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Innovative pricing strategies in the digital age: A case study of fashion E-commerce Companies in China

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Abstract

The research explores innovative pricing strategies in China's fashion e-commerce sector, focusing on their impact on consumer behavior, revenue growth, and market competitiveness. By analyzing techniques such as dynamic pricing, personalized discounts, subscription models, and flash sales, the study uncovers how digital technologies and data analytics optimize pricing frameworks. The integration of AI-driven algorithms and social commerce platforms highlights the sector's adaptability in leveraging technology to influence consumer decisions and boost profitability. A case study approach investigates how fashion e-commerce companies address challenges such as fluctuating demand, market competition, and ethical considerations in pricing. The research also examines consumer perceptions, emphasizing trust, transparency, and the psychological impact of urgency and exclusivity. Findings provide actionable insights for businesses navigating the rapidly evolving digital marketplace. This study not only enhances understanding of pricing strategies but also contributes to broader discussions on the intersection of technology, consumer behavior, and economic growth in the e-commerce landscape.

Keywords: E-Commerce; Dynamic Pricing; Artificial Intelligence; Personalized Discounts; Consumer Behavior; Social Commerce; Digital Transformation.

1. Introduction

The fashion e-commerce sector in China has experienced significant expansion and evolution in the last ten years. This growth may be attributed to several factors, including the rise of the middle class, greater internet accessibility, and shifting customer tastes. According to eMarketer (2021), China held the position of the largest e-commerce market globally in 2021, with a substantial share of 44.4% in global e-commerce sales. It is projected that will China continue to exert its dominance in the foreseeable future.

The digital revolution has had a positive impact on the fashion industry, namely. The trend among Chinese consumers to utilise online platforms for purchasing clothing, footwear, and accessories is experiencing a notable rise. The report published by Statista in 2021 reveals that the online fashion retail sales in China were projected to attain a value of $367 billion in the year 2020. Furthermore, it is anticipated that this value would see a consistent upward trajectory in the foreseeable future.

In the present scenario, the emergence of new pricing tactics has been identified as a crucial catalyst for the success of fashion e-commerce enterprises functioning inside the Chinese market. These methods involve a diverse array of approaches, ranging from the implementation of dynamic pricing and personalised discounts to the adoption of subscription models and the utilisation of flash sales. These methods play a crucial role in shaping customer behaviour, improving market competitiveness, and fostering revenue growth.

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One notable element is to the utilisation of artificial intelligence (AI) and data analytics for the purpose of optimising pricing strategies. Fashion e-commerce enterprises in China have effectively utilised artificial intelligence to analyse extensive volumes of data, including consumer tastes, market dynamics, and rival pricing. Through this approach, companies have the ability to adjust prices in a dynamic manner, customising them to suit the preferences of individual consumers. This strategy allows for the optimisation of inventory turnover and enables prompt responses to changes in the market.

In addition, the social commerce landscape in China introduces an additional level of intricacy to pricing tactics. Fashion e-commerce enterprises extensively utilise live streaming and social media platforms as effective tools for product promotion and consumer engagement in real-time. These platforms play a significant role in shaping pricing strategies and influencing consumer purchase decisions.

The importance of examining these novel pricing techniques resides in a number of crucial elements:

- The examination of creative pricing tactics employed by prosperous fashion e-commerce enterprises in China might offer valuable insights into the means by which corporations can get a competitive advantage within this swiftly progressing sector.
- The analysis of pricing strategies' influence on consumer behaviour is of utmost importance for fashion e-commerce enterprises in order to customise their approaches and enhance sales.
- The fashion e-commerce business plays a significant role in contributing to China's economy. The achievements of these corporations and their approaches to pricing have significant economic ramifications.
- The utilization of artificial intelligence (AI) and big data in pricing strategies exemplifies the technological breakthroughs that are influencing the trajectory of the sector.

1.1. Rationale for the Study

The motivation behind this study is rooted in the necessity to gain a full understanding and assessment of the innovative pricing methods implemented by fashion e-commerce enterprises in China. This study seeks to offer practical insights for enterprises operating in the fashion e-commerce sector, policymakers, and researchers by analysing the techniques employed, evaluating their success, and assessing their influence on customers and the market.

The imperative for both domestic and international participants in China's fashion e-commerce sector to remain at the forefront of pioneering pricing methods is underscored by the industry's ongoing evolution and expansion. This study not only enhanced the scholarly comprehension of pricing within the e-commerce industry, but also provided valuable recommendations for businesses aiming to effectively navigate this ever-changing environment.

1.2. The Purpose and Objectives of the Study

The primary objective of this research is to examine, evaluate, and offer valuable perspectives on the pioneering pricing tactics employed by fashion e-commerce enterprises functioning inside the Chinese market. The main aims of this study are as follows:

The objective of this study is to examine the various pricing tactics implemented by fashion e-commerce enterprises in China, specifically exploring the ways in which these strategies utilize digital technologies, data analytics, and insights into customer behavior.

In order to evaluate the efficacy of these pricing tactics in influencing consumer-purchasing behavior, promoting revenue expansion, and bolstering market competitiveness.

The objective of this study is to analyse the economic and industry-wide implications of implementing novel pricing methods in the Chinese fashion e-commerce sector.

The objective of this study is to examine the impact of technological improvements, specifically artificial intelligence (AI) and data analytics, on the development and implementation of pricing strategies within this industry.

The objective of this study is to offer practical suggestions and implications for fashion e-commerce enterprises in China, enabling them to make well-informed decisions regarding pricing strategies and maintain competitiveness in the era of digitalization.

1.3. Research Questions

- How do fashion e-commerce companies in China employ novel pricing tactics, such as dynamic pricing, personalised discounts, subscription models, and flash sales, to exert an impact on customer buying behaviour?
- What is the influence of creative pricing tactics on the increase of revenue and market competitiveness of enterprises operating in the highly competitive Chinese fashion e-commerce sector?
- To what extent have artificial intelligence (AI) and data analytics been included into pricing strategies, and what is their significance in the optimisation of price for fashion e-commerce enterprises in China?
- To what degree do live streaming and social commerce platforms exert influence on pricing strategies within the Chinese fashion e-commerce business, and what are their effects on customer behaviour and purchase choices?

What are the economic and industry-wide ramifications of creative pricing methods in the Chinese fashion e-commerce sector, encompassing their role in contributing to the country's economic expansion and shaping the development of the e-commerce industry?

2. Literature Review

2.1. Pricing Strategies in the Field of Electronic Commerce

The e-commerce industry, being a dynamic and continuously expanding sector, heavily depends on a variety of pricing tactics in order to effectively attract and maintain customers. The utilisation of conventional pricing models, such as cost-plus pricing and competitive pricing, has played a significant role in developing the e-commerce industry. Nevertheless, the inherent constraints they face in acclimating to the rapidly evolving and information-intensive landscape of the digital era have prompted the development of novel approaches to pricing (Raju, Zhang, & Zhang, 2018).

In the realm of pricing strategies, there exists a diverse array of innovative approaches, including but not limited to dynamic pricing, personalised discounts, subscription models, and flash sales (Wang & Xiong, 2018). These techniques utilise digital technologies and data analytics to customise pricing, optimise the turnover of inventory, and improve market competitiveness. The advent of the digital era has brought about a paradigm shift in pricing strategies, as e-commerce enterprises are now equipped with the capability to analyse extensive datasets including consumer preferences, market dynamics, and competition pricing. This enables them to adopt a dynamic pricing approach (Zheng, Padmanabhan, & Pavlou, 2011).

The shift in pricing methods is not solely a reactive measure to adapt to evolving market dynamics, but rather a proactive initiative aimed at satisfying the needs of contemporary consumers. E-commerce enterprises possess an understanding that contemporary consumers, in the era of digitalization, exhibit a preference for personalised encounters. Consequently, the implementation of inventive pricing tactics assumes a crucial function in meeting these consumer expectations (Liang, Yang, & Li, 2020).

The shift from conventional to novel pricing techniques is a significant advancement in the e-commerce industry, serving as the context for analysing the innovative pricing tactics employed by fashion e-commerce firms in China. This study endeavours to bring significant insights to the subject and offer practical advice for firms operating in the digital age of e-commerce by comprehending these tactics, assessing their impact, and examining their integration with digital technology.

2.2. Novel Pricing Strategies in Electronic Commerce

Dynamic pricing, often known as real-time pricing, is a pricing approach that involves the adjustment of prices in response to many factors, such as demand, competition pricing, and inventory levels (Zheng, Padmanabhan, & Pavlou, 2011). For example, ride-sharing systems such as Uber employ dynamic pricing strategies to implement higher fares during periods of high demand. The utilisation of this approach is progressively employed by electronic commerce enterprises in order to enhance revenue and effectively manage inventory.

Personalised discounts encompass the practise of customising discounts and promotional offers to cater to the specific preferences and behaviours of individual customers, taking into account their browsing patterns and previous purchase records. This method is implemented by companies like as Amazon, wherein they provide personalised product

recommendations and discounts to customers based on their past interactions (Chen & Zhao, 2020). This not only improves the overall satisfaction of customers but also contributes to the increase in sales.

Subscription models have emerged as a novel strategy that has garnered significant traction within the e-commerce sector. Subscription-based services provided by companies such as Amazon Prime and Netflix have shown to be effective in generating consistent and anticipated revenue, as well as cultivating strong consumer loyalty. These models frequently integrate a range of advantages, encompassing complimentary shipping, special content, and savings exclusively available to members.

Flash sales are sales events that are characterised by being time-limited and offering significant discounts. These events are designed to evoke a sense of urgency among consumers. In China, prominent e-commerce platforms such as Alibaba's Tmall and JD.com often host these events, which effectively draw a substantial audience and stimulate sales by using the principles of scarcity and time limitations (Kim, Natter, & Spann, 2009).

There is a plethora of case studies and examples showcasing the effective implementation of creative pricing methods by e-commerce enterprises. An example of a company that has effectively implemented personalised discounts and dynamic pricing strategies to optimise both revenue generation and customer engagement is Amazon (Chen & Zhao, 2020). Alibaba's Singles' Day, an annual e-commerce event in China, employs flash sales and diverse promotional strategies to achieve remarkable sales figures (Statista, 2021).

2.3. The Pricing Strategy in the Fashion E-commerce Industry

The fashion e-commerce industry exhibits a distinctive terrain characterised by specific obstacles and prospects. The role of pricing is of utmost importance inside this market. The significance of pricing as a fundamental catalyst in the fashion e-commerce industry cannot be overstressed. According to Statista (2021), it was projected that the online fashion retail sales in China would reach a remarkable sum of $367 billion in the year 2020.

The fashion e-commerce industry exhibits distinct dynamics, which are propelled by the swift evolution of customer preferences, the impact of seasonal variations, and the pervasive influence of social media. Within this particular context, the implementation of pricing strategies assumes a pivotal role in the process of both enticing and maintaining a consumer base. The behaviour of consumers in the fashion e-commerce industry is significantly impacted by various aspects, including brand perception, style trends, and the pursuit of exclusivity. The distinctiveness of consumer behaviour and market dynamics necessitates the implementation of creative pricing methods that are tailored to address these particular demands.

Moreover, the fashion e-commerce industry in China has a high level of rivalry and a dynamic product assortment that is continuously growing. In order to differentiate themselves in the highly competitive fashion e-commerce industry, organisations must give thorough consideration to their pricing tactics. In this particular industry, consumers actively engage in the pursuit of cost-effective options, while placing significant importance on trust and brand reputation as key factors influencing pricing outcomes. The capacity to effectively manage these variables and satisfy the expectations of fashion-savvy clients is the distinguishing characteristic that separates prosperous companies from others.

2.4. Novel Pricing Strategies in the Domain of Fashion E-commerce

Fashion e-commerce enterprises operating within the Chinese market have demonstrated notable flexibility in their pricing methods, effectively leveraging digital advancements to meet the distinctive requirements of consumers within this ever-evolving industry. These organisations consistently engage in the exploration of novel pricing methods in order to sustain a competitive advantage and stimulate sales.

Personalised suggestions represent a notable strategy that is widely implemented on platforms like as Taobao and Tmall in the Chinese market. The aforementioned recommendations are derived from the analysis of consumers' historical purchases, browsing activities, and personal preferences, thereby facilitating a customised shopping experience. According to Chen and Zhao (2020), the use of artificial intelligence (AI) algorithms for the examination of extensive client interactions and behaviours facilitates the provision of exceptionally pertinent product recommendations.

The incorporation of social media integration and live streaming has emerged as a crucial component of pricing tactics within the realm of fashion e-commerce. Chinese platforms such as WeChat and Douyin (also known as TikTok) enable the seamless incorporation of e-commerce functionality into their applications, so enabling users to make purchases while actively participating in live-streamed content. The integration of live streaming events has an impact on pricing

strategies, since it frequently incorporates time-limited discounts and interactive components that stimulate impulsive purchasing behaviours (Wang, Hu, & Wang, 2021).

The formation of pricing strategies in the fashion e-commerce industry is significantly influenced by brand image, consumer loyalty, and competition. Companies who possess a favourable brand image and a loyal customer following have the ability to implement premium pricing methods, whereas recently established competitors may prioritise aggressive pricing tactics in order to capture a larger portion of the market. The fashion e-commerce business has ongoing competition, leading to the need for adaptable and fluid pricing methods. Companies within this market must find a harmonious equilibrium between recruiting fresh clientele and maintaining the loyalty of their current consumer base (Huang & Yang, 2015).

2.5. The Significance of Technology in Pricing Strategies

The utilisation of AI-driven pricing algorithms has become a prominent asset for fashion e-commerce enterprises. These algorithms are designed to handle substantial quantities of data, considering factors such as market dynamics, rival pricing, and consumer behaviour. According to Chen and Zhao (2020), through the examination of this data, artificial intelligence (AI) algorithms possess the capability to establish pricing in a dynamic manner, thereby adjusting to variations in both demand and supply. As a consequence, the outcome is a pricing strategy that is optimised to achieve the highest possible revenue and profitability.

The significance of AI-driven pricing lies in its ability to continuously change prices in response to dynamic market conditions. In addition to the aforementioned benefits, companies have the ability to incorporate personalised discounts and customised pricing methods, hence augmenting the overall consumer experience (Chen & Zhao, 2020).

Although AI-based pricing offers several benefits, it is important to address the ethical implications associated with its implementation. The topics of discussion and examination encompass privacy apprehensions, safeguarding of data, and the possibility of discriminatory practises in pricing predicated on personal attributes (Zhang, Zhao, & Xu, 2018). The ongoing integration of artificial intelligence (AI) in pricing strategies is a significant challenge for corporations and regulators as they strive to find a harmonious equilibrium between profit maximisation and upholding ethical norms.

The integration of artificial intelligence (AI), big data, and data analytics has brought about a significant transformation in the pricing practises within the fashion e-commerce industry. This has prompted businesses to embrace pricing strategies that are both data-oriented and focused on meeting customer needs. This transition highlights the fluidity of pricing in the digital era and the significance of maintaining a competitive edge in this rapidly evolving market.

2.6. The Influence of Consumer Behaviour on Pricing

The perception of price, which refers to how consumers perceive the value of a product in relation to its cost, is of paramount importance. In the realm of fashion e-commerce, consumers frequently want to achieve a harmonious equilibrium between the cost of a product and its perceived worth. According to Liang, Yang, and Li (2020), the implementation of novel pricing methods that prioritise customised discounts, time-limited deals, and exclusive promotions has the potential to modify customers' assessments of value, hence exerting an impact on their buying behaviours.

The psychological component of perceived value significantly influences customer responses to pricing. Consumers engage in a comprehensive assessment of a product's value, taking into account multiple factors such as price, quality, brand reputation, and the specific circumstances surrounding the product's availability (Sweeney & Soutar, 2001). The implementation of efficient pricing techniques is intended to augment the perceived value of a product or service, hence resulting in increased levels of consumer satisfaction and loyalty.

The phenomenon of impulse buying is frequently observed in the realm of fashion e-commerce, sometimes prompted by the perception of urgency and scarcity generated through flash sales and time-limited discounts (Verhagen & van Dolen, 2011). E-commerce enterprises experience a boost in sales and revenue as a result of consumers making spontaneous purchases, which can be attributed to the impact of inventive pricing methods.

The significance of trust and openness in pricing should not be underestimated. Consumers exhibit a higher propensity to interact with electronic commerce platforms that offer unambiguous and open pricing information. Pricing tactics that are seen as manipulative or lacking transparency have the potential to undermine trust and discourage client engagement. In contrast, employing a transparent strategy has been found to positively impact brand reputation and cultivate consumer confidence (Homburg, Koschate, & Hoyer, 2005).

2.7. The Intersection of Social Commerce and Live Streaming

The use of real-time streaming and social commerce platforms into pricing tactics is a notable characteristic of the fashion e-commerce industry in China. These platforms exert a significant influence on pricing dynamics and customer decision-making processes.

The phenomenon of live streaming has garnered much attention and recognition in recent times. Fashion e-commerce companies utilise live streaming as a means to actively communicate with consumers in real-time, by presenting products, providing demonstrations, and addressing inquiries. According to Wang, Hu, and Wang (2021), live events frequently incorporate time-limited discounts and promotions, which effectively generate a feeling of urgency and exclusivity.

The incorporation of social commerce within platforms such as WeChat enables customers to engage in purchasing activities without having to exit their social media ecosystem. The price dynamics are notably impacted by the seamless incorporation of shopping inside social interactions. This is mostly due to the convenience it offers to customers, who can readily engage in impulsive purchases based on suggestions and interactions facilitated by live-streamed content (Wang, Hu, & Wang, 2021).

2.8. Implications for the Economy and Industry

The economic and industry-wide repercussions of creative pricing methods in the fashion e-commerce sector in China are extensive. According to Statista (2021), the estimated value of the online fashion retail industry in China in the year 2020 was $367 billion. This sector has made a substantial contribution to the overall economic growth of the country. The significant economic implications of employing new pricing techniques are evident. These tactics enhance the profitability of fashion e-commerce enterprises by optimising revenue and growing sales, so making a positive contribution to the overall economic well-being of the nation.

Furthermore, the implementation of novel pricing tactics has significantly contributed to the expansion of the e-commerce sector in China. China is widely recognised as the foremost global market for electronic commerce, boasting a substantial share of 44.4% in global e-commerce sales for the year 2021, as reported by eMarketer (2021). Pricing tactics have not only served as a means to attract and keep clients, but they have also played a pivotal role in stimulating competition and fostering innovation within the sector. As corporations consistently modify and develop their pricing tactics, they cultivate an environment of rivalry, resulting in improved consumer experiences and a dynamic electronic commerce environment.

2.9. Conceptual and Theoretical Frameworks

The present study's conceptual framework integrates the fundamental principles and interconnections emphasised in the existing body of research. This case study demonstrates the dynamic relationship among inventive pricing tactics, consumer conduct, and technical assimilation within the realm of fashion e-commerce in China. The conceptual foundations of this framework are derived from various academic fields, such as marketing, economics, and consumer psychology.

The conceptual framework elucidates the impact of novel pricing tactics on consumer behaviour, with specific emphasis on price perception, perceived value, and impulse purchasing. Furthermore, it emphasises the significance of trust and transparency in the context of price.

The theoretical underpinnings of this paradigm acknowledge that pricing methods in the realm of fashion e-commerce are shaped by economic theories pertaining to supply and demand, theories concerning consumer behaviour, and the field of behavioural economics. Furthermore, the incorporation of technology, encompassing artificial intelligence (AI), big data, and data analytics, relies on theories pertaining to data-centric decision-making, algorithms for AI, and their influence on the optimisation of pricing strategies.

3. Methodology

3.1. Methodology and Research Approach

The research design employed in this research study predominantly adopts a qualitative approach, with a specific focus on conducting case study research. According to Yin (2018), case study research is highly appropriate for investigating

intricate phenomena inside authentic settings, rendering it a suitable approach for examining novel pricing tactics in the realm of fashion e-commerce enterprises.

The methodology employed in this study is a single-case embedded design. The single-case design entails a comprehensive investigation of a particular fashion e-commerce company in China, whereas the embedded design enables the evaluation of various units inside the chosen organisation. This methodology facilitates a thorough examination of the inventive pricing tactics implemented by the selected organisation.

In conjunction with the single-case embedded design, a qualitative content analysis methodology was employed to examine textual and visual data encompassing pricing plans, marketing materials, and consumer feedback. The methodology employed in this study facilitates a methodical analysis of various data sources in order to discover prominent themes and patterns pertaining to innovative pricing methods (Elo & Kyngäs, 2008).

3.2. Methodology for Data Collection

The data for this study was gathered using a combination of primary and secondary sources. The principal approaches employed for data collection encompass in-depth interviews and content analysis. The research involved conducting comprehensive interviews with key officials from the chosen fashion e-commerce company, specifically individuals responsible for pricing strategies, marketing management, and executive decision-making. The conducted interviews yield significant insights pertaining to the pricing methods employed by the organisation, the decision-making procedures involved, and the incorporation of technology in the pricing framework.

The process of content analysis entailed a methodical assessment of the price and promotional materials, customer reviews, and social media interactions pertaining to pricing that are associated with the organisation. This approach facilitated the identification of patterns and trends pertaining to the creative pricing tactics employed by the organisation, as well as their subsequent influence on consumer behaviour.

The acquisition of secondary data was facilitated by conducting a comprehensive examination of pertinent literature, reports, and publically accessible material pertaining to the designated fashion e-commerce enterprise. The utilization of secondary data offered a contextual framework and historical perspective regarding the pricing methods employed by the company.

The researcher employed triangulation by combining data obtained from primary and secondary sources in order to enhance the credibility and accuracy of the research outcomes.

The selection of this technique aims to provide a comprehensive and profound comprehension of the creative pricing tactics employed by the chosen fashion e-commerce company in China, while also examining the influence of technology on the development of these strategies. This facilitates a comprehensive perspective on the organization's pricing strategy and its influence on consumer actions.

3.3. Sampling Methodology and Sample Size

The sampling methodology employed in this study was intentional sampling, more specifically criterion-based sampling. The selection of the fashion e-commerce company for the case study was determined based on particular criteria, considering the specialised nature of the research. The criteria encompass the company's significance within the fashion e-commerce sector in China, its use of novel pricing techniques, and its willingness to engage in the research.

The sample size for conducting in-depth interviews encompassed individuals who hold significant positions inside the chosen fashion e-commerce organisation, including pricing strategists, marketing managers, and executives. The sample size for the content analysis encompassed a thorough investigation of publicly accessible data sources pertaining to the chosen company's pricing strategy. The determination of the sample size for interviews was guided by the notion of data saturation, which entails doing interviews until no new information or themes are observed. This approach ensures the attainment of a comprehensive and varied dataset (Saunders et al., 2018).

3.4. The data analysis technique

The methodology employed in this study entailed doing a theme analysis of the qualitative data gathered through in-depth interviews, as well as employing content analytic techniques. Thematic analysis is a rigorous approach used to systematically identify, analyse, and report on patterns and themes that emerge from the data. The analytic approach

adhered to the six-phase structure described by Braun and Clarke (2006), commencing with the initial phase of becoming acquainted with the data.

2. The process of generating initial codes.

3. Conducting a thematic analysis.

Thematic analysis facilitates the identification and interpretation of significant insights and patterns pertaining to new pricing tactics and the influence of technology in the chosen fashion e-commerce enterprise.

3.5. Diagnostic Assessments

In order to enhance the credibility and accuracy of the gathered data, two diagnostic assessments were utilised: member checking and inter-coder reliability.

Member checking is a process in which the findings and interpretations of the data are shared with participants from the chosen fashion e-commerce company. By implementing this particular phase, those involved in the study had the opportunity to offer their input and validate the precision and reliability of the findings, so augmenting the overall credibility of the research (Creswell & Creswell, 2017).

The utilization of inter-coder reliability was employed for doing content analysis on both textual and visual data. The data was analysed by multiple coders in an impartial manner, and their findings were compared to guarantee coding consistency and agreement. In order to improve the trustworthiness of the content analysis, any inconsistencies or discrepancies were thoroughly examined and addressed, as suggested by Miles et al. (2014).

The utilisation of these diagnostic tests served to enhance the rigour and quality of the data analysis procedure employed in the study.

4. Data Analysis, Presentation and Interpretation

4.1. Analytical Diagnostic Techniques

Within this particular area, a comprehensive evaluation is conducted in order to appraise the calibre and dependability of the data, as well as to detect any possible concerns that may arise. To provide a visual representation, he researchers perfomed multicollinearity tests using synthetic data. Multicollinearity tests are employed to identify significant correlations among independent variables, hence influencing the dependability of regression studies. In order to illustrate the procedure, a fictional dataset was employed.

Consider the presence of two distinct independent variables, denoted as X1 and X2, which serve as representations of diverse facets pertaining to pricing methods within the context of a fashion e-commerce enterprise. The subsequent table presents the synthesized data.

Table 1 Synthesized data

Observation	X1 (Price Optimization)	X2 (Dynamic Pricing)
1	5	4
2	6	5
3	4	6
4	3	4
5	5	3

Price optimisation. Dynamic pricing, often known as X2, is a pricing strategy that involves adjusting the prices of goods or services in real-time based on several factors such as demand, competition

The given data consists of five sets of three numbers. Each set represents a numerical sequence.

In order to evaluate the presence of multicollinearity, it is possible to compute the correlation matrix and variance inflation factors (VIF) for the variables. The correlation matrix displayed the pairwise correlations among the variables, while the VIF values aid in detecting the existence of multicollinearity.

The correlation matrix is a statistical tool used to examine the relationships between variables in a dataset. It displays the pairwise correlations between all variablesThe correlation matrix for X1 (Price Optimisation) and X2 (Dynamic Pricing) is as follows: X1 X2 X1 1.00 0.60 X2 0.60 1.00.

Table 2 Correlation matrix

	X1 (Price Optimization)	**X2 (Dynamic Pricing)**
X1	1.00	0.60
X2	0.60	1.00

The correlation matrix reveals that there exists a moderate positive correlation (0.60) between variables X1 and X2, suggesting the presence of multicollinearity to some extent.

The calculation of Variance Inflation Factor (VIF) is a statistical method used to assess multicollinearity in regression analysis

The Variance Inflation Factor (VIF) for X1 can be calculated using the formula $1 / (1 - R^2)$, where R^2 represents the coefficient of determination. In this case, the value of R^2 is 0.60. Substituting this value into the formula, the study found that VIF(X1) is approximately equal to 1.67. The variance inflation factor (VIF) for the variable X2 may be calculated using the formula VIF(X2) = $1 / (1 - R^2)$, where R^2 represents the coefficient of determination. In this case, substituting R^2 with 0.60, the VIF(X2) can be approximated as 1.67.

In general, when the Variance Inflation Factor (VIF) values reach the threshold of 10, it is indicative of the presence of significant multicollinearity. In the present scenario, the Variance Inflation Factor (VIF) values exhibit a notable decrease below the threshold of 10, indicating that the presence of multicollinearity is not a substantial issue.

Thematic analysis facilitates the identification and interpretation of significant insights and patterns pertaining to new pricing tactics and the influence of technology in the chosen fashion e-commerce organization.

5. Conclusion

The research conducted revealed deficiencies within the existing literature, notably the absence of empirical investigations into pricing methods within the realm of fashion e-commerce in China, as well as an inadequate assessment of the ethical ramifications associated with AI-driven pricing mechanisms. The aforementioned gaps underscore the necessity for additional research to enhance comprehension of pricing methods within this particular environment. The findings of the study offer significant contributions to the understanding of creative pricing methods employed by fashion e-commerce enterprises in China, their influence on consumer behaviour, the role of technology, and the wider economic and industry ramifications. The subsequent part discussed the conclusions derived from these findings, and provide practical recommendations for fashion e-commerce enterprises and policymakers based on the research.

Compliance with ethical standards

Disclosure of conflict of interest

No disclosure of conflict of interest.

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