

Exploring Determinants of Consumer Motivations for Secondhand Fashion, Using Yelp Data Analysis

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Introduction

In recent decades, there has been a rapid global increase in the consumption of secondhand fashion, with many consumers increasingly turning to secondhand retail stores or platforms. Economically, the global secondhand market has evolved into a multi-billion-dollar industry, ranking among the fastest-growing segments in retail, and is projected to nearly double by 2027, reaching \$350 billion (THREDUP, 2023). Consequently, secondhand fashion has emerged as a desirable clothing source and a significant economic entity within this expanding industry. This study aims to understand better the consumer drivers behind secondhand fashion and to explore how retailers can attract more consumers to secondhand stores.

As an exploratory research endeavor driven by data, it identifies the significant determinants influencing consumer ratings for secondhand fashion stores in New York City (NYC) on Yelp. NYC, the most populous city in the US, stands as a prime hub for secondhand clothing boutiques (Velasquez, 2022). Furthermore, Yelp reviews hold considerable sway over businesses, particularly in the retail, hospitality, and service sectors (Marie, 2023), and its positive reviews significantly influence consumer purchase intent at businesses (Belt, 2017). Hence, Yelp data analysis offers valuable insights into consumer motivations within specific geographic industries.

Literature review

Secondhand clothing encompasses garments previously worn, regardless of age (Mortara & Ironico, 2011), while vintage clothing refers to unique and authentic pieces that embody the style of a specific designer or era (Gerval, 2008), which may not necessarily have been previously owned. However, specialized secondhand retailers include vintage stores, thrift stores, consignment stores, community clothing labels, and charities (Ryding et al., 2017). Therefore, in this study, secondhand fashion refers to previously owned or used clothing resold, often at lower prices than new items, through various types of retailers.

Previous research on the motivations behind secondhand fashion consumption has suggested that the motives primarily revolve around individual gratification and satisfaction, based on motivation theory. Consumer motivations have been linked to either product characteristics or consumers' experiences (Bardhi & Arnould, 2005; Turunen et al., 2018). Product-related motivations encompass economic motivations, such as price sensitivity; critical factors, such as ethical, ecological, and sustainability drivers (Guiot & Roux, 2010); and fashion motivations, keeping up with fashion trends (Ferraro et al., 2016). Cervellon et al. (2012) meticulously segmented factors such as nostalgia, the need for uniqueness, the need for status, frugality and value consciousness, and environmental-friendly proneness. Regarding consumers' experiential motivations, recreational factors play a role, including aspects of the purchasing experience, like excitement, treasure, or bargain hunting, and the intended usage of pre-owned goods, such as

playfulness or identity expressions (Turunen et al., 2018).

However, most prior studies on consumer motivations regarding secondhand fashion have primarily utilized confirmatory factor analyses based on existing theories. In contrast, this study aims to conduct exploratory research to uncover the factors influencing consumer motivations toward secondhand stores in NYC.

Methods

To collect data on secondhand fashion stores, the researcher applied the following filters in the Yelp platform, which provides user-generated reviews and ratings for businesses from June to July 2023: Business title: 'clothing,' location info: 'NYC,' business number: '200'. The business type related to secondhand fashion appeared as 'Used, Vintage & Consignment, Thrift Stores.' The reviews of 32 businesses with less than 100 review counts were finally collected from this.

The researcher conducted a Latent Dirichlet Allocation (LDA) analysis on the Yelp platform to extract the underlying topic themes from the consumer reviews. As a methodological approach within content analysis, LDA analysis is a topic modeling technique used in natural language processing and machine learning to uncover hidden themes or topics within an extensive collection of text documents (Piepenbrink & Gaur, 2017; Zou et al., 2022). Then, the researcher performed a multiple regression analysis using R to examine the relationships between the topics from the LDA analysis and the overall rating on Yelp.

Results

First, the LDA analysis identified four topics from each ten associated terms through iterative topic grouping. The first topic centered on the accessibility and availability of particular locations or items. The second topic highlighted the shopping experience and the value of products. The third topic brought attention to preferences and safety measures related to the pandemic. Lastly, the fourth topic centered on exclusive offers and frequent visits. Consequently, the study categorized each topic: 'Location,' 'Product Value,' encompassing economic incentives and uniqueness, 'Safety,' and 'Exclusive Environment,' denoting recreational motivations.

Secondly, the regression analysis investigated the relationships between the four LDA-derived topics and the overall rating on Yelp. The multiple regression model demonstrated a strong fit for the data (R-squared = 71%) and overall significance (p-value < .05), indicating that these independent variables collectively predict consumer ratings for secondhand fashion stores in NYC reliably. Specifically, the analysis revealed a significant relationship between 'Product Value' and 'Rating' (regression coefficient of 3.57), underscoring the considerable association between consumers' perceptions of product value and the ratings they assign on Yelp. It implies the significance of economic motivations and uniqueness, consistent with prior research (Cervellon et al., 2012; Evans et al., 2022; Zaman et al., 2019).

Thirdly, the regression analysis found insignificant associations between 'Location,' 'Safety,' and 'Exclusive Environment' with 'Rating,' suggesting that these factors may not strongly influence consumer ratings for secondhand fashion stores in NYC. Location may have minimal impact on ratings, as consumers are willing to travel to specific areas for stores they find appealing, as Darley & Lim (1999) suggested. Regarding safety, consumers may view pandemic-related safety measures as temporary factors. Although an exclusive environment has been

associated with recreational motivations in prior studies (Bardhi & Arnould, 2005; Cervellon et al., 2012; Ferraro et al., 2016; Guiot & Roux, 2010), the analysis indicates it may not be a decisive factor in customers' evaluations of secondhand fashion.

The implications of this research provide valuable exploratory insights into secondhand fashion businesses, contributing to scholarly literature in the field and offering managerial insights for retailers. Economic motivation and unique styles emerge as key drivers of consumer motivation, suggesting retailers prioritize aspects of product value, such as price, uniqueness, and quality. While previous studies have also highlighted these motivations (Cervellon et al., 2012; Evans et al., 2022; Zaman et al., 2019), this data-driven research underscores their importance as determinants of consumer evaluation. Given that the exclusive environment aligns with consumer experience motivations, follow-up analyses would be beneficial to explore its potential mediation of overall ratings. Future studies with larger sample sizes are also warranted to explore other consumer motivations, such as critical motivations, fashion motivations, nostalgia, or materialism (Cervellon et al., 2012; Evans et al., 2022; Zaman et al., 2019), not covered in the regression analysis.

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