comfort of your home or work during the break. Ultimately, it requires less time for consumers than going and shopping in physical stores. At the same time, for retailers, it presents fewer logistical, organizational, and cost challenges than an online store with delivery. Consumers must spend a considerable amount to get free delivery or even qualify for online purchases with delivery. That amount could be lower for click-and-collect and accessible for a larger group of consumers.

Retailers should exploit the potential of mobile applications as they are significantly underutilized. Through the possibilities offered by applications, such as providing personalized coupons, more detailed product information, and completing the lifestyle through offering recipes - retailers can give consumers more reasons than just informing about store locations and current special offers for using the application.

5. Conclusion

Finally, it can be concluded that the modern digital environment significantly affects the management of retailer business and prices, presenting several challenges. Even if retailers do not have more than one sales channel developed, they are somewhat forced to provide information in a digital environment. The digital environment makes it easier for consumers to reach information and prices, and at the same time, compare with the competition, further increasing pressure on retailers to be very careful about prices. Furthermore, suppose retailers do sell through multiple channels. In that case, they face the additional challenge of setting and managing prices across channels and managing cost-generating ancillary services such as shipping or returns. New retail models and responses to such needs of consumers and retailers are expected to appear soon. Many grocery retailers are testing various models of implementation of online channels into their existing retail network.

Research limitations arise from the fact that the sample of respondents is not representative; respondents come from geographically restricted areas and one country, but the results can serve as indicative. Future research should use a more comprehensive approach and advanced statistical methods for data analysis. Additionally, the study could be conducted in other countries to provide the basis for cross-cultural conclusions.

References

- Accenture (2018). Home for holidays. Available: https://www.accenture.com/t20181025T025725Z_w_us-en/acnmedia/PDF-88/Accenture-810290-Holiday-Research-Grocery-Infographic-3.pdf#zoom=50, accessed: January 4, 2023
- Akturk, M. S., Ketzenberg, M. and Heim, G. R. (2018). Assessing impacts of introducing ship-to-store service on sales and returns in omnichannel retailing: A data analytics study, *Journal of Operations Management*, vol. 61, pp. 15-45.
- Ancarani, F. and Shankar, V. (2004). Price Levels and Price Dispersion Within and Across Multiple Retailer Types: Further Evidence and Extension, *Journal of Academy of Marketing Science*, vol. 32 (2), pp. 176-187.
- Badenhop, A. & Frassetto, M. (2021). Online grocery shopping at multichannel supermarkets: the impact of retailer brand equity. *Journal of Food Products Marketing*, 27(2), 89-104.
- Baird, N. (2016). 4 Ways Retailers Can Save Their Stores. Available: <https://www.forbes.com/sites/nikkibaird/2016/07/19/how-retailers-can-fix-stores/#4cceb13b7d6f> accessed: September 4, 2023
- Baker, W., BenMark, G., Chopra, M. and Kohli, S. (2018). Master the Challenges of Multichannel Pricing, MIT Sloan Management Review. Available: <https://sloanreview.mit.edu/article/master-the-challenges-of-multichannel-pricing/>, accessed, October 15, 2023
- Berman, B. and Thelen, S. (2018). Planning and implementing an effective omnichannel marketing program, *International Journal of Retail & Distribution Management*, vol. 46(7), pp. 598-614.
- Bolton, R. N., Shankar, V. and Montoya, D. Y. (2010). Recent trends and emerging practices in retailer pricing. In *Retailing in the 21st Century* (pp. 301-318). Springer, Berlin, Heidelberg.
- Državni zavod za statistiku (DZS), (2018). Primjena informacijskih i komunikacijskih tehnologija (IKT) u kućanstvima i kod pojedinaca u 2018., prvi rezultati, 5. prosinca 2018. Priopćenje broj 2.3.2.
- Gümüş, M., Li, S., Oh, W. and Ray, S. (2013). Shipping fees or shipping free? A tale of two price partitioning strategies in online retailing, *Production and Operations Management*, vol. 22(4), pp. 758-776.
- Kumar, V., Anand, A. and Song, H. (2017). Future of retailer profitability: An organizing framework. *Journal of Retailing*, vol. 93(1), pp. 96-119.
- Lomas, N. (2019). Amazon Dash buttons judged to breach consumer rules in Germany. Available: https://techcrunch.com/2019/01/11/amazon-dash-buttons-judged-to-breach-consumer-rules-in-germany/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Techcrunch+%28TechCrunch%29&guccounter=1 accessed: May 6, 2023
- Poltz, J., Thomasson, E. and Harvey, J. (2019). Court says Amazon 'Dash' buttons violate German law. Available: <https://uk.reuters.com/article/us-amazon-com-germany-court/court-says-amazon-dash-buttons-violate-german-law-idUKKCNIP42HW>, accessed: May 7, 2023
- Pozzi, A. (2013). E-commerce as a stockpiling technology: Implications for consumer savings. *International Journal of Industrial Organization*, vol. 31(6), pp. 677-689.
- Richter, F. (2018). Groceries Trail Other Categories in Transition to Online. Available: <https://www.statista.com/chart/14852/share-of-online-sales-by-product-category/>, accessed April 15, 2023
- Schiessl, D., Korelo, J., & Dias, H. B. A. (2023). How online shopping experiences shape consumer webrooming behavior. *Marketing Intelligence & Planning*, 41(1), 16-30.
- Simmons, V., Spielvogel, J., Timelin, B. & Tjon Pian Gi, M. (2022). The next S-curve of growth: Online grocery to 2030. Available at: <https://www.mckinsey.com/industries/retail/our-insights/the-next-s-curve-of-growth-online-grocery-to-2030>. accessed September 3, 2023.
- Somervuori, O. (2014). Profiling behavioral pricing research in marketing. *Journal of Product & Brand Management*, vol. 23(6), pp. 462-474.
- Statista (2018). Why do you buy products online instead of in-store? Available: <https://www.statista.com/statistics/428185/reasons-for-purchasing-products-online-instead-of-in-store-worldwide/> accessed: September 8, 2023.

- Vomberg, A. (2021). Pricing in the Digital Age: A Roadmap to Becoming a Dynamic Pricing Retailer. In T. Bijmolt, T. Broekhuizen, B. Baalmans, & N. Fabian (Eds.), *The digital transformation handbook – From academic research to practical insights* University of Groningen Press. Available: <https://www.rug.nl/gdbc/blog/pricing-in-the-digital-age>, accessed September 2, 2023
- Ziliani, C. and Ieva, M. (2015). Retail shopper marketing: the future of promotional flyers. *International Journal of Retail & Distribution Management*, vol. 43(6), pp. 488-5