Considerations on Product Assortment in E-Commerce and Physical Stores for Luxury Brands: A Systematic Review

Teruhiko Fukunaga

Doctoral student, Graduate School of Commerce, Waseda University 1-6-1 Nishi-Waseda Shinjuku-ku, 169-8050 Tokyo Japan

Tel: +81-3-5286-3971

Mail: t-soie-h.f22285@fuji.waseda.jp

Atsushi Osanai

Professor, Graduate School of Commerce, Waseda University 1-6-1 Nishi-Waseda Shinjuku-ku, 169-8050 Tokyo Japan

Tel: +81-3-5286-3971 Mail: osanai@waseda.jp

Shin'ya Nagasawa

Professor, Graduate School of Commerce, Waseda University 1-6-1 Nishi-Waseda Shinjuku-ku, 169-8050 Tokyo Japan

Tel: +81-3-5286-3971 Mail: nagasawa@waseda.jp

Abstract

This study conducts a systematic review of the literature on the assortment strategies of luxury brands in e-commerce (EC) and physical stores, and discusses the gaps and directions for future research. The primary objective is to clarify the current state of research on luxury brands' EC operations and product assortment by reviewing existing literature, identifying research progress, and highlighting areas that need further exploration.

First, the background and purpose of the research are set within the context of the increasing importance of EC and EC for luxury brands due to the digitalization of the global retail market. Despite its growing significance, the empirical research in this field is limited. Given this situation, it is important to explore specific strategies to optimize the assortment of luxury brands in EC. Therefore, the research question was set to explore concrete strategies for optimizing the assortment in EC and physical stores for luxury brands.

To review prior studies, keyword searches were conducted using ScienceDirect and Scopus to identify research papers on luxury brands' EC operations and product assortment strategies. The review revealed that, while there are some studies related to luxury brands' EC and product assortment, these studies are insufficient, particularly in terms of empirical research comparing EC with physical stores. However, studies on specific strategies are limited.

Therefore, the conclusion drawn from this systematic review and the identified research gaps is that while previous studies suggest that luxury brands should actively utilize EC, there has been little empirical research on how exactly brands should manage their EC operations and optimize their product assortment. Consequently, this study confirms that there is considerable scope for future research in this area.

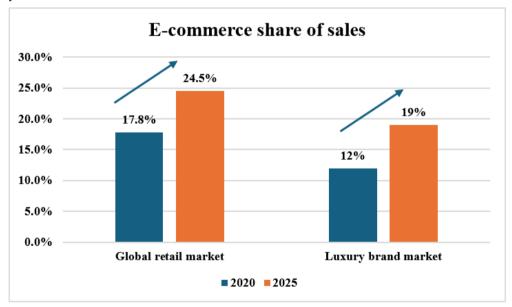
Keywords: Luxury Brand, E-Commerce, Product Assortment, Digital Marketing, Consumer Behavior

Introduction and Objectives

In recent years, with the digitization of the environment, the use of digital media and sales through e-commerce (EC) in the retail market has shown remarkable expansion in the global market. Similarly, in the luxury brand sector, the growth in digital technology and EC sales has become a significant and undeniable trend. As illustrated in Figure 1, for example, the share of EC in global retail market sales was 17.8% in 2020 and is estimated to increase to 24.5% by 2025 (EMARKETER, 2021). The share of EC in global luxury brand sales is also increasing, estimated to increase from 12% in 2020 to 19% in 2025 (McKinsey & Company, 2018). Research on the digital domain of luxury brands has intensified in this context. Discussions on approaches to EC sales channels for luxury brands, including analyses of the current status of EC channels for various brands, have become more frequent. However, there remains a lack of empirical research on how luxury brand operators should effectively utilize EC sales. Therefore, this study aims to review the existing research on luxury brand EC sales with a particular focus on product assortments in EC sales. The goal is to identify the extent to which such research has been conducted. After analyzing the current state of research, this paper proposes the direction for future research, particularly in response to the research question, "How should luxury brands manage their product assortment on EC platforms?" In this paper, we first review the existing research related to this topic, identify gaps in the current research, and finally outline the future directions of the planned research.

Figure 1. Estimated Sales vs. E-Commerce Share in the Global Retail Market and Luxury Brand Market

Source: Created by the author based on data from eMarketer, 2021¹, and McKinsey & Company, 2018²



Research Question

I have established the following research question (RQ) for my study on EC sales in the luxury brand sector:

RQ1: How should luxury brands utilise EC sales and product assortment?

RQ2: What impact do the products and assortments on luxury brands' EC platforms have on

² Referenced and cited McKinsey & Company, *The Age of Digital Darwinism 2018*.

¹ Referenced and cited eMarketer. Global Ecommerce Forecast 2021.

consumers?

RQ3: What are the existing studies on luxury brands' EC assortments, and what are the challenges for future research?

The following research questions (RQs) were established to address key issues related to luxury brands' EC assortments. RQ1 focuses on confirming how luxury brands utilise EC and identifying optimal strategies for product assortments. This is a crucial step in understanding how EC is currently handled in this context. RQ2 delves into the impact of products and assortments on consumers, aiming to explore in detail how they should be structured on EC platforms. This analysis helps evaluate the extent to which such topics have been discussed in existing research. RQ3 aims to review prior studies on luxury brands' EC assortments, identifying their limitations and highlighting opportunities for future research. These research questions hold both academic and practical significance. RQ1 offers valuable insights for brand managers and EC professionals by analysing the current utilisation of EC and assortments. RQ2 further enhances understanding by examining consumer impacts, providing actionable insights for effective management. RQ3 contributes to the development of this research field by systematically organising prior studies and identifying areas requiring further exploration. For these reasons, RQ1–3 were formulated as the foundation of this study.

Research Model and Method for Literature Review Research Paper Databases

ScienceDirect, a research paper database provided by Elsevier, was primarily used for literature review. This site was selected because ScienceDirect is the world's largest database, offering over 2,500 electronic journals and more than 35,000 electronic books in science, technology, medicine, and social sciences. It also includes many research papers on luxury brands. Although there are many other research paper databases, some do not contain many papers on luxury brands. To conduct a broader search, Scopus, another research paper database provided by Elsevier, was used. Scopus covers a wide range of research areas, including social sciences, humanities, medicine, and natural sciences, and includes over 85 million documents from more than 7,000 publishers worldwide. Using these two databases, an extensive search was conducted.

Literature Review from the Perspective of Research Questions

Given the above RQs, it is necessary to conduct a review based on the following three perspectives:

- 1. Review of literature on luxury brand EC.
- 2. Review of literature on luxury brand EC product assortment methods.
- 3. Review of literature on luxury brand EC vs. physical store product assortment.

Therefore, to conduct a literature review aligned with the three perspectives mentioned above, keywords were selected, and papers were narrowed down and screened accordingly.

Research Paper Search Keywords

Given these RQs, the following keywords were selected for the search: "Luxury brand online product range," "Luxury brand e-commerce product range," "Luxury brand online product assortment," "Luxury brand e-commerce product assortment," "Luxury brand online assortment," and "Luxury brand e-commerce assortment." This is because in the context of EC, both "e-commerce" and "online" are commonly observed in research, and in terms of product assortment, both "product range" and "product assortment" are frequently used, so these keywords were set accordingly.

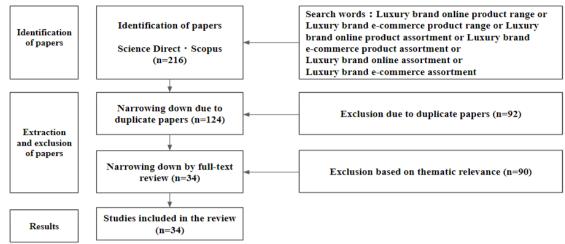
Findings

Systematic Review Flow

Figure 2 shows a flowchart summarizing the process of this systematic review based on the PRISMA 2020 guidelines.

Figure 2. Systematic Review Flowchart for Considerations on Product Assortment in Luxury Brand E-Commerce

Source: Created by the author based on PRISMA 2020



Using previously identified keyword searches, 216 relevant research papers were identified from ScienceDirect and Scopus. After removing 92 duplicate papers, the selection was narrowed down to 124 papers. Next, the full texts of these papers were reviewed, focusing on research related to EC sales and the product assortment of luxury brands from the perspective of how companies should approach these aspects. Finally, 34 papers were selected for review.

Further Narrowing Down the Review Target Papers

Thus far, 34 papers have been identified that correspond to research on luxury brands' EC and product assortments. However, given the focus of RQs on how luxury brands should optimize their EC and product assortments, it was necessary to narrow down further to those papers discussing how luxury brands and companies should approach EC and manage their product assortments. Additionally, further narrowing was performed by focusing on the apparel and accessory sectors. This additional filtering led to the selection of 11 papers from the original 34, as shown in Figure 3.

Figure 3. Further Screening of Studies Included in the Review Source: Created by the author



Analysis of the Journals and Research Fields of the Selected Papers

The 11 papers identified in the previous steps are categorized by journal and content, as shown in Table 1. When analyzed by journal, it is evident that multiple papers have been published in the *Journal of Business Research*, *Journal of Retailing*, and *Journal of Retailing* and *Consumer Services*. Furthermore, journals such as the *Journal of Retailing* and *Journal of Retailing* and *Consumer Services*, which focus on retail and consumer behavior, frequently discuss topics related to luxury brands' online presence and product assortment. The detailed classification of the content aligned with the RQs is elaborated in section 4-4.

Table 1. Classification of Studies Included in the Review by Journal and Content

Source: Created by the author

	Related to EC	Related to product assortment	Numbers of papers
IEEE Transactions on Engineering Management	1	1	1
Journal of Business and Industrial Marketing	1	0	1
Journal of Business Research	1	1	2
Journal of Global Fashion Marketing	1	0	1
Journal of Retailing	1	3	3
Journal of Retailing and Consumer Services	2	2	2
Journal of Visual Culture	1	0	1
Total	8	7	11

Figure 4 shows a graph of the selected papers by year. Considering that the focus of these research papers is on online topics, all papers are from 2010 onward, reflecting the rapid spread of the internet with the use of smartphones and the growing interest in such themes. Notably, more than 70% of these papers have been published since 2020, indicating heightened interest in recent years.

Figure 4. Number of Studies Included in the Review by Year of Publication Source: Created by the author

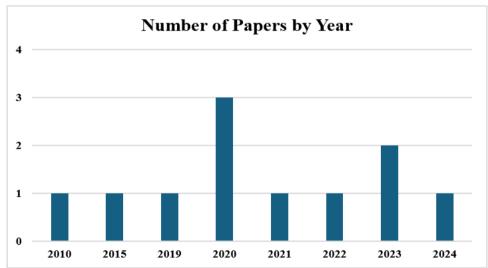
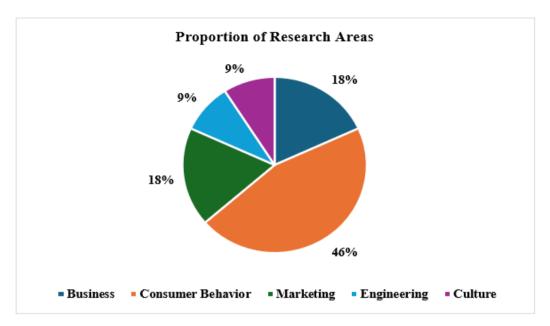


Figure 5 illustrates the proportions of research areas by journal for these studies. Papers related to luxury brand products and assortments on EC platforms are primarily discussed in the fields of business, consumer behavior, and marketing, with over 80% of the papers published in journals from these areas. This suggests that discussions often consider both the perspectives of companies or brands and those of consumers.

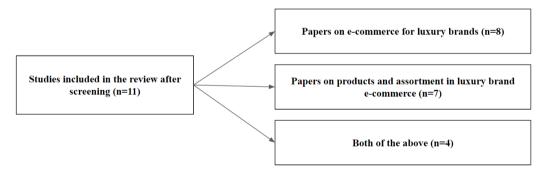
Figure 5. Proportion of Research Areas in Studies Included in the Review Source: Created by the author



Classification of the Selected Review Papers

In this section, we examine the content classification of the selected review papers, as shown in Table 1. The 11 review papers selected after narrowing down can be classified into three categories, as illustrated in Figure 6. First, eight papers discuss how companies and brands should approach EC sales of luxury brands. Second, seven papers focus on how to manage products and assortments on EC platforms. Finally, four papers address both topics. Over one-third of the papers on luxury brand EC and product assortments mention both aspects, indicating a close relationship between EC sales and product assortment strategies.

Figure 6. Classification of Studies Included in the Review Source: Created by the author

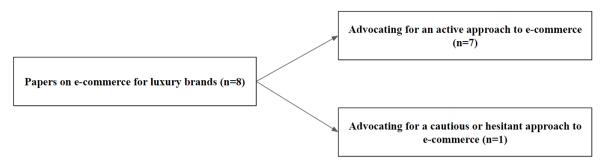


Discussion

Research on E-Commerce Sales of Luxury Brands

In Figure 7, the contents of the papers narrowed down thus far on luxury brand EC sales are further classified as follows: Seven papers argue that luxury brands should actively engage in EC sales, whereas one paper argues that luxury brands should be more cautious and less aggressive. These papers, all published after 2015, suggest that as the share of EC sales in the retail market grows, there is a growing consensus that even luxury brands dealing with highend products should actively leverage EC.

Figure 7. Classification of Papers on E-Commerce Sales of Luxury Brands Source: Created by the author



Given the various theories and discussions in these papers, I would like to highlight some key points of the debate, as outlined below.

Masstige Strategy and Price Display

Parguel et al. (2015) highlight the rapid growth of online sales and the increasing use of EC by luxury brands. They describe the "masstige strategy," which combines mass appeal with prestige to attract middle-class consumers by offering high perceived value at reasonable prices through EC. An example is selling logo-branded Tiffany accessories online to target this audience. Parguel et al. (2015) also challenge the belief that displaying prices for luxury products is harmful. Their study suggests that showing prices, both online and offline, can enhance the perception of luxury. This strategy is analysed in the context of the masstige approach across both channels.

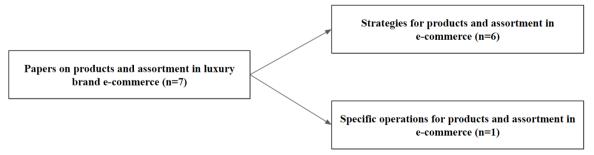
Phygital

Pangarkar et al. (2022) explore the "phygital omnichannel" strategy, which integrates physical stores with digital platforms. They highlight how interactions with knowledgeable sales staff enhance customer experiences in phygital channels. To create an immersive experience, luxury brands must build trust and actively engage with customers. This approach underscores the importance of combining online and offline strategies to provide a seamless customer journey.

Research on Product Offering and Assortment in Luxury Brand E-Commerce

Seven papers on product offerings in luxury EC were identified. Six emphasise that product presentation and assortment are vital for communicating the brand's identity. However, empirical research on how brands manage online assortments is scarce. Only one study, as shown in Figure 8, empirically explores strategies for handling products on EC platforms.

Figure 8. Classification of Papers on Products and Assortment in Luxury Brand E-Commerce Source: Created by the author



Methods for Displaying Products Online

Only one paper specifically addresses how to manipulate products online, which is the study by Chan and Northey (2021). This paper focuses on the placement of luxury products on EC platforms, examining how spatial metaphors such as "luxury equals upper class equals higher position" influence consumer behavior, and how the psychological theory of "processing fluency" is related to this. These experiments concluded that "luxury products are

more likely to convey a positive perception of luxury when placed in a higher position on e-commerce platforms than in a lower position." This finding highlights the influence of anthropological spatial metaphors and psychological processing fluency. This paper was the only one to conduct empirical research on the specific manipulation of products online, although it did not directly address product assortment in luxury brand EC.

Research on Luxury Brand Stores and Product Assortment

Research on product assortment in luxury brand EC has been organised, but examining physical stores is also essential to address this theme comprehensively. Thus, the following research questions (RQs) were established: **RQ1**: What types of product assortments are available in luxury brand stores? **RQ2**: What are the challenges in prior research on luxury brand store assortments, and where do opportunities for future research lie?

A systematic review, similar to the one conducted for EC, was performed to clarify existing studies on store assortments, following PRISMA 2020 guidelines and using Scopus and ScienceDirect for searches.

Initially, keywords like "Luxury brand store..." and "brand" were used, but "brand" drastically reduced results, excluding relevant studies. Using "Luxury store..." instead, 136 studies were identified and narrowed to 10 based on relevance, duplicates, and field of study. Key findings include:

- 1. Monobrand vs. Multibrand Stores
 Monobrand stores offer a full product line, while multibrand stores provide a limited
 assortment. (Brun & Castelli, 2008; Desmichel & Kocher, 2020)
- Seasonal and Classic Items
 Assortments feature seasonal fashion items and long-life staples. (Caniato et al., 2008;
 Lucci et al., 2016)
- 3. Entry-Level Products
 Affordable lines, including accessories and junior sub-lines, align with "masstige" strategies. (Magnoni & Roux, 2011; Parguel et al., 2016; Pizzetti et al., 2023)
- 4. Sustainability-Focused Products
 Sustainable options include recycled and eco-designed goods. (Cimatti et al., 2017;
 Roggeveen et al., 2020; Balconi et al., 2020)
- 5. Uniqueness and Exclusivity
 Distinctive products with regional, artistic, or high-fashion appeal are prominent.
 (Roggeveen et al., 2020)

Luxury brand store assortments span seasonal items, classic staples, sustainable products, entry-level goods, and unique high-priced items, reflecting varied strategies and supply chain practices. Compared to EC, physical store research offers deeper insights into product strategies. However, empirical studies on how assortment breadth or quantity affects consumer behaviour and brand perception are limited. Additionally, direct comparisons between store and EC assortments are rare.

Figure 9. Systematic Review Flowchart for Considerations on Product Assortment in Luxury Brand Stores

Source: Created by the author based on PRISMA 2020

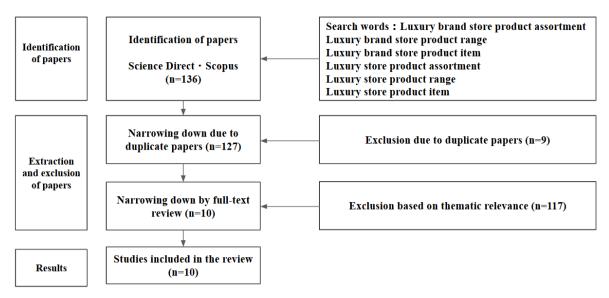


Table 2. Organisation of Reviewed Papers on Luxury Brand Store Assortments Source: Created by the author

Author	Year	Journal	Field	Analysis Target	Target Industry	Store Assortment Relevance
Alessandro Brun and Cecilia Castelli	2008	Int. J. Production Economics	Supply Chain Management Supply Chain Strategy	Case Study	Apparel	Luxury brand flagship stores offer a full product line, while independent specialty stores provide a limited assortment.
Federico Caniato et al.	2008	Research Journal of Textile and Apparel	Retail Management Supply Chain Management		Apparel, Footwear, Watches, Jewellery	here are seasonal fashion items and long-life cycle products. Fashion Products: Highly trend-driven and made-to-order. Carryover Products: Stable demand and produced based on forecasts.
Fanny Magnoni and Elyette	2011	IHHH International Conference on Management of Innovation and Technology	Brand Management Consumer Behaviour Theory	Consumer Survey	Apparel	Step-Down Line Extension Strategy Assortment Expansion from Core Brand Products to Sub-Brand Products Impact of Sub-Brands on the Core Brand New customers show increased purchase intention for sub-brands, while existing customers may perceive a decline in the core brand's image.
Béatrice Parguel et al.	2016	Journal of Business Research	Brand Management Consumer Behaviour Theory		Apparel, Fashion Accessories	A masstige strategy involves offering an assortment of affordable accessories, junior lines, and sub-lines to attract middle-class consumers.
Lucci, Giulia et al	2016	Proceedings of the Summer School Francesco Turco	Supply Chain Management		Apparel, Fashion Accessories	Optimising the inventory management model for staple products in luxury fashion brands.
Barbara Cimattia et al.	2017	Procedia Manufacturing	Eco-Design, Recycling Sustainability	Case Study	Apparel, Bags, Accessories	Luxury Eco-Design Assortment Strategy Impact of Assortments Featuring Recycled, Eco-Designed, and Sustainable Products
Anne L. Roggeveen et al.	2020	Journal of Retailing	Brand Management Consumer Behaviour Theory		Apparel, Fashion Accessories	Mention of unique products, regionally inspired products, artistic products, sustainable products, and high-fashion items. In merchandising (MD) strategies, elements such as themes, brand storytelling, playfulness, exclusivity, and virtual merchandising are essential.
Michela Balconi et al.	2020	Neuropsychological trends.	Eco-Luxury Sustainability, Consumer Behaviour Theory		Apparel, Fashion Accessories	Differences in consumer responses to sustainable products based on consumer attributes.
Perrine Desmichel and Brw	2020	Journal of Retailing	Brand Management Consumer Behaviour Theory		Apparel, Fashion Accessories	Differences in consumer responses to mono-brand and multi-brand offerings of luxury brand products.
Marta Pizzetti et al.	2023	Journal of Business Research	Brand Management Consumer Behaviour Theory		Apparel, Fashion Accessories	While not directly related to store assortments, a comparison of the impact of masstige strategy assortments, such as accessories and sub-brands, on the purchasing behaviour and attitudes of consumers in China and France.

Conclusion

As a result of conducting a systematic review on considerations of product assortment in luxury brand EC and physical stores, the following findings have been confirmed regarding luxury brand EC and product assortment in previous research papers:

Regarding luxury brand EC sales and product assortment:

- 1. Except for a few papers, it is generally recommended that luxury brands actively utilize EC.
- 2. It is important that EC sales and communication be linked with offline channels, such as physical stores, and used as a platform for consumer interaction.
- 3. The assortment of products on EC platforms is crucial for conveying the brand's worldview to consumers.
- 4. Only one paper specifically indicates that placing luxury brand products at the top of

the EC screen can increase consumer purchase intention.

Regarding luxury brand store Product Assortment

- 1. Luxury brand assortments include seasonal items, classic staples, sustainable products, entry-level goods, and high-priced products featuring uniqueness, artistic value, or high fashion.
- 2. Research has been conducted on merchandising strategies and supply chain management for each category of assortment.

Given this situation, a clear research gap exists concerning empirical studies on product offerings and the assortment of luxury brands on EC platforms. Strictly speaking, very few empirical studies have been conducted on the assortment of luxury brand products in EC. Therefore, there is scope for further research on the assortment of luxury brand products in EC. Regarding store product assortment, while there is research on the strategies behind the various types of assortments offered in stores, empirical studies on the breadth and quantity of assortments remain limited. Studies comparing store assortments with those in e-commerce are noticeably lacking. Additionally, empirical research on how changes in product assortments on EC platforms affect consumers is necessary, as suggested by RQ1 and RQ2. Furthermore, research comparing EC with physical stores and categorizing differences by brand is lacking. Therefore, there is ample scope for future research in these areas.

Limitations

In this systematic review, ScienceDirect and Scopus, two international databases that cover a wide range of academic papers, were used for the selection of studies. However, the addition of other databases could potentially enable broader research, which may be considered a limitation of this study. Furthermore, the review was limited to papers written in English and up to the year 2024. As a result, papers in other languages and those published after 2024 were not included in the analysis. This raises the possibility that conducting a similar systematic review in a few years might yield different results, which is another limitation of this research.

Further Research

As mentioned in the previous conclusion, there is ample room for further research in this systematic review on the product assortment of luxury brands in e-commerce. It is clear that there is significant potential for research on this topic. In future studies, we need to research the product assortment of luxury brands in both EC and physical stores, conducting experiments with consumers as an empirical study. Through these future studies, we aim to draw a concrete conclusion on how luxury brands should optimize their product assortment in EC.

Managerial Implication

This systematic review provides important insights for many stakeholders and executives currently managing luxury brands. In the face of the rapid digitalization, luxury brands are confronted with the challenge of how to effectively utilize EC. By summarizing recent studies, this review offers a certain degree of guidance on how to approach this issue at present. Moreover, further research on specific strategies, such as product assortment in EC, could lead to empirical studies that offer practical applications for brands in their actual operations. In this regard, this study is considered to be highly insightful.

References

Balconi, M., Sebastiani, R., Galeone, A. B., et al. (2020). Sustainability in the fashion luxury branding. Using neuroscience to understand consumers' intentions towards sustainable

- eco-luxury items. Neuropsychological Trends, 27(2020), 65-74.
- Bruckberger, G., Fuchs, C., Schreier, M. & Osselaer, et al. (2023).Retailing groundedness: How to improve customer experience, brand perceptions, and customer loyalty through feelings of groundedness. Journal of Retailing, 99(4), 594.
- Brun, A. & Castelli, C. (2008). Supply chain strategy in the fashion industry: Developing a portfolio model depending on product, retail channel and brand. *International Journal of Production Economics*, 116(2), 169.
- Caniato, F., Caridi, M., Castelli, C. & Crippa, L. Demand and retail management in luxury fashion industries.
- Chan, E. Y. & Northey, G. (2021). Luxury goods in online retail: How high/low positioning influences consumer processing fluency and preference. Journal of Business Research, 132136.
- Cimatti,B., Campana,G. & Carluccio,L. (2017). Eco design and sustainable manufacturing in fashion: A case study in the luxury personal accessories industry. *Procedia Manufacturing*, 8393.
- Desmichel, P. & Kocher, B. (2019). Luxury single- versus multi-brand stores: The effect of consumers' hedonic goals on brand comparisons. Journal of Retailing, 96(2), 203.
- Kim, A. J. & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. Journal of Global Fashion Marketing, 1(3), 164-171.
- Lucci, G., Schiraldi, M. M. & Varisco, M. (2016). Fashion luxury retail supply chain: Determining target stock levels and lost sale probability. Smart Manufacturing Conference, 1-5
- Magnoni, F. & Roux, E. (2011). The impact of brand familiarity, branding and distribution strategy on luxury brand dilution. Cahier de recherche, 05E3(2011)
- Pangarkar, A., Arora, V. & Shukla, Y. (2022). Exploring phygital omnichannel luxury retailing for immersive customer experience: The role of rapport and social engagement. Journal of Retailing and Consumer Services, 68.
- Parguel, B., Delécolle, T. & Valette-Florence, P. (2015). How price display influences consumer luxury perceptions. Journal of Business Research, 69(1), 341.
- Pizzetti, M., Chereau, P., Soscia, I. & Teng, F. (2023). Attitudes and intentions toward masstige strategies: A cross-cultural study of french and chinese consumers. *Journal of Business Research*, 167.
- Rees-Roberts, N. (2020). After fashion film: Social video and brand content in the influencer economy. Journal of Visual Culture, 19(3), 405-421.
- Roggeveen, A. L., Grewal, D., Karsberg, J., et al. (2020). Forging meaningful consumer-brand relationships through creative merchandise offerings and innovative merchandising strategies. Journal of Retailing, 97(1), 81.
- Shakir Goraya, M. A., Zhu, J., Akram, M. S., et al. (2020). The impact of channel integration on consumers' channel preferences: Do showrooming and webrooming behaviors matter? *Journal of Retailing and Consumer Services*, 65.
- Shankar, A. & Jain, S. (2020). Factors affecting luxury consumers' webrooming intention: A moderated-mediation approach. Journal of Retailing and Consumer Services, 58.
- Shen, B., Xu, X. & Yuan, Q. (2023). Demand learning through social media exposure in the luxury fashion industry: See now buy now versus see now buy later. IEEE Transactions on Engineering Management, 70(4), 1295-1311.
- Shin, D. & Darpy, D. (2020). Rating, review and reputation: How to unlock the hidden value of luxury consumers from digital commerce? Journal of Business and Industrial Marketing, 35(10), 1553-1561.