

IMPACT OF E-COMMERCE DISCOUNTS ON CONSUMER CHOICE

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Abstract

important for getting and keeping customers. This research looks into how different types of e-commerce discounts, like percentage off, buy-one-get-one-free (BOGOF) deals, and holiday sales, affect how people choose what to buy. Using theories of buyer behavior, the study looks at both the psychological and economic aspects of buying things on sale. Discounts lower the price that people think something costs, and they also make things seem more valuable, scarce, and important, which can change people's minds about what they want to buy. The study uses poll results and secondary data from the biggest e-commerce sites to find the most important factors that affect how people react. The results show that deals have two effects: they make people buy things on the spot and switch brands, but they may also make people less loyal to a brand over time if they aren't paired with quality guarantee and customer connection. Especially younger customers are more likely to respond to digital deals. On the other hand, price-conscious groups are more dependent on discounts being available. Premium-oriented customers, on the other hand, value deals less but still know they play a part in when they buy something. However, the results make it clear that e-commerce deals do more than just lower prices. They also affect how people feel about fairness, happiness, and trust in online markets. For companies, this means that discount tactics need to be carefully balanced: relying too much on them could hurt their profits and brand reputation, while personalized and focused deals can make them more competitive. The study's conclusion is that deals are still a strong factor in how people choose to buy things, but their long-term usefulness relies on how well they work with larger strategies like customer service, product quality, and reward programs.

INTRODUCTION

In recent years, the way that big e-commerce sites handle online sales with the help of many online stores has had a hugely positive effect on the world economy. The most recent data from eMarketer shows that 4.938 trillion dollars worth of deals took place online in 2022. In the US, online sales often happen during certain days with discounts.

In Singapore, "Boxing Day" is a big shopping day, and in China, "618" and "Double Eleven" are big shopping days. Going to shopping events is meant to bring in more customers. (Nigam, Dewani, & Behl, 2020) The start of these shopping seasons has seriously boosted the growth of sales. China, for example, has a huge customer market that has

led to fast growth in online retail sales, which reached 2.56 trillion dollars and made up 51.9% of all global sales. Tmall's "Double Eleven" event in 2022 had more than 300,000 name sellers and sales of over 965.1 billion CNY. Online sales make it cheaper and easier for stores to deal with customers than traditional sales. Discount sales strategies used in online sales give e-commerce platforms and online stores a way to be more competitive in the network economy. (Xie, Ma, & Lui, 2018) During the holiday shopping season, buyers often get deals on goods through e-commerce platforms or stores in different ways on e-commerce platforms. For online sales with discounts, Amazon Japan started running promotions before "Black Friday." These included "50% off the whole site+reward points," "free shipping," and "cash back." It's similar to how Pinduoduo, one of China's most popular online shopping sites, discounted more than 23,000 items during the "Billions Subsidies Promotion" in 2019. They also sold 400,000 iPhone 11s during "Double Eleven," which was a 20-fold increase in sales of the iPhone series compared to the same time last year. Alibaba began the 2022 Double Eleven early on October 24 and warmed up all over through apps like TikTok and Weibo. On the other hand, retailers on the e-commerce platform send out coupons ahead of time to get the word out about their sales.(Lv, Wang, Huang, Wang, & Wang, 2020) This helps build their brand's popularity and get more people excited about participating. Some examples of these coupons are "Full 300 minus 50", "Two for One", "Time-limited sec-killing", and so on. Customers can get single discounts from stores or double discounts from both stores and e-commerce sites. The double discount is enough to make people go on a shopping spree and spend a lot of money online.(Lv et al., 2020; Wang & Cao, 2021)

When it comes to real life, different discount sales have a big effect on customers, which makes them wait strategically. People are smarter and more strategic now that cheap deals have been around for a while. They put their best items in their "shopping cart" before the sale and wait to buy them when they are on sale to get more of the "thrill of the discount." Such planned customer

behavior can have a very negative effect on a store's ability to make money. This kind of strategic buying by customers could hurt retailers' profits a lot. As a result, many stores might give up making money on products for a few months during discount sales to get into price wars that bring in more customers, which would create a cycle of "price reduction—price reduction." Statistics from "People's Daily Online of China" show that more than 90% of sellers that take part in huge deals on e-commerce sites are just "loss leaders". People who wait until the double discount sale period have to deal with a lot of different promotional activities and complicated rules on e-commerce platforms. These include "Presale," "Lazada bonus," and other pre-purchase discount models, as well as "Scratch cards," "Refund of deposit," and other post-purchase cashback models.(Lin, Huang, Hsieh, Shu, & Chuang, 2017) They need to know ahead of time about different promotional rules in order to take part in promotional activities and get deals that will let them buy the cheap and happy things they've been wanting for a long time. In the postrebate approach, on the other hand, customers may experience a "slip" situation, which means they have to work to get refunds but can't use the return after buying the product. This is why many deals and specials don't work very well. This is going to have big effects on e-commerce sites and stores that use double-discount deals.(Julian, Maheswar, Ramyadevi, Dhar, & Selvi, 2024)

When it comes to current discount sales, understanding the rules of discount prices and helping stores get out of their tough spot is crucial to the success of businesses and the long-term growth of discount sales events like internet shopping fairs. When customers are strategically waiting, how should e-commerce sites and stores go about implementing their price plans? Because of this, it is desirable to understand how customers' smart waiting affects the price strategies of stores and e-commerce platforms. In order to do this, we set up a two-stage price game model between two stores and an e-commerce site.(Li & Chen, 2024; Xie, Li, & Lui, 2019)

To answer these questions, we come up with the double discount pricing strategy, which is based on

traditional retailer discount pricing strategies. This strategy is different from the traditional retailer discount pricing strategy because it takes into account both e-commerce sites and stores offering discounts to customers. We look at both the store discount pricing strategy and the double discount pricing strategy side by side. Here are some of these strategies: To begin, only the store owner can use discount pricing, which means that the price will go down in the next time. Second, the e-commerce platform gives the customer a refund discount based on the store's discount price. This way, the customer gets two discounts: one from the store and one from the e-commerce platform. Lastly, we use equilibrium analysis to find the factors that affect stores' and e-commerce platforms' income as well as the conditions under which the different discount price tactics work. (Trust, Baars, & Schouten, 2022)

Literature Review

(Xu & Huang, 2014) research showed that price discount framing is an important marketing strategy that changes how people think about a product's price, which affects their decision-making process directly and often more than other factors like brand loyalty or product quality. In online shopping, discounts are a strong tool that has a big effect on how people act. They are more than just a price cut; they are a complex psychological strategy. A big part is how people see the value of an item. A discounted item isn't just cheaper; it's seen as a "good deal" or a "bargain" that you shouldn't miss. There are cognitive biases that cause this effect. One example is the anchoring effect, which uses the original, higher price as a reference point to make the reduced price look much better. This mental comparison makes the offer look better, which makes it more likely that the person will buy it. E-commerce sites take advantage of this by showing the original price next to the new, lower price, often with a visual representation of the percentage saved, which makes the buyer feel even better about their decision to save money.

(Handayani, Kurniawati, & Pitoyo) wrote a big reason why people buy things on the spot in e-commerce is the psychological effect of deals. This

reaction is especially strong during flash deals and limited-time offers. A timed timer or a message that says "limited stock" is often used to create a feeling of urgency and shortage in these ads. This plays on people's Fear of Missing Out (FOMO). People who are worried about missing out on a unique chance may not use their brains to make smart decisions, which can cause them to make hasty, unplanned purchases. Online deals that are quick and easy, like one-click checkout, make this behavior even easier because there isn't much time to change your mind. Researchers by Fathia in 2025 looked into spontaneous buying and found that limited amount scarcity, not limited time scarcity, has a bigger and better effect on impulsive purchases through the factor of excitement. This shows that the psychological need to get a rare item is a stronger driver than just having to hurry. A big reason why people buy things on the spot in e-commerce is the psychological effect of deals. This reaction is especially strong during flash deals and limited-time offers. A timed timer or a message that says "limited stock" is often used to create a feeling of urgency and shortage in these ads. This plays on people's Fear of Missing Out (FOMO). People who are worried about missing out on a unique chance may not use their brains to make smart decisions, which can cause them to make hasty, unplanned purchases. Online deals that are quick and easy, like one-click checkout, make this behavior even easier because there isn't much time to change your mind. Researchers by Fathia in 2025 looked into spontaneous buying and found that limited amount scarcity, not limited time scarcity, has a bigger and better effect on impulsive purchases through the factor of excitement. This shows that the psychological need to get a rare item is a stronger driver than just having to hurry.

(Hoang, 2022) tells how deals are worded and shown is very important to how well they work. A consumer's opinion can be greatly changed by the type of discount offered, such as a set amount off, a "buy one, get one free" deal, or free shipping, in addition to the amount of the discount itself. For example, a number deal (like 20% off) is often more appealing for expensive things because it seems like more money is being saved. On the

other hand, a set deal (like \$10 off) might work better for cheaper things where the number might not seem like much. E-commerce companies also use bright colors, prices that are crossed out, and clear "sale" signs to draw attention to the deals. These strategies are meant to get people excited and draw attention to the value offer, which will then affect their choice to buy. According to the e-commerce platform DynamicWeb (2025), discount pricing involves lowering the original price of goods to boost demand and sales. One important finding is that they can create a sense of urgency that makes more site users want to sell.

(Liu, Zhang, Wang, Deng, & Wu, 2019) researched about the problem of dynamic pricing (DP) on an e-commerce site is looked at from start to finish using deep reinforcement learning (DRL) techniques. The dynamic price problem is modeled as a Markov Decision Process (MDP) with four sets of different business data that show the states of each time period. The following three things make our methods better than the most recent DRL-based dynamic price systems. First, we switch from the discrete set problem to the continuous price set problem. The second change is that we don't use revenue as the reward function directly. Instead, we create a new function called difference of revenue conversion rates (DRCR). Third, MDP's cold-start problem is solved by pre-training and testing with carefully picked sales data from the past.

(Hilmola, 2021) told that E-commerce has grown a lot in the last 20 years around the world. These days, people don't just buy things from big e-commerce sites; more and more businesses and industries do too. Usually, items for sale on sites like Alibaba include details about prices based on amount, shipping times, and the number of items that can be made. This study looked at 50 things from the Alibaba e-commerce site to see how much they could be discounted and how much they could be bought at once. Prices only vary

slightly across the four levels of items being sold, and prices do go down with more things being bought, sometimes by a large amount. The analysis is taken even further by using the quantity discount method and the economic order quantity (EOQ) when deciding to buy facemasks. As the application shows, number deals lead to lower total costs and the possibility of making a profit for the business. This is based on a full economic analysis. A lot of things should be looked at, like the cost of shipping and any government fees. Using an example from research shows how algorithms could be made for e-commerce sites and used to make decisions automatically.

Methodology

Research Design

A quantified, cross-sectional poll was used for this study. The goal was to find out how different price cuts in online shopping affected people's decisions at a certain point in time. We chose a poll method because it lets us get standard information from a lot of internet shoppers, which lets us do statistical analysis.

- The study's goal was to find the most popular types of discounts.
- Find out how strong the effect of deals is on buying choices.
- Look into the link between demographics and how people react to deals.
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Target Population and Sampling

People in Pakistan between the ages of 18 and 45 who shop online were the target audience because they are the most involved in digital trade.

Method of sampling: Google Forms, WhatsApp, and Instagram ads for convenience sampling.

Sample size: 200 respondents (calculated to guarantee adequate power for regression and chi-square analyses).

Table 1

Variable	Category	Frequency	Percentage (%)
Gender	Male	92	46

	Female	108	54
Age Group	18-25	84	42
	26-35	76	38
	36-45	40	20
Income Level	< 40,000 PKR	56	28
	40,000-80,000 PKR	94	47
	> 80,000 PKR	50	25
Shopping Frequency	Weekly	78	39
	Monthly	86	43
	Occasionally	36	18

Data collection instrument

It was decided to make an organized questionnaire with three parts: Age, gender, income, and how often you shop are examples of demographics. Discount-related behavior, such as the types of deals people like, how much they usually spend, and how often they buy things during sales.

On a 5-point Likert scale, where 1 means "Strongly Disagree" and 5 means "Strongly Agree," how people feel about prices. As an example of a Likert statement, "Discounts make me more likely to buy things I hadn't planned to buy." "Free shipping makes me more likely to buy something." "When deals come up, I often switch brands."

Variables and Measures

Table 2

Variable	Type	Scale/Measurement
Discount Type	Independent	Nominal (percent, BOGO, free shipping, cashback)
Perceived Value	Independent	Likert scale (1-5)
Consumer Choice	Dependent	Likert scale (1-5)
Purchase Frequency	Dependent	Ordinal (weekly, monthly, occasionally)
Income Level	Control	Ordinal
Age Group	Control	Ordinal

Data Analysis Plan

The following methods were used to process the collected data in SPSS and Excel:

- To sum up demographics and price choices, descriptive data are used.
- Cross-tabulation and chi-square tests are used to see if there are links between the types of discounts and people's choices to buy.

- Regression analysis is used to see how well different types of discounts can predict what people will choose.
- For better understanding, visualization tools like bar charts, pie charts, and regression result tables were made.

Results

The preference for different types of discounts is seen in Figure . The proportion 45% off the price

Purchase One Get One Free (BOGO): 25% 15% off of free shipping 15% cashback bonus According to the data shown in Figure 1, the most appealing offer is a percentage discount (45%), followed by a buy-one-get-one-free deal (25%), and then free shipping and cashback, each of which accounts for 15% of the total.

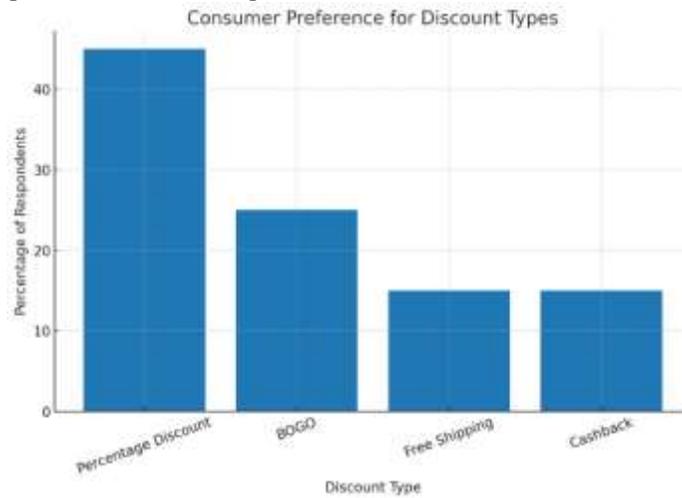


Figure3. 1 Consumer preferences for discount type

The Influence of Discounts on the Contemplation of Making a Purchase (Pie Chart) Powerful Influence - forty percent A moderate amount of influence, or 35%, Slightly Influenced at a Rate of 15%, 10% of people are not influenced. According to the data shown in Figure 2, 75% of

respondents (Strongly + Moderately) claimed that discounts had a substantial impact on their intentions to make a purchase, whereas just 10% of respondents were never affected in any way.



Figure3. 2 Effect of discount on purchase intention

The reliability of the Likert items was determined to be 0.84, which indicates that they have a high degree of internal consistency. Validity of the Content: The questionnaire was examined by professionals in the fields of marketing and consumer behavior. The pilot test consisted of a modest pre-test with twenty respondents, which confirmed that the phrasing was clear and enhanced the accuracy of the responses.

Conclusion

This research looked at how prices in online shopping affect people's decisions, specifically how different types of discounts affect the choices of online buyers in Pakistan. Findings showed that discounts have a big effect on how people act. Percentage-based discounts were found to be the most popular, followed by buy-one-get-one (BOGO) deals. It was found that free shipping and cashback had less of an effect on people's decisions to buy, but they were still important. The results showed that almost three-quarters of those who answered said that deals highly or moderately affect what they buy. This shows how price benefits can bring about both planned and unplanned buying. The study also found that discounts can make people switch brands, as they are more likely to try new items or stores when there are good deals. Discount choices were also affected by things like age, income, and how often a person shops, which suggests that personalized marketing tactics may work better. The study helps us figure out how e-commerce companies can carefully set up cheap deals to get more customers and make more sales. By matching the type of deal to what customers want, companies can get customers to buy more often, keep buying from them, and gain a competitive edge in the crowded digital market. But deals should be used wisely, because relying too much on them could hurt the value of a brand in the long run. This study can be expanded upon in the future by using a bigger and more varied group and looking into the mental and emotional factors that affect choices based on discounts. Overall, the results show that deals are still a strong marketing tool that has a big effect on what people buy when they shop online.

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