

**INTENTION TO PURCHASE LOCAL
JEWELLERY ONLINE AMONG CHINESE
CONSUMERS: THE MODERATING EFFECTS OF
O2O/ROPO**

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UNIVERSITI SAINS MALAYSIA

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JEWELLERY ONLINE AMONG CHINESE
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O2O/ROPO**

by

ZHANG LINXUE

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LIST OF ABBREVIATIONS

CSR	Corporate social responsibility
eWOM	Electronic word of mouth
O2O	Online to offline
ROPO	Research online purchase offline

NIAT UNTUK MEMBELI BARANG KEMAS TEMPATAN ATAS TALIAN DALAM KALANGAN PENGGUNA CINA: KESAN MODERASI O2O/ROPO

ABSTRAK

Dipandu oleh kemajuan ekonomi dan teknologi serta meningkatnya permintaan semasa pandemi COVID-19, e-dagang menjadi penting untuk daya saing industri perhiasan China. Walau bagaimanapun, cabaran seperti permulaan lewat, kualiti perkhidmatan yang rendah, dan ketidakpastian pengguna tentang risiko masih wujud. Kajian ini mengkaji kesan rangsangan maklumat—CSR, Keakraban Jenama, Reka Bentuk, dan eWOM—terhadap Niat Membeli Perhiasan Dalam Talian di China, yang dimediasi oleh Perasaan terhadap Etika, Jenama, dan Risiko, serta dipengaruhi oleh tingkah laku O2O/ROPO dalam rangka S-O-R. Kajian ini menggunakan pendekatan kuantitatif dengan soal selidik dan analisis empirik menggunakan SPSS dan Smart PLS untuk membangunkan rangka kerja teori dan skala pengukuran, serta memberikan wawasan untuk perkembangan e-dagang perhiasan di China. Hasil kajian menunjukkan CSR meningkatkan niat pembelian dalam talian dengan memperkukuhkan Perasaan terhadap Etika, manakala Keakraban Jenama dan Reka Bentuk memperkuat Perasaan terhadap Jenama, seterusnya meningkatkan niat pembelian. eWOM pula mengurangkan Perasaan terhadap Risiko, memudahkan niat pembelian. Walau bagaimanapun, walaupun O2O/ROPO dijangka meningkatkan kepercayaan, ia tidak mempunyai kesan moderasi yang signifikan terhadap hubungan antara Risiko dan Niat Pembelian.

INTENTION TO PURCHASE LOCAL JEWELLERY ONLINE AMONG CHINESE CONSUMERS: THE MODERATING EFFECTS OF O2O/ROPO

ABSTRACT

Driven by economic and technological advancements, alongside rising consumer demand during the COVID-19 pandemic, e-commerce has become crucial for enhancing competitiveness in Chinese jewellery industry. However, challenges such as a late start, poor service quality, and consumer uncertainty about risks remain. This study examines the impact of information stimuli—CSR, Brand Familiarity, Design, and eWOM—on Intention to Buy Jewellery Online of Chinese consumers, mediated by Feelings towards Ethicalness, Brand, and Risk, and moderated by O2O/ROPO behaviour within the S-O-R framework. As the Chinese jewellery retail sector rapidly digitizes, understanding how external stimuli influence online purchase intentions through internal psychological mechanisms is essential. This study uses a quantitative approach with questionnaires and empirical analysis via SPSS and Smart PLS to develop a theoretical framework, measurement scale, and provide insights for the growth of Chinese jewellery e-commerce. Results show CSR significantly boosts online purchase intentions by enhancing Feelings towards Ethicalness, while Brand Familiarity and Design positively affect Intention by strengthening Feelings towards Brand. eWOM reduces Feelings towards Risk, further facilitating purchase intentions. However, while O2O/ROPO was expected to enhance trust, it had no significant moderating effect on the relationship between Risk and Purchase Intention.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the research background of Chinese jewellery e-commerce. It also delves into the development process of Chinese e-commerce and examines its relationship with the jewellery market. Followed by the problem statement, wherein a thorough examination of the existing condition of Chinese jewellery e-commerce be provided, it also includes an interview-based preliminary study. The subsequent section presents the research questions, research objectives and gap. The chapter additionally encompasses research implications and contributions, culminating with the elucidation of key terms.

1.2 Background of the Study

Online shopping has become a prevalent global trend in contemporary society. Since the beginning of the use of the Internet for commerce in the 1990s, global online consumption has shown double-digit growth, averaging nearly 50 per cent annually, with global retail e-commerce sales reaching \$42.8 million in 2020, an annual growth rate of 22 per cent over the past five years (Rob & Opara, 2003; Risberg, 2022).

With the ongoing progress of e-informational infrastructure and the rapid pace of internationalization in China, the Internet and mobile phones have become widely accessible in various sectors of Chinese society. According to the research conducted by the China Internet Network Information Center (2022), the number of Chinese netizens had reached 1.032 billion by December 2021, which was an increase of 42.96

million compared to the previous year. Additionally, the Internet penetration rate in China had reached 73.0% as reported in The 49th Statistical Report on the Development of Internet in China (2022), indicating a consistent upward trend. Simultaneously, the proliferation of mobile networks has significantly altered the lifestyle and consumption patterns of the Chinese population. E-commerce has progressively permeated everyday life and exerts a significant influence on consumer buying behavior (Liu, 2013).

Since 2013, China has consistently held the position of being the largest online retail market globally for eight consecutive years (Gao, 2020). By December 2021, the total number of online shopping users in China had reached 842 million, indicating a significant increase of 59.68 million compared to December 2020. This figure represents approximately 81.6% of the total netizens in the country. In the year 2021, it is projected that the online retail sales in China amount to 13.1 trillion yuan, indicating a growth of 14.1% compared to the previous year. According to the 49th Statistical Report on Internet Development in China (2022) released by CNNIC, the online retail sales of physical goods constituted 24.5% of the overall retail sales of social consumer goods.

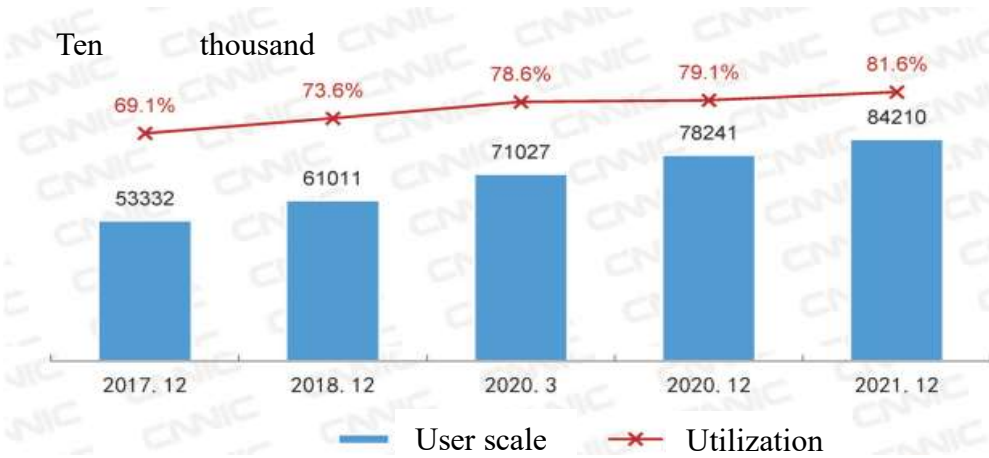


Figure1.1 2017.12-2021.12 User Scale and Utilization Rate of Online Shopping in China
Source: The 49th Statistical Report on the Development of Internet in China (2022)

At the same time, the online jewellery market in Asia is undergoing significant expansion (Weinswig, 2016). For instance, in China, the Chinese jewellery and jade industry e-commerce platform underwent successful evaluation and acceptance in 2009, leveraging various well-established and advanced e-commerce methods. The system achieves comprehensive management of the e-commerce supply chain, encompassing product data collection, product material management, transaction process management, and service system. It is advantageous for Chinese jewellery enterprises to investigate novel market channels and business strategies, enhance sales volume, expedite international market expansion, enhance global competitiveness, and establish sustainable development for the entire industry (Lin et al., 2008).

1.2.1 The Development Process of Chinese E-commerce

The years 1997-2000 mark the embryonic stage of Chinese e-commerce. At present, the quantity of Internet users in China is comparatively limited. According to the statistics published in mid-2000, the number of Chinese netizens was reported to be 10 million (Zhang & Tang, 2000). The registration of Alibaba Group in December 1998 marked a significant turning point. In March of the following year, Alibaba China, a subsidiary of Alibaba, was established in Hangzhou. In May of the same year, the first B2C e-commerce website in China was launched, raising a total of 2.6 million US dollars (Zhong, 2001). This event marked the inception of Chinese e-commerce (Kwak et al., 2019). From then on, there has been a notable shift among Chinese netizens from engaging in general online social behaviors such as browsing the web, chatting, and sending emails, to actively participating in online shopping activities (Gong et al.,

2013; Zhang, 2016).

The years 2001-2006 witnessed a significant surge in the development of Chinese e-commerce. During this period, there was a significant development in internet sales platforms such as Dangdang, Zhuoyue, JD.com, and others. Among them, Taobao, which was established on May 10, 2003 and invested in by Alibaba Group, stood out as the most prominent (Hu, 2005; Wang & Guan, 2017). In 2003, the SARS virus rapidly spread across the globe (Barboza & Quatresous, 2003). In light of the virus's mode of transmission, which involves close-range and contact, individuals are compelled to minimize their presence in crowded areas such as shopping malls and supermarkets. This precautionary measure aims to reduce the risk of infection during the current period. The advent of online shopping, a form of e-commerce that eliminates the need for face-to-face interactions, had seamlessly integrated into people's daily lives at that time, leading to a rapid transformation in traditional trading practices (Gu, 2019; Barboza & Quatresous, 2003; Noy & Shields, 2019). In 2005, Taobao surpassed eBay (Chen, 2006) and subsequently emerged as the largest e-commerce platform in Asia the following year (Chu, 2006). The number of Internet users in China experienced a significant increase during this period. By the conclusion of 2004, the quantity of internet users in China had surpassed 90 million, positioning it as the second highest globally (Wang, 2005). Additionally, it was found that 70% of these individuals had engaged in online shopping (Ren, 2007).

From 2007 to 2015, the growth of e-commerce in China has experienced a significant surge. As of June 2010, the cumulative number of Chinese internet users has surged to 420 million (Kyriakopoulou, 2011), exhibiting a twofold increase over a span of five years.

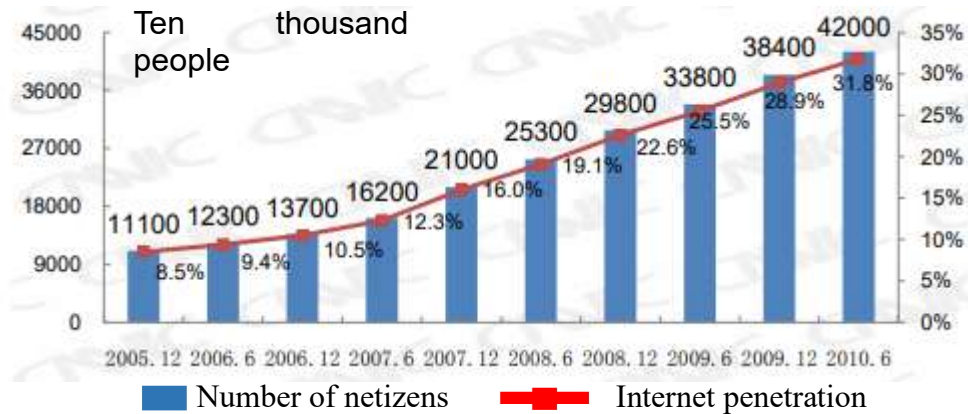


Figure 1. 2 The Scale and Popularity of Internet Users in China
Source: Statistical Report on the Development of Internet in China (2010)

At that stage, it is imperative to acknowledge the significant impact that the Double 11 Shopping Carnival of Taobao has had on the e-commerce industry. The Double 11 Shopping Carnival, also known as Singles' Day, is an annual online shopping promotion held on November 11th (Xu, 2017). This event, similar to Black Friday in the United States, is a deliberately created shopping day (Yang et al., 2018). The origin of this phenomenon can be traced back to the online promotional events organized by Taobao Mall (Tmall) on November 11, 2009. Despite the limited participation of only 27 brands during that period, the turnover amounted to 52 million yuan (equivalent to approximately 8 million US dollars), so Taobao has established November 11 as the designated date for hosting annual large-scale promotional events (Wu & Wu, 2017). November 11 has emerged as the largest annual event in the Chinese

e-commerce industry now. In addition to Taobao, an increasing number of e-commerce platforms have also opted to organize large-scale promotional activities on this day. This has subsequently led to the creation of other online shopping promotions such as 12.12 and 6.18, which have gradually impacted the international e-commerce industry. As a result, buyers from over 200 countries and regions have participated in these events, highlighting the internationalization of Double 11 as a new trend (*Double 11 Internationalization Has Become a New Trend, Buyers in More than 200 Countries and Regions*, 2014).

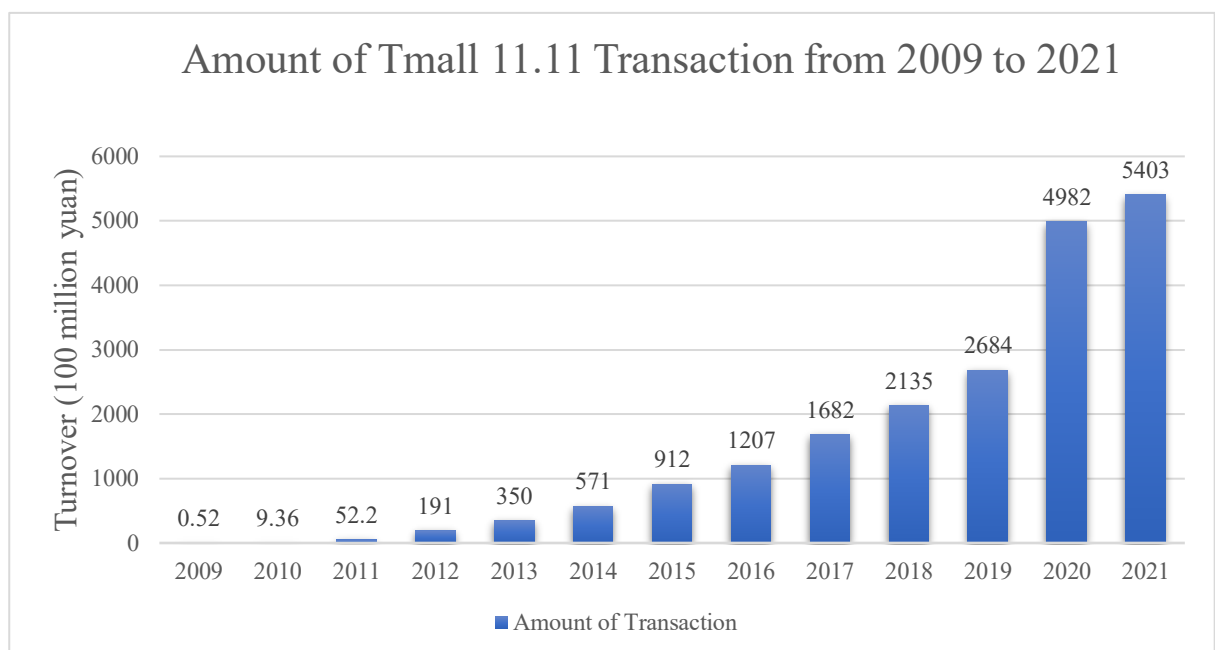


Figure 1. 3 Amount of Tmall 11.11 Transaction from 2009 to 2021
Source: Tmall-Tianmao (2022)

Since 2016, the Chinese e-commerce industry is experiencing a period of steady growth. According to recent research, the electronic commerce industry in China has experienced significant growth but has now entered a phase of relatively stable development since 2016 (Ministry of Commerce of the People's Republic of China, 2020). Currently, the Chinese e-commerce industry has reached a level of

technological maturity and has established high barriers to entry. Leads to several small e-commerce platforms have been eliminated from the market or absorbed by larger platforms, and a situation where mainstream e-commerce companies dominate the e-market: according to platform data from 2019, the user penetration rate of Taobao reached 50.1%, while JD.com reached 26.51% (*Aurora Big Data: Q1 Mobile Internet Industry Research Report 2019*, 2019; 2019 China Online Retail Market Data Monitoring Report, 2020). The combined user base of these two platforms now exceeds 70% of the total number of Internet users in China.

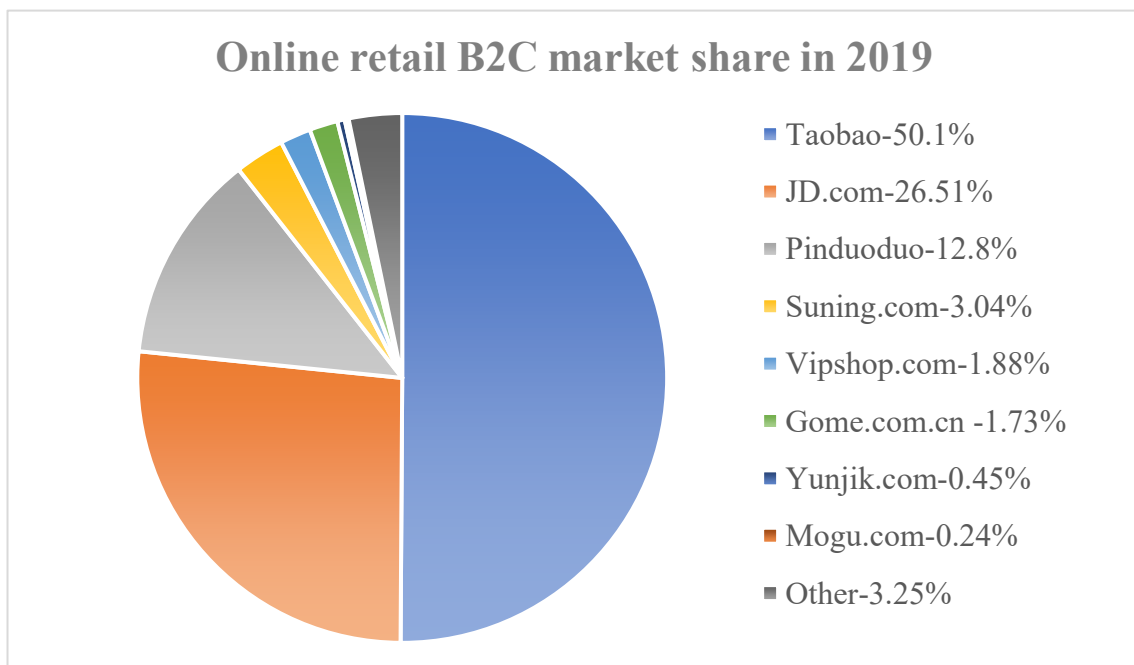


Figure 1. 4 Online retail B2C market share in 2019
Source: 2019 China Online Retail Market Data Monitoring Report (2022)

1.2.2 The Development Process of Chinese Jewellery Market

The origins of jewellery culture in China can be traced back to the Paleolithic Hongshan culture. A notable example of jade jewellery from this culture is the jade pig-dragon, which dates back approximately 5,500-5,000 years ago (Sax et al., 2004).

Jewellery and jade have played a significant role in Chinese history and culture, being highly esteemed as sacred and auspicious objects. They have been extensively utilized in religious ceremonies, court rituals, and other important events. In ancient China, jade was particularly revered as a symbol of virtuous and noble attributes (Kutcher & McDermott, 2001; Nott, 2013; Shi et al., 2020). Consequently, the jewellery industry in China has a rich and enduring heritage. Despite the transitions of power between different dynasties, the role of jewellery has consistently held great importance in Chinese history and culture. This is evident through the presence of extensive jewellery exhibits in both the National Palace Museums located in Taipei and Beijing (The Palace Museum, 2019; National Palace Museum, 2023). Jewellery began to increasingly permeate the everyday lives of Chinese individuals during the 20th century, coinciding with advancements in material culture. The current state of the Chinese modern jewellery market can be summarized as follows:

Initial development (before 2000): Owing to the prevailing market environment and economic conditions, jewellery companies had limited influence in the Chinese market, resulting in minimal sales and brand recognition (Hsu et al., 2014).

The Rise Period (2000-2010) witnessed a rapid growth in the Chinese economy, resulting in an increase in per capita income. Consequently, there was a surge in the demand for items among the Chinese population (Garner & Chan, 2005). This trend also prompted the entry of jewellery brands into the Chinese market. For instance, Tiffany & Co. inaugurated its inaugural store exclusively for the Chinese market in the lobby of The Peninsula Hotel Beijing in 2001. Since then, globally acclaimed jewellery brands have proactively ventured into China and established boutiques in major cities, including both first and second tier cities. Chinese consumers' demand

for jewellery is experiencing significant growth, positioning them as one of the most influential consumer segments in the global market (Zhou, 2011).

High growth period (2010-2015): The Chinese jewellery market witnessed a significant surge in growth during this period (Cui et al., 2015). Considering the flourishing e-commerce sector, jewellery companies capitalized on the opportunity by expanding their sales in China through the establishment of new online flagship stores. This strategic move aimed to extend their market reach to a wider range of cities and customer segments. One notable establishment that exemplifies this is Chow Tai Fook (Chow Tai Fook Official Online-mall, 2011), which was inaugurated on October 1, 2011, reaching more consumer groups and sell to more cities. The jewellery industry has become a highly competitive market for numerous companies, primarily driven by the increasing demand for jewellery among Chinese customers and their growing purchasing power.

Period of stable normality (2015 to present): Over the past few years, the Chinese jewellery market has experienced a gradual transition into a state of stability and normalcy. The purchasing behaviors and attitudes of consumers have undergone changes due to the reorganization and upgrading of consumption in the Chinese economy (Zhang, 2017). Brands are increasingly prioritizing the aspect of interaction and experiential engagement with consumers, employing more direct communication methods through digital and social media channels (Liu et al., 2019). The Internet is steadily taking on more significance in the jewellery industry, permeating every facet of the transaction and not just the sale. The marketing and promotion of jewellery companies also depends more on the network (Marques et al., 2021). Meanwhile, Chinese independent designer brands and independent

jewellery brands are concurrently emerging, thereby introducing innovation to the market.

1.2.3 The Development Process of Chinese Jewellery E-commerce

Amid growing internet usage and a surge in the number of netizens, the rise of online shopping has fuelled the transformation of the jewellery industry. Statistics show that the jewellery market of China is worth close to 700 billion yuan today and that retail sales of jewellery in 2018 reached nearly 700 billion yuan, with a compound growth rate of 4.4% over the past five years (Chyxx.com., 2020).

Between 1999 and 2002, the Chinese jewellery e-commerce industry experienced its formative years, marking its emergence as a prominent player in the digital marketplace. This period can be considered as the inception phase of the millennial generation of Chinese jewellery e-commerce. China started online jewellery sales in the late 1990s, and the first commerce-focused jewellery sites included 800buy.com, 21Gem.com, and yoyanyc.com (Lin, Zhang, & Li, 2008), and foreign online sales website mainly influenced those websites in this period. Although the CNAPS (China National Automatic Payment System, 2000) project was completed at that time, it was not yet popularized in China, so the issue of electronic payment became one of the obstacles restricting the development of Chinese domestic jewellery e-commerce (Yang & Li, 2001). Additionally, there are many unsatisfactory aspects in the construction of credit system, supply of goods, logistics and after-sales service (Yang, 2005), which makes the emerging jewellery e-commerce in China face many problems and the business performance is not ideal. Nonetheless, the establishment of a jewellery e-commerce website during this period holds significant importance for the

development of e-commerce in the Chinese jewellery industry.

Since 2003, there has been a significant growth in the Chinese jewellery e-commerce industry. Because of the repercussions of the SARS outbreak, the Shanghai Gemstone Association collaborated with Shanghai 21gem.com in May 2003. The objective was to mitigate the financial setbacks experienced by the jewellery industry due to SARS. As a result of this collaboration, a complimentary e-commerce platform was established, catering to over 200 gold and silver enterprises as well as jewellery retailers (21gem event, 2020). Furthermore, the organization hosted the inaugural Chinese large-scale online exhibition of the jewellery industry, while also establishing a trading and exchange platform for both domestic and international jewellery enterprises, as well as enthusiasts. Additionally, Alipay, a dedicated third-party payment tool of Taobao, was launched by the Alibaba group in October 2003. This platform has significantly altered consumers' perception of online payment through its implementation of the "secured transaction mode" (Dong, 2006). This software serves to bolster consumers' confidence in online payment transactions and effectively addresses the issues that have historically plagued online payment systems. The advantages have played a significant role in driving the rapid growth of the Chinese jewellery e-commerce industry. This growth is evident in the establishment of numerous e-commerce jewellery websites and the subsequent subdivision of the jewellery e-commerce market. As a result, the sales performance in this sector has experienced notable success. The prominent jewellery brands have also initiated a proactive search for novel marketing strategies and have subsequently joined the leading e-commerce platforms in succession. For example, renowned brands like Chow Tai Fook, Chow Sang Sang, Lao Feng Xiang, and CHJ JEWELLERY have successfully established their own e-commerce platforms, in addition to launching

flagship stores on popular online marketplaces such as Taobao and JD.com. Chow Tai Fook achieved RMB2.621 billion in sales revenue from the mainland e-commerce channel of prominent jewellery brands in 2020, positioning itself as a distant second, where the e-commerce business operating revenue constituted 4.2% of Chow Tai Fook's total revenue.

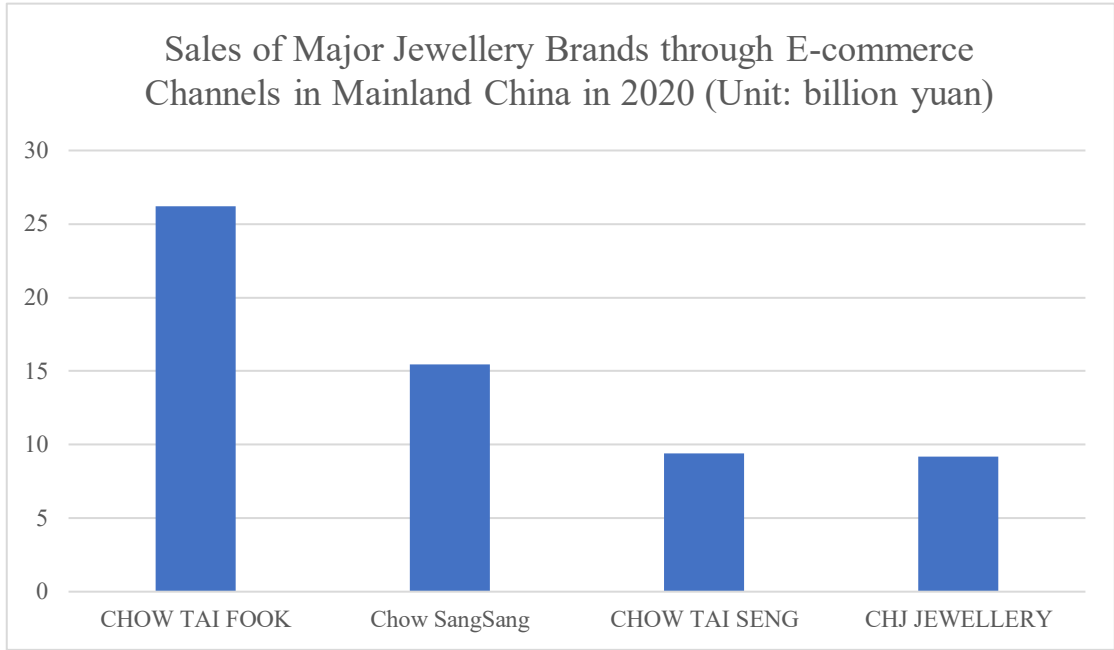


Figure 1.5 China Jewellery E-Commerce Market Status and Development Trend Analysis in 2022
Source: Prospective industry research institute (2022)

According to Figure 1.5, Chow Tai Fook is the brand with the highest market share in China jewellery e-commerce market. According to Global Powers of Luxury Goods 2023 of Deloitte, Chow Tai Fook, as a well-known jewellery brand in China, successfully rebounded in the 2022 fiscal year, surpassing Hermès and ranking seventh globally. Its smart retail business (including e-commerce, online to offline (O2O) platforms, and related businesses) saw a 62.7% increase in retail sales, accounting for 8.6% of the group's total retail sales. The sales of gemstones, platinum, and K-gold jewellery increased by 19.1%, and their rapid development is remarkable

(Deloitte, 2024).

As one of the most iconic jewellery brands in China, Chow Tai Fook exemplifies the core attributes of jewellery, particularly through its meticulous selection of rare and high-quality materials. The brand consistently utilizes pure gold, 18K gold, platinum, and other precious metals, along with natural diamonds, jadeite, pearls and other materials favored by Chinese consumers. These materials are not only scarce in nature but also possess enduring value and deep symbolic significance, often representing social identity and emotional expression in Chinese culture. Moreover, Chow Tai Fook enhances its products with exceptional craftsmanship, a distinctive design language, and the incorporation of traditional Chinese cultural elements, elevating its jewelry beyond material value to serve as cultural and personal symbols.

E-commerce in China plays a vital role in transforming traditional jewellery retail. It enables brands to reach broader consumer segments, especially digital-native buyers, while enhancing accessibility and convenience. Supported by secure payment systems and improved logistics, it reduces purchasing barriers and drives innovation in marketing and service delivery. As a key force in modernizing the jewellery industry, it contributes significantly to the sector's growth and competitiveness in the digital era.

1.2.4 The analysis of Chinese Jewellery E-commerce

Advantages of Chinese Jewellery E-commerce

Primarily, young generation who grew up in the digital age are now the mainstay of e-commerce spending, consequently leading to the expansion of consumption patterns and generating new market opportunities for the jewellery industry. Meanwhile, the advancements in the production process and the emergence of

intelligent technology have presented digital opportunities for the jewellery industry. One of the most prominent benefits of the integration of the jewellery industry with e-commerce is the reduction in costs and the availability of preferential pricing. This, in turn, facilitates the attraction of consumers towards purchasing jewellery online. In contemporary society, the younger netizen prioritizes the efficient allocation of time, energy, and financial resources when it comes to purchasing jewellery.

On the other hand, when considering conventional jewellery brands, the persistent rise in rental fees, labor expenses, and operational costs over the past few years has resulted in minimal profits for brick-and-mortar establishments. Given that jewellery e-commerce companies are exempt from these fees, the prices of products of the same quality sold on e-shops are significantly lower compared to those sold at physical stores. Additionally, the rapid growth of e-commerce in the jewellery industry and the increasing demand from consumers have brought attention to the similarity of jewellery product designs and the significant price disparity between online and offline markets. Traditional jewellery brands are increasingly adopting the strategy of exploring new sales channels to diversify their business directions. Leveraging their established reputation, these brands are rapidly expanding their online presence and targeting a wider range of consumers by entering various digital platforms. This approach allows them to expand their business channels and tap into new market opportunities. Today, the diversified network infrastructure of jewellery e-commerce aligns more closely with the purchasing preferences of young consumers, providing them with a wider range of brand and product options.

Additionally, it is worth noting that the majority of jewellery platforms and merchants offer personalized services for online jewellery products to cater to the needs and preferences of consumers. According to the specified requirements for

jewellery design, professionals have the capability to create unique jewellery products by utilizing "one-to-one" design and various processing techniques, based on the physical or design drawings provided by customers. This particular online jewellery personal customization service is particularly popular among fashionable women, young couples, and individuals in romantic relationships. Compared to traditional brick-and-mortar stores, online retailers have the advantage of being able to cater to the diverse psychological needs and individual experiences of their customers in a more flexible manner.

Last but not least, with the advancement of the e-commerce system, consumers now have a greater sense of confidence when it comes to purchasing high-price items such as jewellery through online platforms. The Consumer Protection Service of Taobao, introduced in 2013, establishes regulations allowing for the return or exchange of online purchased jewellery within 7 days, without requiring a reason (*Service Rules of "Return and Exchange without Reason within 7 Days" in Consumer Protection Service*, 2013). Similar to clothing and electrical appliances, jewellery also falls under the category of goods eligible for the 7-day return service, regardless of the reason. This policy provides a strong level of protection for customers buying jewellery online, just with the exception of customized products and non-returnable styles explicitly indicated by the merchants. Also, in the highly competitive market, many merchants address concerns regarding the credibility, quality, and after-sales service of their products by providing a specialized identification certificate for each piece of jewellery. These certificates are often issued by reputable jewellery appraisal agencies such as GIA, NGTC, AGS, and other recognized domestic or international authorities. The concerns of a huge number of consumers are alleviated, making online jewellery shopping a more convenient option.

Disadvantages of Chinese Jewellery E-commerce

Recent data reveals that during the first half of 2020, the largest jewellery brand in China experienced a decline in the number of new physical stores for the first time in four years, with a negative value of -6. This decline was attributed to the closure of 21 stores and the opening of only 15 new ones (Prospective industry research institute, 2021). Despite the impact of the COVID-19 pandemic, the expansion of physical stores for prominent jewellery brands has suspended, online jewellery stores in China continue to face challenges due to the preference of Chinese consumers for the traditional sales model in physical stores, especially when it comes to high-value products like jewellery. The primary rationale behind consumers' preference for trying on jewellery before making a purchase is the non-standard nature of these products.

E-commerce in the jewellery industry for consumer is a novel marketing approach that influences their purchasing preference, decision-making behaviour, and ultimately elicits varied consumer responses. Hence, Chinese consumers are currently in the process of adjusting to the practice of purchasing jewellery online, and it is a gradual and enduring process to alter their jewellery consumption habits.

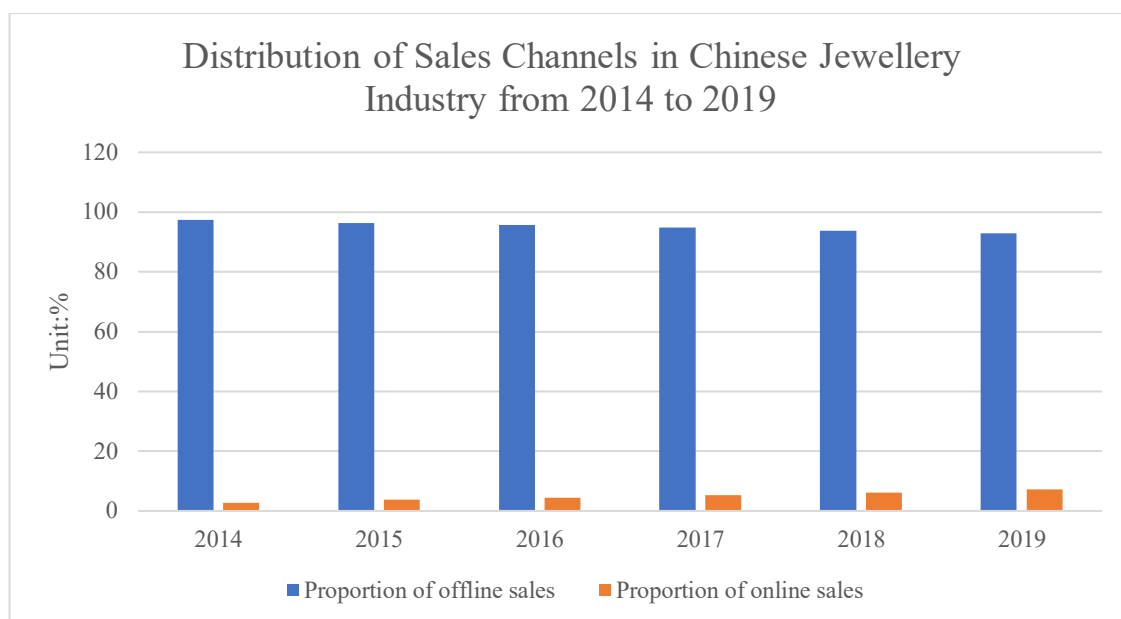


Figure 1. 6 Distribution of Sales Channels in Chinese Jewellery Industry from 2014 to 2019

Source: Prospective industry research institute (2021)

At the onset of 2020, the global pandemic known as COVID-19 pandemic rapidly spread across the globe. The Chinese e-commerce industry, which experienced significant growth following the SARS outbreak in 2003, has achieved remarkable advancements during the ongoing battle against the COVID-19 pandemic. Years of theoretical and practical accumulation have established pathways reference for the emerging supply and demand dynamics in the Chinese jewellery e-commerce industry. Under similar circumstances in 2003, the electronic commerce of jewellery in China encountered significant opportunities as well as formidable challenges.

Opportunities of Chinese Jewellery E-commerce

The sales of the Taobao 2020 Double 11 shopping carnival amounted to RMB 498.2 billion (equivalent to 74.1 billion US dollars). According to new research on

the jewellery aspect of it, the best-selling jewellery shops have a turnover of RMB 400 million (Syntun, 2020). This phenomenon can be attributed to two factors: One is, wedding jewellery continues to dominate the Chinese jewellery consumer market. But, due to the global pandemic in 2020, many couples planning to get married were compelled to postpone their wedding dates to the latter half of the year. Consequently, there was a substantial surge in the demand for wedding jewellery during that period. Another reason is the operations of physical stores suspended due to the ongoing pandemic has prompted major jewellery brands to redirect their attention towards online sales. To attract customers and boost online jewellery consumption, these brands have adopted new media marketing strategies, such as instant video and live streaming. These approaches capitalize on the benefits of immediate visual experiences, sensory empathy, and interactive participation, thereby enticing customers to make online purchases.

The Chinese online live streaming e-commerce model has witnessed a spurt of growth since 2020. According to a study conducted by iiMedia Research, the number of online livestream users in China reached 587 million in 2020. Among them, e-commerce live streaming users, within 1 year, directly surpassed the scale of traditional livestreaming users of games, reality shows, concerts, sports, etc., reaching 265 million, accounting for nearly 50% of the total (*Annual Research Report on Chinese Online Live Stream Industry from 2020 to 2021*, 2021). Research data shows that 97% of Chinese e-commerce consumers have engaged in live streaming e-commerce, and the total size of the Chinese livestreaming e-commerce industry reached RMB1,201.2 billion in 2021, and it is expected to continue to maintain steady growth in the future, reaching a size of RMB2,137.3 billion by 2025(iiMedia Consulting|2022-2023 Chinese Livestream E-commerce Industry

Operation Big Data Analysis and Trend Research Report - iiMedia.com, 2022; iiMedia Consulting | China Wholesale Market Livestream E-Commerce Industry Survey and Development Trend Report, 2023, 2023).

The livestream e-commerce provides a more interactive shopping experience for the jewellery industry. Through the on-site demonstration and explanation by the anchor, the design, material and craftsmanship of the jewellery can be better demonstrated to improve the understanding and trust of the consumers on the products, and real-time promotional strategies can better stimulate the purchasing desires of the consumers to bring more sales opportunities for the jewellery e-commerce companies. Customers will undoubtedly find it more straightforward to accept online jewellery sales as a form of buying as an outcome, which could potentially lead to massive chances for the e-commerce jewellery industry.

The Online-to-Offline (O2O) and Research Online, Purchase Offline (ROPO) models offer strategic solutions by bridging digital engagement with in-store experiences. These hybrid models allow consumers to evaluate product details and social proof online while benefiting from the assurance of offline verification and service.

According to data released by ChinaIRN.COM, the scale of Chinese O2O retail market has reached 1.6 trillion yuan in 2022, a year-on-year increase of 13.7%. This growth is mainly due to the increased demand of consumers for online and offline integrated shopping experience, as well as the rapid development of mobile Internet technology. In 2024, the scale of Chinese O2O retail market will further reach to 2.2 trillion yuan, becoming an important driving force for the development of the retail

industry (Analysis of the Current Status and Future Development Trends of O2O Retail Industry Market in 2024, 2024).

Given the high-value and tactile nature of jewellery products, consumer hesitation often stems from the inability to physically inspect items online, leading to elevated perceived risk. Incorporating O2O and ROPO into the analysis helps capture the nuanced consumer behavior in high-price product categories and reflects a more realistic decision-making process in China's evolving e-commerce landscape. Moreover, these models can mitigate risk perceptions, enhance trust, and ultimately increase purchase intention—thereby providing both theoretical depth and practical relevance to the study of jewellery e-commerce.

Threats of Chinese Jewellery E-commerce

In addition to the market segmentation resulting from the presence of domestic physical jewellery stores, the Chinese jewellery e-commerce sector is also encountering pressure from foreign operators who have successfully overcome numerous obstacles in their development journey. Today, in light of the discernible trend of globalization, the Chinese jewellery e-commerce market is experiencing further compression.

Logistics poses a huge challenge that hinders the growth of the Chinese jewellery e-commerce industry. Despite the fact that Chinese jewellery sellers currently rely on insurance as a means to ensure the safe delivery of their products to consumers, resulting in consumers having to pay an additional insurance premium, they are still willing to accept this arrangement. As jewellery is considered to be both valuable and delicate, making it susceptible to loss or theft during transportation. Additionally,

damage incurred during the distribution process is often unavoidable. Some developed countries in Europe (e.g. UK and Italy), their e-commerce in the jewellery industry has exhibited superior logistics capabilities compared to China. In contrast to the centralized e-commerce platform operation in China, jewellery sales in European or American countries are conducted through independent online platforms operated by major brands. These platforms employ a combination of online and offline methods: allowing customers to place orders for desired products online and then visit the nearest offline store to inspect the item physically before making a satisfactory purchase (Jared, 2021). Moreover, customers have the option to select jewellery that comes with life-long guarantee services. These services encompass various benefits such as the cleaning and polishing of jewellery, repairing chains and clasps, and tightening loose inlaid gems (Kay, 2021). By availing these services prevents customers from having to endure irreversible damage to their jewellery during transportation and enhance their overall after-sales experience.

Furthermore, there are even professional jewellery logistics companies specialising in the distribution of jewellery (Subbota, 2021). Its professionalism guarantees the safety of goods, and some companies can provide subdivided logistics services according to the different quality of jewellery (*CN Freight & Shipping: Fine Jewellery Solutions*, 2012), to meet the needs of customers while ensuring the quality of service.

Most importantly, the concept of ethical jewellery has been put forward in the jewellery sales industry in developed countries, which means that the production and sales stage of jewellery will not have a negative impact on the environment, and line up with the sustainable development concept. By advocating this concept, the jewellery industry may be encouraged to a more ethical, sustainable and socially

responsible direction, safeguarding human rights, the environment and social welfare while also giving customers a selection of trustworthy items. Ethical jewellery also helps businesses establish a positive reputation while satisfying the demands of customers who are becoming more conscious of ethical issues (Bloomfield, 2017; De Chiara, 2017). Hilson (2014) found that consumers are increasingly aware of the human rights violations associated with non-ethical jewellery, as is their desire for more jewellery goods with a traceable source.

The ethical status of jewellery has a significant influence on the decision-making of customers today, as evidenced by the fact that more than 90% of jewellery consumers currently say they take ethical considerations into account and are concerned about or interested in whether the jewellery they buy will have an impact on the environment or society (Jokinen, 2011). Many foreign homepages of world-renowned jewellery brands have ethics-related content (*Responsible Diamond Mining & Sustainability* | Tiffany & Co., 2021), while Chinese official website does not (Tiffany & Co. *Tiffany's official website in China*, 2021), it can be concluded that the sustainable development concept of jewellery e-commerce in developed countries has been one step ahead of China, which means ethical jewellery is new to the Chinese market and is still not yet fully accepted by consumers (Herbig and Day, 1992).

1.3 Problem Statements

Based on the overall analysis in the previous section, four aspects of problem statements of Chinese jewellery e-commerce are analysed below:

According to the study above, Chinese existing e-commerce platforms have steadily become better, and online sales have increased because of the COVID-19

pandemic limits on the growth of brick-and-mortar retailers (Bhatti et al, 2020). According to certain statistics, the operational revenue from online channels of the biggest listed jewellery firms in China is growing steadily. In 2020, it reached 7.112 billion yuan with a growth rate of 17.7%, which is a substantial improvement over the previous year (Forward Business and Intelligence Co., Ltd., 2021). Additionally, online jewellery sales reached 235 billion in 2022, according to monitoring data from the Ministry of Commerce of the People's Republic of China on major e-commerce platforms, including a growth rate of up to 27.3% for the sales of items in the gold and silver jewellery category (Ministry of Commerce of the People's Republic of China, 2023).

Firstly, in the Internet era, savvy customers frequently conduct their own independent research to find pertinent information and compare costs before making purchases. In keeping with the advancement of the times, jewellers should grow their internet sales channels while utilising a number of new media for advertising. Generating internet word-of-mouth influences how customers perceive information linked to online jewellery purchases, appealing to their online jewellery consumption behaviours.

Second, attention needs to be paid to the promotion of ethical principles and overseas competition. The development of international jewellery e-commerce will have certain effects on the Chinese market. However, Chinese customers are reluctant to engage owing to problems such as import duties and the difficult process of shopping abroad (Xu & Zheng, 2017), therefore one of the most notable points is the promotion and use of ethical jewellery by international e-commerce. Ethical jewellery is a novel idea in China, and major exclusive manufacturers indeed advertise the ethical or sustainable notion of their jewellery through their online websites (Armitage

et al., 2017). Although marketing staff in physical stores will occasionally incorporate sustainability content in their product presentations for marketing, it is very limited, and high-end brands are primarily using eWOM to significantly increase their economic and social sustainability claims (Kong et al., 2021). To distinguish Chinese jewellery e-commerce from physical stores, a strategy is used that takes use of the benefits of e-distinct commerce while also incorporating innovative ethical jewellery principles from abroad.

Then, jewellery designs are subject to duplication, with different manufacturers engaging in imitation and even plagiarism (Wu, 2022), and online sales make this problem much worse. While the survey indicated that online jewellery platforms also have an impact on offline sales, customers are primarily interested in the design of jewellery goods. Before going to a store, customers like perusing the jeweller's web store to get a sense of the most recent trends, styles, and selections available (Jokinen, 2011). Jewellery firms may thus stand out from the competition by using distinctive designs, and a strong brand reputation can allay consumers' concerns and boost their confidence when making online jewellery purchases (Lin & Chuang, 2018).

Finally, one of the most critical challenges in Chinese jewellery e-commerce is the degree of customer acceptability, which refers to consumers' willingness and confidence in purchasing jewellery online, particularly when it comes to high-value products. According to Havinga et al. (2016), China has one of the fastest-growing e-commerce sectors in the world right now, but customers are still adjusting to online jewellery sales. Some studies claim that the category has a significant role in determining whether customers would buy online, with categories like garments needing perceptions of size, material, etc., and people preferring to experience these physically before making a purchase (McCabe & Nowlis, 2003). So, this reluctance