

## PERCEIVED RISKS IN ONLINE APPAREL SHOPPING: A STUDY OF CONSUMER BEHAVIOR IN BHOPAL CITY

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### ABSTRACT

**Purpose:** The rapid growth of e-commerce has significantly transformed the landscape of online apparel shopping, providing consumers with the convenience of ease and a huge array of choices. However, perceived risks such as financial, product, privacy, and delivery concerns continue to affect consumer behaviour and limit full adoption. This study has aimed to identify the dimensions of perceived risk in online apparel shopping within the socio-cultural and economic context of Bhopal city. The present research identifies the major risk factors and understand the influences that shape consumer perceptions and analyse strategies consumers use to mitigate those risks.

**Methodology:** The study adopts a quantitative research approach using a structured questionnaire to gather data from 30 respondents residing in Bhopal city through convenience sampling. Data is analysed using descriptive statistics, chi-square tests, and graphical representation of trends and influences.

**Findings:** Consumers are moderately to highly concern about product quality, privacy, and delivery risks. Financial risk is not a major concern due to improved secure payment systems. Gender, age, occupation, and income do not have significant influence on risk perception. Reading reviews, secure payment methods, trusted brands, and clear return policies are the most commonly adopted strategies. Perceived risks significantly influence purchase decisions and online shopping frequency. Consumers who are highly concerned about risks tend to shop less frequently.

**Originality Value:** This study provides localized insights into consumer risk perceptions within a Tier-2 city and highlights the particular concerns and behaviour of online apparel

shoppers in Bhopal. It provides practical recommendations for e-commerce businesses to address these barriers by enhancing trust, transparency, and service quality.

**Keywords:** E-commerce, Online apparel shopping, Perceived risk, Financial risk, Product risk, Privacy risk, Delivery risk, Consumer behaviour

## INTRODUCTION

With the rapid expansion of e-commerce, online apparel shopping has gained significant traction, and offers consumers convenience, variety, and competitive pricing. However, perceived risks—such as concerns over financial security, product quality, and privacy concerns pose significant barriers to its full adoption. These risks influence consumer trust and satisfaction, which eventually affect their purchase decisions. This study focuses on understanding the dimensions of perceived risks in online apparel shopping and their effects on consumer behaviour within Bhopal city.

## OPERATIONAL DEFINITIONS OF KEY TERMS

1. **Perceived Risk:** The personal judgment of consumers about potential negative results to online apparel shopping, which may be financial, product-based, privacy-based, and delivery-based risks.
2. **Financial Risk:** The risk of money loss due to issues like fraud websites or any other insecure payment gateway.
3. **Product Risk:** The possibility of receiving the product that is either fake, of poor quality, or not similar to the one presented online. .
4. **Privacy Risk:** Related issues of misusing or access to personal information.
5. **Delivery Risk:** The risk of delays, non-delivery, or discrepancies in the delivery process.
6. **Mitigation Strategies:** Actions taken by consumers to reduce or manage perceived risks, such as review checking or using secure payment methods.

## REVIEW OF THE RELATED LITERATURE:

(Forsythe & Shi, 2003): Classified perceived risks into five dimensions: financial, product performance, psychological, privacy, and time risks. Consumers often hesitate to shop online because of the fear of inaccurate product descriptions, delayed delivery, and difficulty in returns or refunds.

**(Kim & Lennon, 2013):** Stated that factors like product fit, colour, and quality are more influential online apparel shopping decisions. Their study highlights that trust in a retailer and a clear return policy reduce these concerns significantly.

**(Sinha & Singh, 2018):** Found that a lack of internet literacy and mistrust in online platforms present barriers to adoption. Despite these challenges, the study also noted a growing trend toward online shopping among younger demographics.

**(Gefen, Karahanna, & Straub, 2003):** Emphasized the importance of trust in mitigating perceived risks. Their research shows that perceived ease of use and perceived usefulness of the platform significantly affect purchase intentions.

**(Mitchell, 1999):** Suggests that consumers adopt various strategies to reduce perceived risks, such as seeking recommendations, preferring cash-on-delivery options, and relying on user reviews. These strategies are evident in the behaviour of online shoppers in emerging markets like India.

**(Li & Zhang, 2002):** Reveal that demographic factors such as age, gender, and income level play a crucial role in shaping consumers' risk perceptions. Younger consumers, for example are more likely to adopt online shopping as an experience but may also exhibit higher sensitivity to peer reviews and social media influence.

## **NEED OF THE STUDY**

Understanding barriers faced by consumers is essential for businesses to develop customer trust and loyalty. The present research would help in giving an idea about consumer concerns and address critical issues concerning the e-commerce platforms, improving the user experience. The findings will contribute to academic research as well, in the case of risk perception by focusing on the Tier-2 Indian city and offering localized insights.

## **LIMITATIONS**

1. The sample size is limited to 30 respondents, which may not represent the larger population of Bhopal city.
2. The study focuses exclusively on online apparel shopping, limiting its applicability to other e-commerce sectors.

## RESEARCH OBJECTIVES

1. To identify the key types of risks perceived by consumers while shopping for apparel online.
2. To examine the strategies adopted by consumers to mitigate these risks.
3. To study the influence of the demographic factors such as gender, age, occupation and monthly income on Perceived risk in online apparel shopping.
4. To study the influence of perceived risks on purchase decisions and online shopping frequency.

## RESEARCH HYPOTHESIS

**H1:** There is no significant influence of gender on perceived risk in online apparel shopping.

**H2:** There is no significant influence of age on perceived risk in online apparel shopping.

**H3:** There is no significant influence of occupation on perceived risk in online apparel shopping.

**H4:** There is no significant influence of monthly income on perceived risk in online apparel shopping.

**H5:** There is no significant influence of perceived risks on purchase decisions and online shopping frequency.

## RESEARCH METHODOLOGY

This study uses a quantitative research approach, leveraging a structured questionnaire as the primary data collection tool. The questionnaire consists of:

1. **Demographic Variables:** Age, gender, occupation, and income level.
2. **Perceived Risks:** perceived financial, product, privacy, and delivery risks.
3. **Mitigation Strategies:** Exploration of actions taken by consumers to reduce risks.
4. **Consumer Behaviour:** Analysis of online shopping frequency and decision-making factors.

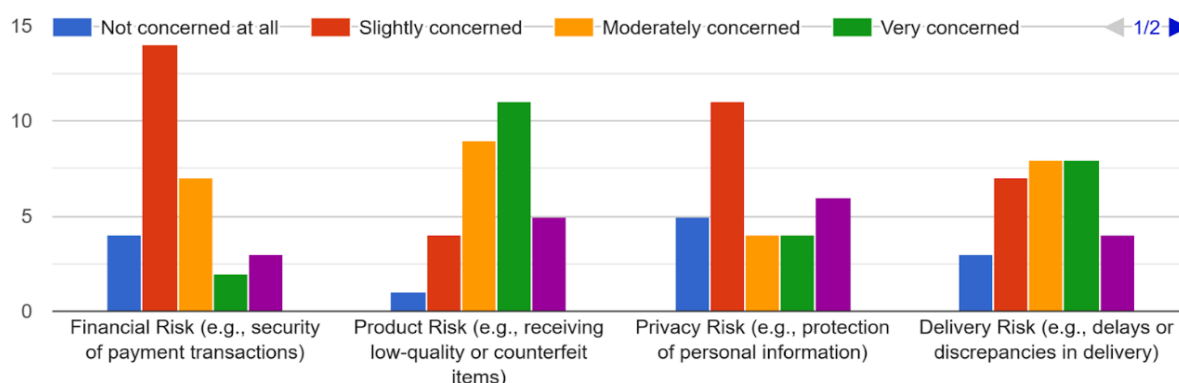
The data will be collected from 30 respondents residing in Bhopal city through convenient sampling. Statistical methods percentage and chi square test will be used to analyse the data

and identify trends, influences, and significant findings related to perceived risks and consumer behaviour.

## DATA ANALYSIS AND INTERPRETATION

**Research Objective 1:** To identify the key types of perceived risks by consumers while shopping for apparel online.

**Graph 1: Types of risks perceived by consumers while shopping for apparel**



**onlineSource:** Analysed using Google Forms.

The graphs illustrate consumer concerns regarding perceived risks in online apparel shopping:

1. **Financial Risk:** Most consumers are slightly concerned, with few very concerned, due to improvements in secure payment systems.
2. **Product Risk:** Consumers are moderately to very concerned about receiving low-quality or counterfeit items, reflecting uncertainty due to the inability to physically view products.
3. **Privacy Risk:** Concerns are significant, with data breaches and misuse of personal information being key worries.
4. **Delivery Risk:** Evenly distributed concerns about delays or incorrect deliveries suggest that logistical problems occur regularly.

The collected open-ended responses collected indicate that

1. **High risk areas:** The most common issues in online clothing purchases are product mismatches, quality differences, and sizing errors.

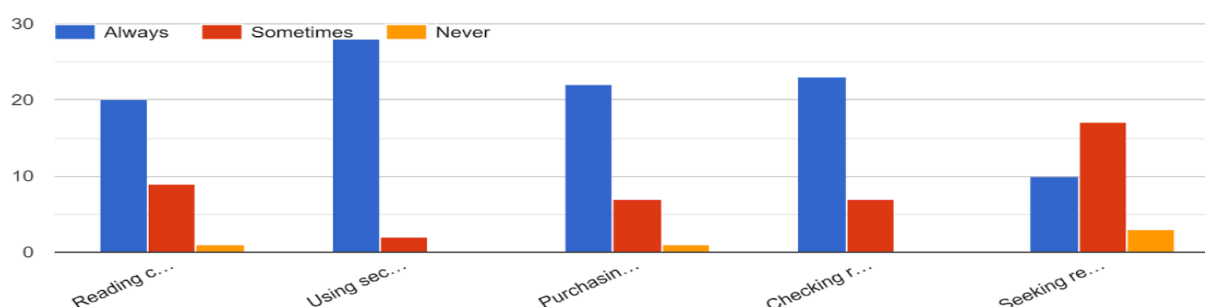
2. **Critical Role of Policies:** Policies play a very important role as return, refund, and exchange policies should be clear and customer-friendly to keep the trust of consumers.
3. **Customer Service:** Proper and prompt customer service can also enhance customer satisfaction and reduce the effect of the negative experience.
4. **Trust Reinforcement:** Retailers must focus on trust building through transparent product descriptions, consistent quality, and reliable logistics.
5. **Future Considerations:** Addressing these common pain points can help e-commerce platforms reduce consumer apprehensions and improve loyalty.

To reduce these concerns, retailers should focus on secure transactions, accurate product descriptions, robust privacy measures, and reliable delivery systems.

**Research Objective 3:** To examine the strategies adopted by consumers to mitigate these risks.

- Reading customer reviews
- Using secure payment methods (e.g., credit card, PhonePe, PayPal)
- Purchasing from well-known or trusted brands
- Checking return and refund policies
- Seeking recommendations from friends or family

**Graph 2: Strategies Adopted by Consumers to Mitigate These Risks.**



Source: Analysed using Google Forms.

The graph shows that consumers adopt multiple strategies to mitigate perceived risks, with secure payment methods being the most trusted. This demonstrates an overall trend of

growing digital literacy and caution among online shoppers. Less reliance on recommendations suggests that consumers are becoming more independent in their decision-making, leveraging digital tools like reviews and return policies for assurance.

**Research Objective 2:** To study the influence of the demographic factors on risk perception.

**H1:** There is no significant influence of gender on perceived risk in online apparel shopping.

**Table 1: Influence of Gender on perceived risk in online apparel shopping**

| Perceived Risk in Online Apparel Shopping |                      |                    |                      |                |                     |            |             |
|-------------------------------------------|----------------------|--------------------|----------------------|----------------|---------------------|------------|-------------|
| Gender                                    | Not concerned at all | Slightly concerned | Moderately concerned | Very concerned | Extremely concerned | Total      | Chi value   |
| Male                                      | 1, 3.3%              | 1, 3.3%            | 6, 20.0%             | 2, 6.7%        | 0, .0%              | 10, 33.3%  | 0.506<br>NS |
| Female                                    | 2, 6.7%              | 5, 16.7%           | 8, 26.7%             | 2, 6.7%        | 3, 10.0%            | 20, 66.7%  |             |
| Total                                     | 3, 10.0%             | 6, 20.0%           | 14, 46.7%            | 4, 13.3%       | 3, 10.0%            | 30, 100.0% |             |

Source: Author's own calculations using SPSS software.

The analysis suggests that gender does not significantly influence risk perception in online apparel shopping, as evidenced by the chi-square value of 0.506. Variations observed are likely due to individual differences rather than gender-based factors.

**H2:** There is no significant influence of age on perceived risk in online apparel shopping.

**Table 2: Influence of Age on perceived risk in online apparel shopping.**

| Perceived Risk in Online Apparel Shopping |                      |                    |                      |                |                     |       |           |
|-------------------------------------------|----------------------|--------------------|----------------------|----------------|---------------------|-------|-----------|
| Age                                       | Not concerned at all | Slightly concerned | Moderately concerned | Very concerned | Extremely concerned | Total | Chi Value |
|                                           |                      |                    |                      |                |                     |       |           |

|          |          |          |           |          |          |            |             |
|----------|----------|----------|-----------|----------|----------|------------|-------------|
| Under 18 | 0, 0%    | 0, 0%    | 1, 3.3%   | 0, .0%   | 0, .0%   | 1, 3.3%    | 0.683<br>NS |
| 18-24    | 0, 0%    | 1, 3.3%  | 2, 6.7%   | 1, 3.3%  | 0, .0%   | 4, 13.3%   |             |
| 25-34    | 2, 6.7%  | 2, 6.7%  | 5, 16.7%  | 1, 3.3%  | 0, .0%   | 10, 33.3%  |             |
| 35-44    | 0, .0%   | 1, 3.3%  | 3, 10.0%  | 1, 3.3%  | 3, 10.0% | 8, 26.7%   |             |
| 45-54    | 1, 3.3%  | 2, 6.7%  | 3, 10.0%  | 1, 3.3%  | 0, .0%   | 7, 23.3%   |             |
| Total    | 3, 10.0% | 6, 20.0% | 14, 46.7% | 4, 13.3% | 3, 10.0% | 30, 100.0% |             |

Source: Author's own calculations using SPSS software.

The analysis shows no significant influence of age on perceived risk in online apparel shopping, as supported by the chi-square value of 0.683. Variations in responses across age groups reflect individual differences rather than age-based patterns.

**H3:** There is no significant influence of occupation on risk perception perceived risk in online apparel shopping.

**Table 3: Influence of Occupation on perceived risk in online apparel shopping**

| Perceived Risk in Online Apparel Shopping |                      |                    |                      |                |                     |           |             |
|-------------------------------------------|----------------------|--------------------|----------------------|----------------|---------------------|-----------|-------------|
| Occupation                                | Not concerned at all | Slightly concerned | Moderately concerned | Very concerned | Extremely concerned | Total     | Chi Value   |
| Student                                   | 1, 3.3%              | 1, 3.3%            | 3, 10.0%             | 1, 3.3%        | 0, .0%              | 6, 20.0%  | 0.374<br>NS |
| Employed                                  | 2, 6.7%              | 3, 10.0%           | 7, 23.3%             | 2, 6.7%        | 3, 10.0%            | 17, 56.7% |             |

|               |          |          |           |          |          |            |  |
|---------------|----------|----------|-----------|----------|----------|------------|--|
| Self-employed | 0, .0%   | 0, .0%   | 4, 13.3%  | 0, .0%   | 0, .0%   | 4, 13.3%   |  |
| Homemaker     | 0, .0%   | 2, 6.7%  | 0, .0%    | 1, 3.3%  | 0, .0%   | 3, 10.0%   |  |
| Total         | 3, 10.0% | 6, 20.0% | 14, 46.7% | 4, 13.3% | 3, 10.0% | 30, 100.0% |  |

Source: Author's own calculations using SPSS software.

The data indicates that occupation does not significantly influence perceived risk in online apparel shopping, as evidenced by the chi-square value of 0.374. While some variations exist (e.g., employed individuals showing a broader range of concern), these differences are not statistically significant. Larger and more diverse samples might help clarify any subtle trends.

**H4:** There is no significant influence of monthly income on perceived risk in online apparel shopping.

**Table 4: Influence of Occupation on perceived risk in online apparel shopping**

| Perceived Risk in Online Apparel Shopping |                      |                    |                      |                |                     |          |             |
|-------------------------------------------|----------------------|--------------------|----------------------|----------------|---------------------|----------|-------------|
| Monthly Income                            | Not concerned at all | Slightly concerned | Moderately concerned | Very concerned | Extremely concerned | Total    | Chi Value   |
| Rs. 10,000 - Rs. 20000                    | 0, .0%               | 0, .0%             | 1, 3.3%              | 2, 6.7%        | 0, .0%              | 3, 10.0% | 0.051<br>NS |
| Rs. 20001 - Rs. 30000                     | 2, 6.7%              | 1, 3.3%            | 3, 10.0%             | 0, .0%         | 0, .0%              | 6, 20.0% |             |
| Rs. 30001 - Rs. 40000                     | 0, .0%               | 0, .0%             | 5, 16.7%             | 1, 3.3%        | 3, 10.0%            | 9, 30.0% |             |
| Above Rs. 40000                           | 1, 3.3%              | 2, 6.7%            | 2, 6.7%              | 0, .0%         | 0, .0%              | 5, 16.7% |             |

|             |          |          |           |          |          |            |  |
|-------------|----------|----------|-----------|----------|----------|------------|--|
| Not Earning | 0, .0%   | 3, 10.0% | 3, 10.0%  | 1, 3.3%  | 0, .0%   | 7, 23.3%   |  |
| Total       | 3, 10.0% | 6, 20.0% | 14, 46.7% | 4, 13.3% | 3, 10.0% | 30, 100.0% |  |

Source: Author's own calculations using SPSS software.

The data shows no significant influence of monthly income on perceived risk in online apparel shopping, as evidenced by the chi-square value of 0.051. While variations exist (e.g., higher concerns among middle-income groups), these differences are not statistically significant.

**Research Objective 4:** To understand the influence of perceived risks on purchase decisions and online shopping frequency.

**H5:** There is no significant influence of perceived risks on purchase decisions and online shopping frequency.

**Table 5: Influence of perceived risks on purchase decisions and online shopping frequency.**

| Online Apparel Purchase Behavior          |         |          |          |          |           |             |  |
|-------------------------------------------|---------|----------|----------|----------|-----------|-------------|--|
| Perceived Risk in Online Apparel Shopping | Rarely  | Monthly  | Weekly   | Daily    | Total     | Chi Value   |  |
| Not concerned at all                      | 2, 6.7% | 0, .0%   | 1, 3.3%  | 0, .0%   | 3, 10.0%  | 0.000<br>** |  |
| Slightly concerned                        | 1, 3.3% | 3, 10.0% | 1, 3.3%  | 1, 3.3%  | 6, 20.0%  |             |  |
| Moderately concerned                      | 0, .0%  | 4, 13.3% | 9, 30.0% | 1, 3.3%  | 14, 46.7% |             |  |
| Very concerned                            | 0, .0%  | 0, .0%   | 4, 13.3% | 0, .0%   | 4, 13.3%  |             |  |
| Extremely concerned                       | 0, .0%  | 0, .0%   | 0, .0%   | 3, 10.0% | 3, 10.0%  |             |  |

|                          |          |          |           |          |            |  |
|--------------------------|----------|----------|-----------|----------|------------|--|
| Total                    | 3, 10.0% | 7, 23.3% | 15, 50.0% | 5, 16.7% | 30, 100.0% |  |
| ** Significant influence |          |          |           |          |            |  |

Source: Author's own calculations using SPSS software.

The data shows that perceived risks influence the purchase decision and online shopping frequency. The frequent shoppers, who shop weekly and daily, are more concerned, as they are more aware of the pitfalls of online shopping. Rare and monthly shoppers are less concerned because they do not interact much with e-commerce platforms.

The collected responses reveal that **perceived risks have significant influence on the consumer willingness to shop for apparel online**. The recurring themes include:

1. **Trust and Brand Familiarity:**

- Several respondents were hesitant to buy from unfamiliar brands.
- Trust in the platform is crucial, as many limiting purchases to trusted websites or brands.

2. **Concerns about Product Quality and Fit:**

- A major concern is the uncertainty around the quality and fit of apparel.
- Respondents would rather visit physical stores when it comes to important purchases or occasions to get right size and quality.

3. **Importance of Return and Exchange Policies:**

- Many participants indicated that a clear return and exchange policies minimizes perceived risks.
- Good customer service is also a key factor in shopping.

4. **Hesitation for High-Value Purchases:**

- There is a notable hesitation to order expensive items online due to risks related to product authenticity, quality, or fit.

5. **Impact of Delivery and Logistics:**

- Concerns about delayed or incorrect deliveries were mentioned, contributing to caution when shopping online.

## 6. **Preference for Physical Stores:**

- Multiple respondents also preferred buying from physical stores, particularly for critical purchases to inspect before, ensuring a good fit.

## 7. **Risk Mitigation Strategies:**

- Several respondents indicated that they check reviews and ratings before making a purchase.
- Shopping is often restricted to safe and trusted platforms secure payment methods, and easy returns.

Retailers could address these concerns by enhancing trust-building measures like secure payment options, transparent policies, and robust customer support.

## **KEY FINDINGS**

### 1. **Types of Risks:**

- **Financial Risk:** Reduced due to improved secure payment systems but remains a concern.
- **Product Risk:** Significant, especially around quality, counterfeit products, and size mismatches.
- **Privacy Risk:** Notable concerns over misuse of personal data and information security.
- **Delivery Risk:** Regular concerns about delays, non-delivery, or incorrect items.

### 2. **Mitigation Strategies:**

- Most consumers rely on secure payment methods and user reviews.
- Trust in well-known brands and understanding return policies are common practices.
- Consumers show a trend toward digital literacy, reducing dependence on personal recommendations.

### 3. **Demographic Influences on Risk Perception:**

- **Gender:** No significant influence on risk perception.
- **Age:** No significant age-based patterns; individual differences dominate.

- **Occupation:** While employed individuals showed broader risk concerns, differences were not statistically significant.
- **Monthly Income:** Income levels had no significant influence on perceived risks.

#### 4. **Consumer Behavior:**

- Risk perception impacts online shopping frequency and purchase decisions.
- Consumers expect transparent product descriptions, reliable logistics, and robust customer service.

### **CONCLUSION**

This study highlights the multi-dimensional nature of perceived risks in online apparel shopping and their influence on consumer behaviour in Bhopal city. The findings reveal that though consumers show moderate concerns over financial, product, privacy, and delivery risks, these risks do not have significant variations with respect to demographic factors such as gender, age, occupation, or monthly income.

The consumer takes all mitigation measures by checking reviews, secure payment, and preference of a brand for trust. Thus, the paper underscores the importance of transparent policies, logistics, and good customer service for trust and satisfaction in e-commerce among consumers. This, therefore, enhances the experience for the users and fosters long-term loyalty among users in tier 2 cities like Bhopal.

### **IMPLICATIONS**

#### • **For Retailers:**

- Focus on clear return, refund, and exchange policies.
- Quality assurance and secure payment gateways to increase customer trust.
- Reduce delivery-related risks by eliminating logistical inefficiencies.
- Secure payment gateways and transparent transaction processes to reduce financial risks.

#### • **For E-Commerce Platforms:**

- Invest in user-friendly privacy measures and trust-building features like adopting advanced encryption technologies to enhance consumer confidence.
- Engage consumers through reviews, recommendations, and active customer support.

- Implement verified purchase reviews and ratings to provide consumers with reliable insights into products and services.
- Educate users about safe online shopping practices by conducting online tutorials.
- Ensure the accuracy of product descriptions, provide detailed images, and maintain strict quality checks to reduce product risk concerns.
- Address logistical issues such as delays and discrepancies by collaborating with reliable courier services and offering real-time tracking.

## SUGGESTIONS FOR FURTHER RESEARCH

1. **Increase Sample Size and Demographics:** Include a larger and more diverse sample to capture broader consumer behaviour and risk perceptions.
2. **Comparative Analysis across Regions:** Compare similar studies in another city or locality to identify risk perceptions due to cultural and other socio-economic conditions.
3. **Sector-Specific Risk Studies:** Conduct similar studies in perceived risks in other e-commerce sectors, such as electronics or groceries.
4. **Long-term Studies:** Analyse changes in consumer risk perceptions over time to reveal trends and the effectiveness of mitigation strategies.
5. **Psychological Factors and Risk Perception:** Explore psychological factors, such as risk tolerance and trust propensity, to understand their influence on shopping behaviour.
6. **Emerging Technological Advancements:** Study the influence of emerging technologies, like AI-driven personalization and block chain, on perceived risks in online shopping.

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