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## *A Study on Influential Factors of Online Shopping towards Electronic Goods*

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*Abstract: Online shopping has become a new norm in retail, expanding globally, including India. Consumer behaviour in online shopping differs from physical market shopping, where consumer can physically assess the product. This research aims to study consumer behaviour in online shopping of electronic products. The main research question is how consumers behave while shopping online. The analysis aims to identify factors that affect buyer's online shopping behaviour, which may be critical issues in e-commerce and marketing. This study also analyses the problems faced by consumers while shopping electronic goods in online mode. However due to complex and vast numbers of variables involved there is limited knowledge about online shopping behaviour. The study is based on both primary and secondary data targeting 195 respondents from different age groups including students, professionals, and businessmen with varying experience in online shopping. The findings will provide a clear and broad picture to online sellers, enabling them to understand consumer attitude and their buying behaviour towards online shopping for electronic goods and develop strategies to cater to needs of online shoppers.*

*Keywords: online purchase, buying behaviour, and electronic goods.*

### I. INTRODUCTION

Online shopping is a rapidly growing business channel that allows individuals to buy and sell goods and services through the internet. Since the emergence of the World Wide Web, businesses have attempted to sell their products to consumers who are surfing the internet. Nowadays, customers can conveniently visit online stores and make purchases from the comfort of their homes. The internet has revolutionized the way consumers shop and purchase products, and businesses are utilizing it to minimize marketing costs and stay ahead of the competitive market. In addition, customers use the internet not only to buy products but also to compare prices and read reviews. Consumer behaviour varies based on individual buying habits, psychological and social drivers, and the purchase decision process. Researchers and practitioners in electronic commerce are constantly working to gain a better understanding of online shopper behaviour and improve online retailing. The study of online shopping behaviour encompasses various factors, such as consumer perceptions and emotional states, and the types of products purchased online.

In recent years, the global pandemic has further accelerated the shift towards online shopping, as more consumers have opted for digital channels to purchase goods and services. In the case of electronic goods, online shopping has become particularly popular due to the wide range of products available, competitive pricing, and the ability to compare products and

prices from different retailers with ease. Therefore, understanding the factors that influence consumers' online buying behaviour regarding electronic goods is crucial for businesses to develop effective marketing strategies and improve their overall online performance. By identifying the key determinants of online shopping behaviour, businesses can tailor their offerings to meet consumer needs and preferences and create a more personalized shopping experience.

## II. FACTORS AFFECTING ONLINE SHOPPING

One of the most critical factors is convenience that influences online buying behaviour. Online shopping provides convenience in terms of time and effort, and it allows consumers to shop from anywhere at any time (**Jaganathan et al 2016**). A study by **Nahla Khalil (2014)** found that perceived convenience significantly influences online purchasing behaviour. Convenience and ease of use are essential factors influencing online buying behaviour for electronic goods.

Home delivery is another essential factor that attracts consumers to online shopping for electronic goods. Consumers prefer the convenience of having their products delivered to their homes rather than going to the store to pick them up (**Islam et al., 2021**). Home delivery provides consumers with a hassle-free online shopping experience, leading to increased online sales.

Trust is also significant factor that affects online buying behaviour for electronic goods. Consumers want to be assured that the online retailer is trustworthy and reliable (**MuraliDharshan & JapaAsritha 2019**) Online retailers need to build consumer trust through transparency, honesty, and ethical business practices. Consumers tend to trust online retailers that provide clear product information, user reviews, and customer support, leading to increased online sales.

Price is another crucial factor that influences online buying behaviour, as consumers tend to search for the best deals and prices online (**Shanthi & Kannaiah 2015**). Discounts and offers are also a powerful incentive that encourages consumers to shop online for electronic goods (**Chhabra & Saini, 2020**). Consumers are attracted to online stores that offer discounts and special offers on their products. Discounts and offers provide consumers with an opportunity to purchase electronic goods at a lower price, leading to increased online sales.

Security and privacy concerns are critical factors that affect online buying behaviour for electronic goods. Consumers are concerned about the safety and security of their personal and financial information when making online purchases (**Priyanka Sharma 2017**). Online retailers need to implement effective security measures to safeguard consumers' information and reassure them of their safety. Consumers tend to trust online retailers that have robust security and privacy policies, leading to increased online sales.

Online reviews have a significant impact on consumer behaviour, as consumers rely on them to make decisions about purchasing electronic goods (**Changchit & Klaus 2020**). Online reviews provide consumers with valuable insights into the product's features, performance, and reliability, helping them to make purchase decisions. Positive online reviews can increase consumer trust and confidence in the product and the online retailer, leading to increased online sales.

Website design is another critical factor that affects online buying behaviour for electronic goods. Consumers prefer a website that is user-friendly, visually appealing, and easy to navigate (**Grac & Chi Sun 2018**). Website design elements such as layout, font, colour, and images play a crucial role in shaping consumer behaviour. A well-designed website that provides clear product information, user reviews, and customer support enhances the consumer's online buying experience, leading to increased online sales.

## III. LITERATURE REVIEW

**Sharma, V., & Jain, R. (2017)** studied the Impact of demographics on online buying behaviour of consumers of Bhopal. They studied buyers shopping perception on the basis of different demographic factors such as age, gender, qualification, profession and income. The study came into conclusion that demographic factors in Bhopal do not significantly impacts the purchase intension of online buyers. **Bhatti & Rehman (2020)** examines consumers' reactions to online shopping,

including the purchase of electronic goods. The authors found that consumers' perceived risk and trust were key factors that influenced their online shopping behaviour. **Jain & Kulhar (2019)** explained about challenges and barriers in online shopping. This study was conducted with special reference to online shopping of apparels and accessories. It was a reviewed study. After reviewing various literature it was concluded that security in payment methods and assurance of quality were the main hurdles in online shopping. **Raman (2019)** tried to understand the role of trust, convenience and customer service on female consumers' intention to shop online. The purpose of this paper is to develop a model to examine the female consumer's intention to shop online. A conceptual model was proposed to explain the theory of reasoned action (TRA) with three additional variables, namely trust, convenience and customer service. The findings showed that there was a significant influence of attitude, convenience and trust on the female consumer's intention to buy online. Customer service proved the most crucial factor in influencing the attitude of female consumers towards online shopping. **Kumar & Dash (2015)** focused on exploring the difference of electronic service quality dimensions across age and gender groups and also analysed its effectiveness. The study proves that gender and age play important role in determining their attitude towards electronic buying. Researchers have stated that Business innovation and timely research on consumers' behaviour is required to develop marketing mix strategies to attract new customers and retain old ones. They also recommend ways for electronic service provider to enhance their performance. **Kinker & Shukla (2016)** jointly focus on is how consumers behave while shopping electronic goods online. They analysis that time saving, product quality, product price, shop anywhere and anytime are crucial factors in shopping online. Guaranteed quality, cash on delivery, and dis-counts and promotions are also influence customers attitudes while taking their buying decision. Their study was limited to the area of Madhya Pradesh. **Muruganantham & Naveen (2021)** conducted a study with the primary objective of analysing the factors to be considering while purchasing smartphones and analyse the awareness level towards smartphones in Tirupur city. The study was based on the primary data which were collected through the structured questionnaire and personal interview. The results showed that the respondents had given top priority to the Redmi Smart phone. **Savita & Sheoran (2020)** researched evaluating the buying behaviour of respondents of Union Territory of Chandigarh in India towards e-gadgets. The research reflected that mobile phones and laptops were most popular e-gadgets among the respondents. Smart watches and smart speakers were the new entrants into few respondents' kitty. Specifications of the gadgets and latest technology were the top attributes that the respondents looked for. Social media and word of mouth were preferred sources of information about latest trends in e-gadgets. Cash and debit cards were the preferred mode of payment for these gadgets.

#### IV. STATEMENT OF THE PROBLEM

Consumer buying patterns are indicative of their preference and expectations, which are crucial to satisfying their needs. Therefore understanding the frequency and extent of online purchasing by consumers is essential for online retailers to provide satisfactory services. While online retailers cater to consumer's needs by offering various products, there are certain obstacles in online purchases that consumers face, necessitating the identification of these issues to overcome them. With these considerations in mind, the present study aims to explore the following questions:

1. What is the online consumer behaviour when making purchases?
2. To what extent are online consumers satisfied with their experiences?

#### V. OBJECTIVE OF THE STUDY

- To evaluate the factors influencing consumers for online shopping of electronic goods.
- To analysis the challenges faced by consumers during online shopping of electronic goods.

**VI. RESEARCH METHODOLOGY**

A descriptive research study has been conducted to analyse the factors that motivate consumers for online shopping. The study aims to analyse the shopping behaviour of consumers in the context of online mode. A survey has been conducted as the primary method for data collection, with a questionnaire comprising closed ended questions pertaining to consumer purchasing behaviour. The purpose of this research is to gain insights into the attributes that drive consumers towards online shopping mode with reference to electronic goods.

**VII. SCOPE OF THE STUDY**

This study was limited to the districts Gurugram and Palwal respectively with a sample size of 195 respondents and focused only on online shopping of electronic goods. Therefore, the findings and conclusions of this study are only suggestive and not conclusive, despite the best efforts and honesty of the researchers. The study is based on primary data collected from a structured questionnaire with a specific geographical area and cannot be argued to be applicable in all conditions, times, and places.

**VIII. DATA ANALYSIS TECHNIQUES**

Various statistical tools are used to processed and analysed collected data. To achieve the objective of the research paper, Tables, charts, Percentage Analysis etc. are used in this study.

**Table: 1**  
**Demographic Profile of the Respondents**

Demographic variables	Frequency	Percentage
<b>Age</b>		
Less than 20	24	12.3
20-30	51	26.2
31-40	56	28.7
41-50	35	17.9
Above 50	29	14.9
<b>Total</b>	195	100
<b>Gender</b>		
Male	85	43.6
Female	110	56.4
<b>Total</b>	195	100
<b>Educational Qualification</b>		
Doctorate	30	15.4
Post Graduate	71	36.4
Graduate	69	35.4
Upto 12 <sup>th</sup>	25	12.8
<b>Total</b>	195	100
<b>Marital Status</b>		
Married	114	58.5
Unmarried	81	41.5
<b>Total</b>	195	100
<b>Occupation</b>		
Students	55	28.2

Business	45	23.1
Salaried Employee	57	29.2
Others	38	19.5
<b>Total</b>	195	100
<b>Annual Income</b>		
Less than 5	62	31.8
5 to 10	52	26.7
10 to 15	57	29.2
More than 15	24	12.3
<b>Total</b>	195	100

**Interpretation:** The provided table highlights the demographic characteristics of individuals who prefer to purchase electronic goods two online shopping platform. The data revealed that the substantial portion of online shoppers are between the age of 31 -40 accounting for 28.7% of the total respondents the age group of 20-30 following closely at 26.2% this trend can be attributed to the increased accessibility of technology among these age groups. Additionally, the data indicated that the majority of online shoppers are female comprising 56.4% of the respondents, while males accounts for 43.6%. The data also revealed that 58.5% of the respondents are married while 41.5% are unmarried. The highest level of education attained by these shoppers is postgraduate accounting for 36.4% while graduates make up 35.4% of the respondents .Education plays a significant role in an individual's ability to engage in online or web-based shopping. Furthermore, the data showed that 31.8% of respondents have an annual income of less than 5,00,000 while 29.2% fall within the annual household income range of 10,00,000 two 15,00,000 the majority of online shoppers comprising 29.2% and 28.2% respectively are salaried employees and students businessmen accounts for 23.1% of the remaining respondents while 19.5% belong to various other fields.

**Table: 2 No. of Purchases during Last Five Years**

No. of Purchases	Laptops		Smartphones		Smartwatches	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Not purchased	73	37.4	45	23.1	145	74.4
1 to 2	113	57.9	125	64.1	45	23.1
3 to 4	8	4.1	20	10.3	4	2.1
Above 4	1	0.5	5	2.6	1	.5
Total	195	100	195	100.0	195	100.0

**Interpretation:** Based on the data presented in the table, it can be observed that majority of respondents (57.9%) and (64.1%) purchased laptops and smart phones in the range of one to two units respectively. Additionally, a significant number (37.4%) of respondents did not purchase laptops while (4.1%) of respondents purchased 3 to 4 laptops since last five years. In case of smartphones (23.1%) respondents did not purchased smartphone while 10.3% of respondents purchased smartphone in the range of 3 to 4 units. In terms of smart watches, a smaller proportion of respondents (23.1%) purchased them compared to laptops and smartphones. 74.4% respondents did not purchase smart watches while 23.15 purchase in the 1 to 2 numbers.

Figure: 1

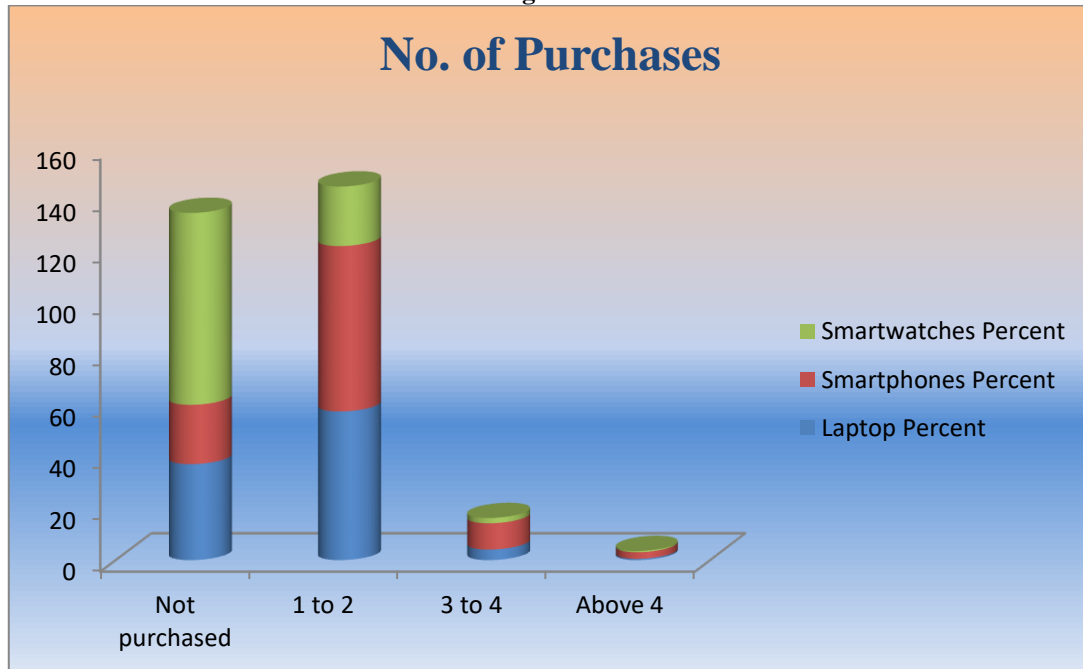


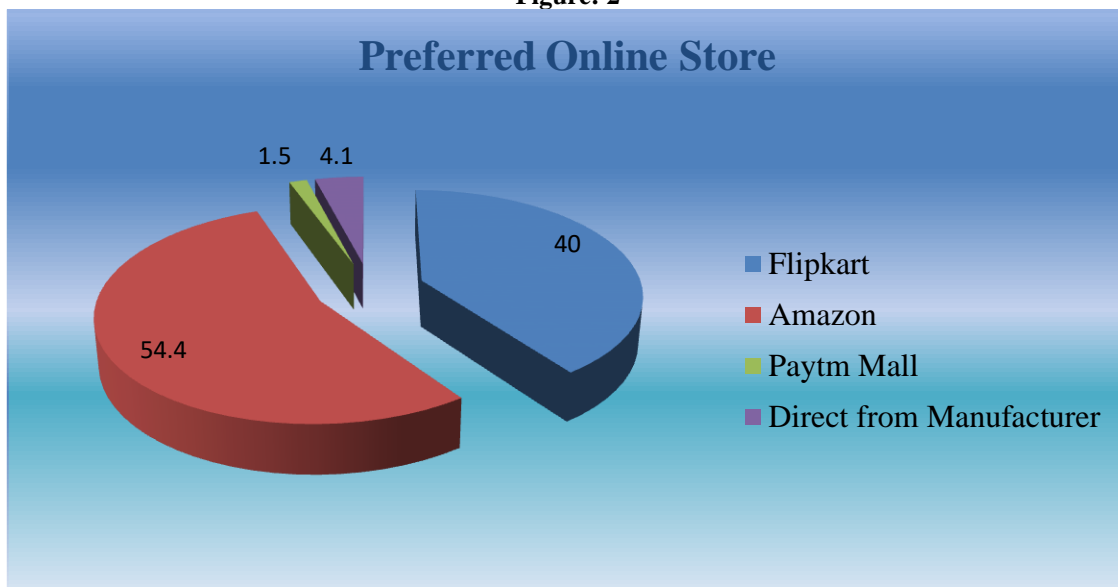
Table: 3

Most Preferred Online Store/Website for Online Shopping

Online stores	Frequency	Percent
Flipkart	78	40
Amazon	106	54.4
Paytm Mall	3	1.5
Direct from Manufacturer	8	4.1
Total	195	100

**Interpretation:** The table shows the distribution of respondents based on their preference online stores for making purchases. The data indicates that Amazon is the most popular online store with (54.4%) of respondents reporting that they use this platform for their online purchase. Flipkart is the second most popular option with (40%) of respondents using this platform. Only small percentage of respondents reported using Paytm Mall (1.5%) or purchasing directly from the manufacturer (4.1%). This suggests that these platforms are not as commonly used or preferred among respondents.

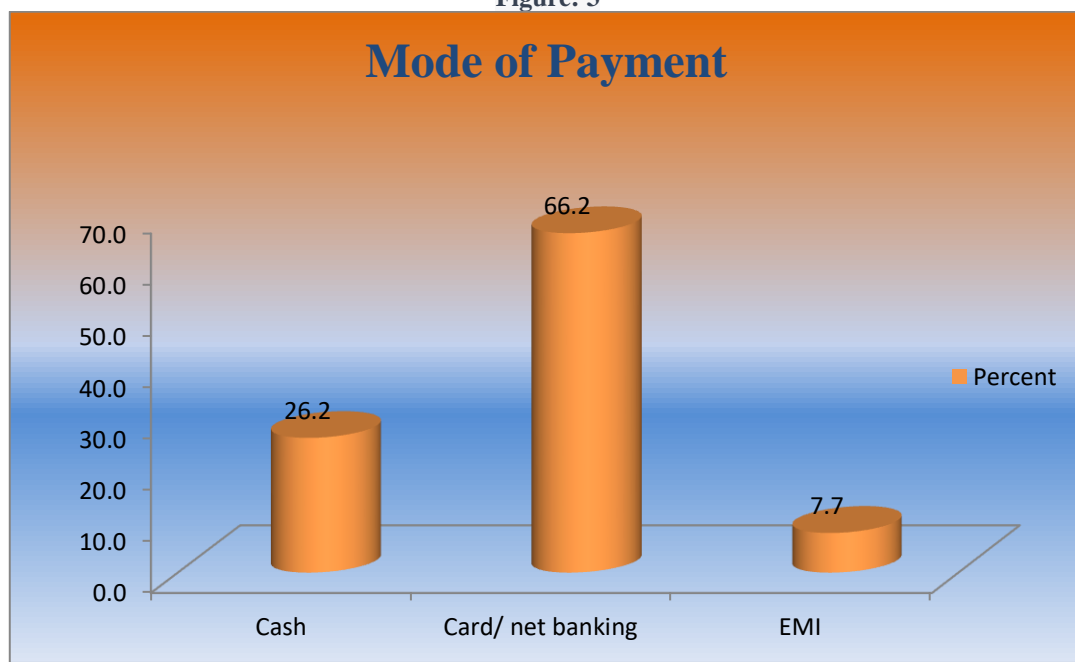
Figure: 2



**Table:4 Most Preferred mode of payment in Online shopping**

Mode of Payment	Frequency	Percentage
Cash	51	26.2
Card/ net banking	129	66.2
EMI	15	7.7
Total	195	100.0

**Interpretation:** Among the 195 respondents, a significant majority of 66.2% preferred using card or net-banking as their mode of payment when purchasing consumer electronics products through online shopping. On the other hand, 26.2% of respondents opted for cash on Delivery (C.O.D) as their preferred payment mode. The remaining 7.7% of respondents chose the EMI option while purchasing consumer electronics products through online shopping. These findings highlight the popularity of online payment methods such as card and net-banking, while also indicating a significant percentage of customers still preferring the traditional cash in delivery.

**Figure: 3****Table: 5  
Factors Influencing Online Shopping Behaviour**

Sr. no.	Factors	Mean Score	SD
1	Online shopping saves time and money	4.138	.7573
2	Wide varieties of electronic products are available	4.277	.7073
3	Provides facility of home delivery of products	4.379	.6883
4	Prices of different brands can be compared easily on website	4.415	.7156
5	Some brands of products are available in online mode only	4.077	.8730
6	All information about product is available at one place	4.154	.8415
7	Better deals and discount offers are available	4.118	.7939
8	Convenient as the customer can buy goods at anytime	4.277	.6925
9	Availability of other customer's review for buying decision	4.256	.7968
10	No discrimination in price for different customers	4.092	.8505
11	Goods are available on reasonable price	3.856	.8793
12	Easy return and replacement process	3.846	.9064

**Interpretation:** A question was posed to the online shopper what factors influence their decision to buy electronic goods from online stores. The result revealed that a significant majority of respondents strongly agreed that the ease of comparing

price of different brands on websites was a crucial factor with a mean score of 4.415 for this statement. Additionally respondents also acknowledge the convenience of home delivery means score 4.379 which allowed them to order their preferred brand and features. The availability of wide variety of goods and convenience of buying at any time with mean score 4.277 were also considered a key factors. The study revealed that online shopping provided a way for busy individuals to purchase electronic goods without visiting physical store which was identified has a significant influence. Furthermore the availability of customer's reviews and the opportunity to save time and money were additional reasons why respondent choose to purchase electronic goods over the Internet.

Figure: 4



Table: 6 Challenges in Online Shopping

(n= 195)

Sr. no.	Factors	Mean Score	Rank
1	Fear of Fraud	4.153	I
2	Delay in Delivery	3.892	III
3	Charge Hidden costs	3.873	VI
4	Cannot Bargain	3.922	II
5	Sometimes deliver defective goods	3.886	IV
6	More risky in payments	3.814	IX
7	Plenty of goods create confusion	3.845	VII
8	No personalised services	3.818	VIII
9	False reviews on site	3.884	V
10	After sale services not satisfactory	3.573	X

**Interpretation:** The analysis from the table 6 showed that fear of fraud got rank I while lack of bargaining got rank II. Delay in delivery and delivery of defective goods got rank III and IV respectively. False reviews of product and hidden costs are also became challenges during online shopping and got V and VI rank. The other significant problems faced by the customers are absent of touch and lack of personalised services.



**IX. FINDINGS**

- This study highlighted the factors influencing buying behaviour of online shoppers. Overall the data suggests that laptops and smartphones are the most popular devices among respondents with a greater number of people purchasing smartphones compared to laptops. Smartwatches appear to be less common technology choice for the majority of respondents.
- In addition, the data also suggest that Amazon and Flipkart are the most popular online stores among respondents, indicating the potential dominance of these platforms in the Indian e-commerce market.
- Majority of the people like to make payment through card or net banking as compared to cash.
- The study also reveals that the 'home delivery' 'convenience' and ease of buying are crucial factors impact online buying behaviour towards electronic goods and marketers should put additional efforts into improving customers' satisfaction in these areas.
- The data shows that 'fear of fraud' is major concern for online shopper of electronic goods. Customers worry about whether the product they receive will match the description, if it will be good condition. Delayed in delivery also became a challenge for customers.

**X. SUGGESTIONS AND CONCLUSIONS**

With the increasing use of the internet for online shopping in India, companies need to leverage this platform to sell their products and gain a competitive advantage in the market. To attract customers, proper pricing strategies and sales promotional techniques should be used, and cost savings should be passed on to consumers through reduced product prices. Convenience is a crucial factor for Indian consumers, and companies must focus on the internet as a selling platform, providing proper product information, secure payment options, and cash on delivery facilities. Offering a variety of high-quality products is also essential for companies to succeed in the Indian market.

Proper advertising is crucial to ensure that customers are aware of the company and its products, and providing information about the seller is important for building customer trust. Offering proper after-sales service and feedback also plays a significant role in influencing online purchasing behaviour. As Indian consumers become more sophisticated and discerning, online sellers need to adapt to the changes taking place in Indian retail sector adopt new technologies and focus on providing a perfect shopping experience to their customers.

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