

# Impact Of Time Scarcity Marketing Promotions On Online Shoppers' Purchase Decisions

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## Abstract

The present research investigates the influence of time scarcity in promotional messages on consumers' purchasing intentions in online retailing. A quantitative research design was used and the data were collected using a computerized questionnaire from 260 online shoppers. The study aims to explore consumers' attitudes toward time scarcity cues in both time-limited offers (exclusive and regular) and countdown timers and their purchasing effect. It shows that time scarcity marketing also plays an important role in consumers' buying decisions because of its time-urgent characteristic and impulse buying. However, attendants also listed some limitations, like the perception of pressure to buy and too much time stringency. This study extends the applicability of time scarcity marketing in an online retail context and provides practical implications for online retailers who wish to manage their promotional tactics.

**Keywords:** time scarcity marketing, online shopping, purchase decisions, impulsive buying behavior, online shoppers, promotional constraints, urgency, marketing tactics.

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## INTRODUCTION

In the maturing world of e-commerce, time shortage is one of the powerful determinants for time-poor consumers in making purchases deliberation. The digital environment where consumers have so many choices is challenging for businesses as they try to get noticed and stay noticed. In this world of plenty, time-poverty marketing campaigns – those that leverage a time pressure point, such as time-limited offers, countdown timers, and special time-limited deals – have taken on a major role in shaping consumer behavior.

The growth of Internet shopping has completely changed the way people shop, offering immediate and worldwide access to equipment. But this ease also comes with a glut of options, which can be daunting to the consumer. In reaction, many online retailers are becoming more and more concerned with time-scarcity tactics that will force an artificial sense of urgency on list members, urging them towards quick action before the deal disappears. These impromptu offers not only shape impulse purchase behavior but also find their way into different phases of the consumer decision journey.

Prior research has found that limited-time offers increase consumers' intention to purchase, their product preferences, and their spending. When time-constrained, consumers are less reflectively deliberative and more likely to engage in rapid decision-making – focusing on immediate gratification rather than long-term perspective. Scarcity of time marketing also creates competition and creates feelings of urgency in a prospect not to “miss out” before your product is gone. Methods like countdown timers and stock availability labels act as a form of social proof, these tell people that lots of others are buying it and there's not much stock available. This feature has the effect of generating the FOMO (Fear of Missing Out) phenomenon and prompting buyers to take part in the buying craze.

However, time scarcity marketing has been used on a large scale, and bears ethical concerns. Critics fear that artificial time limits might undermine consumer freedom, cause undue stress, and even hijack consumers will formation processes. Additionally, too much misleading scarcity-making can also erode trust and discredit the brand. These issues highlight the importance of developing an informed appreciation for when and how time-related selling tactics may impact consumer behavior from both the marketer and consumer viewpoints.

Time scarcity marketing leverages key psychological principles, such as loss aversion and the scarcity heuristic. According to loss aversion theory, people are more motivated to take action to prevent a loss than to achieve a gain. When it comes to expiration dates on limited-time offers to lure you to sign up, it is all about urgency over deliberation. At the same time however the scarcity heuristic predicts that items that are seen as scarce are also seen as more valuable. – scarcity is applied by marketers to make products appear more exclusive and desirable; they restrict the availability of the product or constrain it in time. In summary, urgency and perceived scarcity, which are the psychological drivers used in time scarcity marketing promotions, appear to be a compelling addition to the list of tactics to affect online consumer behavior. However, it is not clear if BAS manipulates the behavior of users and it could hypothetically result in a perceived violation of trust. Drawing on these matters and the public attitudes this can evoke, optimal and ethical use of time scarcity appeals demands a profound insight into the psychological mechanisms it triggers, but also potential consequences for consumer well-being. With the future of digital commerce still unfolding, balancing the effectiveness of these practices with ethical ones will be a key factor in continuing to cultivate consumer trust and brand loyalty over the long run.

## REVIEW OF LITERATURE

### Time Scarcity in Marketing

Time poverty has become an influential marketing device, especially in online retail where the consumer is constantly distracted by choice. Limited-time only (LTO) when concerning marketing in general, and time scarcity would artificially induce a limit in the amount of a product available for purchase, or curtailing a promotional time-frame; which then stimulates a faster purchasing behavior (Cialdini, 2009). Urgency-based offers: Flash sales, limited-time discounts, and countdown clocks are all intended to convey that the chance to take advantage of an offer is a fleeting one, motivating the customer to act quickly before time runs out.

### Psychological underpinnings of scarcity marketing

Time scarcity sales tactics work based on several psychological principles that are well known. One of the leading candidates is the psychological phenomenon of loss aversion, the cornerstone of Prospect Theory (Kahneman & Tversky, 1979), which holds that people suffer more from losses than they enjoy equivalent gains. They play on this predictably irrational behavior, force-feeding you with an imaginary loss if you don't jump right in.

A second mechanism is the scarcity heuristic, through which consumers perceive scarce items to be of greater value (Lynn, 1991). A rare item (as clearly expressed in countdowns or low-stock calls to action) is more desirable and higher value. Moreover, fear of missing out (FOMO) has been identified as a key driver of consumer behavior in digital environments (Przybylski et al., 2013). FOMO drives people to want to make snap decisions so that they can fit in and not miss out on opportunities that could improve their lives.

### Online Retail Environment and Consumptive Behavior

The advent of e-commerce has increased time scarcity tactics because of the lower barriers to entry across the Internet, the instantaneous ability to compare values, and the sustained presence of other choices on the Internet. Online environments increase the likelihood of cognitive overload amongst consumers, which may, in turn, incite consumers to depend on heuristics such as scarcity cues, when they make purchase decisions (Iyengar & Lepper, 2000). Time pressure only makes this worse so that customers are more inclined to make snap and emotional decisions (Verhagen & van Dolen, 2011).

In addition, online platforms frequently involve persuasive interface features like "Forget User Test, it'll never sled!" 76 increased attendance as well as visiting stock prices and limited-time-only offers, from not only individual-based purchase decisions but also a social environment of time constraints, if not outright competition (Li, Sun, & Wilcox, 2020).

### Ethics of Time Scarcity Marketing

The scarcity of time frame marketing is effective in promoting purchasing in the short term, but it does raise significant ethical issues about consumer autonomy and informed choice. Artificially forcing urgency could result in the consumers purchasing something they did not want to, thus damaging trust and loyalty towards the brand in the longer term (Sharma & Keller, 2004). The appropriateness of limited availability tactics (like fake countdowns or stock availability devices) has sometimes been questioned for manipulating consumer perceptions and even initiating needless psychological pressure.

Academics maintain that ethical commercial ethology will blend sensitivity with persuasive tactics and righteousness for the welfare of consumers (Laczniak & Murphy, 2006). As online marketing develops, it will be important to take the ethics of time-scarcity marketing into account to ensure sustainable brand-customer relationships.

### Objective of the study

This research primarily aims to explore the influence of time scarcity marketing promotions on the purchase decisions of consumers in the context of online retail choices.

The specific objectives are:

- To analyze the effect of short-term promotion on the consumers' urgency perception.
- To examine the impact of time while scarcity tactics on impulse buying behavior.
- To measure the consumer perception of pressure and decision satisfaction during time pressure.
- To determine the potential ethical concerns associated with time scarcity marketing as consumers perceive them.

### Research Questions

According to the objectives, the study answers the following research questions:

RQ1: What is the impact of time scarcity marketing promotions on consumers' purchase decision urgency?

RQ2: How do time scarcity strategies affect impulsive buying behavior?

RQ3: How do consumers view the ethical nature of time-bound offers in online retail?

RQ4: Is there a carry-over effect on consumers' satisfaction with same-day online delivery purchases stimulated by an experience of time scarcity promotions?

### Hypotheses

H1: Time scarcity marketing promotions have a positive effect on consumers' urgency in the context of online purchase decisions.

H2: Exposure to time scarcity tactics is positively associated with impulsive buying behavior.

H3: Consumers exposed to time scarcity promotions are more likely to feel pressured during their decision-making.

H4 (Mediation): The perception of unethical marketing practices mediates the influence of time scarcity promotions on consumer trust in online stores.

## RESEARCH METHODOLOGY

A quantitative research design is used in this paper to examine the influence time time-scarcity marketing promotions on the purchase decisions of online shoppers. The research strategy is oriented to collect data with the help of a structured questionnaire and to analyze data through the use of statistical methods. The design is selected for an experimental exploration of how time-limited offers and scarcity signals impact consumers' urgency, impulse purchase, and decision satisfaction in an online retail setting with a systematic empirical lens.

This study will focus on active e-commerce users among online shoppers. Respondents were selected by non-probability convenience sampling. The study was conducted on 260 online shoppers, who had made a purchase online in the past month. These people were selected to make sure they know first-hand the tactics you see time wholesalers (such as scarcity offers, countdown timepieces, and well-timed offers). The population frame selected people of a variety of age groups, both genders (male and female), and different locations to represent a broad profile of online shopping behavior. Most respondents were from India, and the sample size (n= 260) was considered adequate for robust statistical findings and representativeness within the study's environment.

### Descriptive Statistics

To calculate descriptive data for the variables in the study: These are urgency perception, impulse buying, pressure perception and ethical concerns.

Variable	Mean	Standard Deviation
Urgency Perception	3.82	0.76
Impulse Buying Behavior	4.04	0.69
Pressure Perception	3.45	0.84
Ethical Concerns	3.11	0.92

These findings imply that in general, respondents experienced moderate feeling for urgency and impulse buying behavior under time scarcity cues. Ethical issues were less problematic but not absent.

### Reliability Analysis

We examined the scales applied for measuring the major measures for reliability using Cronbach's Alpha.

Construct	Cronbach's Alpha ( $\alpha$ )
Urgency Perception	0.86
Impulse Buying Behavior	0.89
Pressure Perception	0.83
Ethical Concerns	0.80

Cronbach's Alphas range from 0.70 to 0.91; thus, measurement scales are reliable.

### Hypotheses Testing

**H1: Time scarcity marketing promotions have a positive effect on consumers' urgency in the context of online purchase decisions.**

The regression analysis was done to examine the effect of time-scarcity manipulation of marketing on perception of urgency:

Model	Beta ( $\beta$ )	p-value	Result
Time Scarcity Marketing $\rightarrow$ Urgency	0.56	< 0.01	Significant

**Interpretation:** These results indicate that time scarcity-related marketing promotions are indeed effective in stimulating urgency in buying decisions. H1 is supported.

**H2: Exposure to time scarcity tactics is positively associated with impulsive buying behavior.**

A Pearson correlation was run to determine the correlation between exposure to time scarcity tactics and impulse purchase.

Variables	Pearson Correlation (r)	p-value	Result
Time Scarcity Tactics $\leftrightarrow$ Impulse Buying	0.68	< 0.01	Strong Positive

**Interpretation:** Time scarcity tactics and impulsive buying behavior exhibited strong positive association. H2 is supported.

**H3: Consumers exposed to time scarcity promotions are more likely to feel pressured during their decision-making.**

The perceived pressure was compared between consumers exposed to and not exposed to time scarcity using a paired t-test.

Group	Mean	t-value	p-value	Result
Exposed to Time Scarcity	3.45	5.82	< 0.01	Significant
Not Exposed to Time Scarcity	2.56			

**Interpretation:** Time scarcity promotions increased perceived pressure among consumers. H3 is supported.

**H4 (Mediation): The perception of unethical marketing practices mediates the influence of time scarcity promotions on consumer trust in online stores.**

A mediation analysis was done to examine whether ethical concerns mediate the effect of time scarcity marketing promotions on consumer trust.

Indirect effect	Direct effect	p-value	Result
0.35	0.45	< 0.01	Partial mediation

**Interpretation:** Mediation analysis revealed that perception of unethical marketing practice partly mediated the impact of time scarcity promotions on consumer trust. H4 is supported.

### Ethical Implications and the Consumer Trust

In addition, we examined the influence on consumer trust of perspectives about unethical marketing with regression analysis.

Model	Beta ( $\beta$ )	p-value	Result
Ethical Concerns $\rightarrow$ Consumer Trust	-0.42	< 0.01	Negative impact

**Interpretation:** The regression analyses indicated that higher ethical concerns were less trusting of the retailer. This indicates that time scarcity marketing may be an effective sales technique, but may also lead to a loss of consumer trust over time.

### Findings

**1. Effects of Time Scarcity Marketing on Perceived Urgency (H1):** Time scarcity marketing (e.g., countdown timers, limited time offers) as a principle, considerably enhances consumers' urgency by pressuring them to purchase. Consumers under the time pressure offer situations were more likely to be under pressure to make decision.

**2. Time Scarcity and Impulse Buying Behavior (H2):** There is a significant positive association between time pressure strategies and impulsive consumer buying. Participants were more likely to decide on impulse when they were faced with time limited offers or urgency cues.

**3. Perceived Pressure on Decision Making (H3):** Consumers perceived more pressure in decision making when they were exposed with the time scarcity promotions. Too much time pressure may result in a negative purchase experience.

**4. Ethical Concerns and Their Influence on Consumer Trust (H4):** The image of unscrupulous marketing practices (such as count downs that seemed misleading, and causeless scarcity) mediated the effect of time scarcity promotions on consumer trust. Moral implications inhibited trusting online retailers engaging in these activities, undermining relationship building in the long-run.

**5. The Psychological Motivators to Tactics of Time Scarcity:** Scarce time marketing plays with minds in ways similar to loss aversion and the scarcity heuristic. Industry consumers are also influenced, to act quickly to avoid loss or due to the common belief of value in scarce items.

**6. Time Scarcity Marketing and Ethical Issues:** Responses were mixed concerning the ethics of tactics to create time scarcity. Although they work, manipulative and misinformative methods can lead to distortion of the consumers' decision-making process and put them into stress, with consequent impact to the brand trust.

### CONCLUSION

This paper investigates time scarcity marketing and its influence on behavior, including a focus (but not limited) on online retail and behavior related to, urgency, and impulsive buying, as well as those on the darker side where ethical considerations come into play. The results provided that time scarcity promotions, including countdown timers and limited-time offers, have a positive effect on promoting consumers' urgency to purchase and provoke impulse buying behavior. Yet these strategies stimulate pressure, which if it is perceived too much, can produce frustration. Furthermore, ethical aspects of employing such tactics are important otherwise consumers may lose trust if they feel they are being manipulated or deceived. Of course, psychological factors like loss aversion, the scarcity heuristic and more are at play in influencing consumer behavior, but it's the marketer's job to employ such tactics responsibly by ensuring that the consumer has a choice and so they don't lose credibility with the brand. Ultimately, time poverty marketing can be a valuable tactic for generating short-term sales, but its ability to pay in over the long term is contingent on its ethical usage and maintaining that fine line between urgency and the customer's well-being. Future studies might also examine the long-term impact of time scarcity strategies on brand loyalty and customer retention, providing additional evidence on the potential sustainable use of these promotional techniques.

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