How Does the Decoy Effect Affect Decision-making and How We Can Prevent It?

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ABSTRACT
Scientists have been interested in the psychological aspects of economic life since the 18th and 19th centuries. As a result, behavior economics is used to better understand human behavior using economic methods. It began in the twentieth century, thanks to George Katona, who proposed a link between economics and psychology [1]. Thanks to Daniel Kahneman, who offered a prospect theory that challenged "bounded rationality" later in the century, it began to shed more light [2].

Previous studies relied on data and experiments that examined rationality in general [3]. To concentrate on specific decision-making habits, this paper will rely on market data. The decoy effect is the one topic this paper will talk about, which wants to inform more people about how the decoy effect affects market behavior. The research is really meaningful in looking into how consumers make irrational decisions. The findings revealed that the decoy effect influences customers to buy goods that seem superior to the alternatives available to them. As a result, it is recommended that customers should weigh their options before making a purchase, determine which quality is most essential to them, and select products accordingly.

Keywords: The Decoy Effect, the Compromise Effect, behavioral economics, pricing strategies

1. INTRODUCTION

The Decoy Effect was discovered by Joel Huber, an American marketing professor. Many experiments were conducted on the Decoy Effect. Now, the Decoy Effect becomes prevalent in top companies’ pricing strategies to boost their revenues. However, most consumers do not realize how the Decoy Effect prompts them to make wrong decisions. Therefore, this paper aims to investigate the Decoy Effect on market behaviors and inform consumers of such an effect and even make them aware of it, if possible. This paper comes up with a question: how does the Decoy Effect affect the consumers decision-making process and how to prevent its effect? [4]

Assuming you are in the market for a Nutribullet. You have two choices available to you [1]. Less costly model, which costs $89, has 900 watts of energy and comes with a 5 accessory set. The $149 model has a power output of 1,200 watts and twelve different attachments. The one which you select will be chosen by a cost-benefit analysis. However, it is not immediately obvious that the more expensive choice is the better value. It is just around 35% more efficient, but it is also approximately 70% more expensive. It has more than double the number of plastic accessories, but are they worth anything?

Analyze the two when a third possibility is present [5]. It has 1,000 watts and 9 connectors for $125. It allows you to create what seems to be a more thoughtful comparison. You could gain four additional accessories and 100 watts more of energy for $36 more. However, for an additional $24, you will get three more attachments as well as an additional 200 watts of power. What a good deal!

What you have experienced is known as the decoy effect, a deceptive pricing approach used by marketers to influence consumer decisions. It shows how adding a third, less appealing option (the decoy) to a choice between two alternatives might impact customers’ view of the original two options [6]. Decoys sometimes referred "asymmetrically dominant", in which they are entirely inferior to one option (the target), but only partially inferior to the other (the competitor).

Businesses and companies frequently employ decoys to "nudge" customers into buying more than they require. This may have a significant impact on our money — as well as our health — over time. Many of the goods typically promoted with decoys are harmful meals, such
as soft drinks, which can have major health repercussions if consumed in excess. Sugary beverages have been connected to an increased risk of diabetes, heart disease, and other chronic illnesses, but they are far from the only product that employs decoys to upsell higher serving sizes [6].

When a decoy alternative is available, consumers are more likely to make judgments based on what feels like the most beneficial option rather than which option would best meet our needs [6]. Unfortunately, trusting our instincts does not necessarily imply that we are making the best decision. Most of the time, the decoy effect causes people to choose a more expensive option that seems “cost-effective.” [7]

2. CASE ANALYSIS OF THE DECOY EFFECT

2.1. The Decoy Effect in the Market

|                | When two options presented (web-only membership and a print + web subscription) | When three options presented (web-only membership, print-only membership, and a print + web subscription) |
|----------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Web only: $59  | 68%                                                                               | 16%                                                                                              |
| Print only: $125 | N/A                                                                              | 0%                                                                                               |
| Web + print: $125 | 32%                                                                              | 84%                                                                                              |

Ariely earned $8,012 from the initial group, with 68% of students opting for an online-only membership and 32% opting for a web plus print subscription. However, Ariely earned a total of $11,444 dollars from the second group, with 84% of students opting for web and print subscriptions and none opting for print (decoy). The Economist increased sales by 30% by adding a fake product.

Not only Economist, but Apple, the world's most well-known company, uses price to entice buyers to buy their expensive items. If consumers look closely at their profiles, they will notice that one of the other goods is always used as a ruse to get buyers to pick a more expensive version of the product [8]. While deciding to purchase an iPod touch, there is something that will make folks scratch their heads. People who wish to increase the storage capacity from 16GB to 32GB must spend an additional $70 and receive additional features such as a 5MP iSight camera and iPod Touch Loop. However, if consumers wish to increase the storage from 32GB to 64GB, they must spend an additional $100 and will not receive any additional features. The 32GB version appears to be the most cost-effective. Only a small percentage of people would buy the 16GB model, and even fewer would buy the 64GB model. The 64GB version serves as a "price deception," allowing the 32GB version to be the most cost-effective alternative. Apple has boosted the average price paid for every iPhone from $694 to $796 just by adding a more costly decoy—not only by releasing a more expensive model but also by making the previous most expensive, which made the second choice more appealing. Other businesses, such as the New York Times, have used this marketing tactic as well [8]. Here is how the weekend bargain compares:

Saturday-Sunday for $2.50 vs $2.50 for Extended Weekend (Fri-Sun) and $4.99 for Weekday (Mon-Fri) versus $4.99 for Daily Delivery (7 days).

 Does this imply that readers will receive additional newspaper editions for the same price? No, that is not the case. So, why did the New York Post provide two extra choices? In this situation, they added the first two alternatives, which are two decoys, to make the two possibilities appear so much better (Srivastava).

2.2. Application in other areas

Does the decoy effect have any other repercussions outside influencing customer behavior in terms of

Here is a well-known example of the decoy effect in action. Dan Ariely spotted something peculiar on The Economist's membership website a few years ago. An online subscription, a print+web subscription, and only print subscription were all available from the magazine. As a result, Ariely researched his people.

• For Group 1, there were two subscription options: a web-only membership and a print + web subscription.

• Group 2 was given all three subscription options: an online-only, a print-only, and a print + web subscription.

Here are the choices made by each group:

• Group 1: when given a choice between two options: Only the web was chosen by 68 percent of respondents, while 32 percent preferred both print and web.

• Group 2: offered three options: 16% picked only online, 0% chose only the paper, and 84% chose online + paper.
money? The influence is also seen in politics. The following example is based on University of Iowa’s William Hedgcock’s study [9]. When there are two frontrunners in a political campaign, the research found that how people view the third contender may sway undecided voters toward one of the candidates, taking two presidential contenders from the Democratic Party as an example:

- Candidate A is strong on national security and a new face in Washington.
- Candidate B also has the same strength but seems quite old.
- Both of them have a great possibility of winning the election.

Candidate C has now entered the competition (the decoy). He seems inexperienced on national security matters and looks quite old. Candidate A outperforms Candidate C in these two areas, whereas Candidate B outperforms Candidate C solely on the national security issue. Therefore, the decoy effect boosts candidate A’s appeal and draws voters’ votes to the new face in Washington. The decoy effect can also operate in reverse if candidate B manipulates candidate C’s characteristics for his benefit. Thus, the decoy candidate could potentially benefit both parties [9].

3. HOW TO PREVENT THE DECOY EFFECT

Another challenging aspect of the decoy effect is that simply being aware of it is unlikely to be enough to prevent it. After all, one of the reasons this prejudice works so effectively is that it appears to be sensible. When people strive to evaluate their options carefully, they may wind up reaffirming their decision. However, there are a few techniques to prevent slipping into the asymmetric dominance trap [6].

The first piece of advice is to plan ahead of time and decide on your preferences. As previously said, when individuals are making judgments, they are more prone to fall prey to the decoy effect since they do not know what elements to emphasize. As a result, when people need to buy anything, they should take some time to find out what attributes are most important to them when it comes to whatever it is they are shopping for. It is a good idea to define these preferences ahead of time. The decoy effect does not always lead to individuals making “wrong” decisions. Choosing a version of a product that was larger and higher-quality may be more beneficial in the long term in some situations. Buying the more costly target choice, on the other hand, may not meet people’s demands any better than a rival. In situations like these, it’s a good idea to think about why you are buying this at first and if the wanted version of a product would meet that need any better than a less costly option [6]. The response may be “yes”, but it is more likely that it will be “no.” The second is to be wary of three-piece sets. When three possibilities were in play: target, competition, and decoy, the decoy effect is most powerful. People should strive to observe when objects appear in groups of three, whether they’re shopping or analyzing political candidates since there might be a decoy in the mix. The final point is to ignore your instincts. Individual thinking styles have an impact on how susceptible people are to the decoy effect. The persons most impacted by a decoy were those who tended to depend on intuitive thinking, according to one study with over 600 participants [6].

4. OTHER CONNECTIONS

Another notable behavioral economics discovery that Simonson and Tversky examine in detail is the "Compromise Effect," which occurs when customers are presented with three alternatives [10]. People either detest or weary of making mental trade-offs between things, according to the psychology behind this impact. Determining which features are vital, how much they are worth, which product has the best mix, and so on may be intellectually tiring, so consumers want to keep things as simple as they could. As a result, if a consumer is provided with three items with no apparent best option, they are more likely to choose the one that appears to be in the “middle” of the category. Participants, for example, were shown two microwaves:

- 180 dollars of a 0.8 cubic foot Panasonic
- 0.5 cubic foot Emerson’s microwave costs 110 dollars.

The first microwave was chosen by 43% of consumers. However, if the third microwave, which was $200, was offered. the Panasonic was chosen by 60% of customers. It's worth noting that this is 60% out of three possibilities, compared to 43% out of two options previously. Emerson's proportion of customers has fallen from 57% to 27%.

Another factor that makes the middle option appealing is because of its rationality. People are more likely to choose an alternative if they believe they have a compelling reason to do so, and balancing trade-offs is a simple and gratifying rationale (Itamar Simonson). Therefore, anything that provides buyers a compelling incentive to purchase a product is a wonderful approach to encourage them to do so.

According to 2003 research by Ravi Dhar and Itamar Simonson, one major flaw in the Compromise Effect's effectiveness is the ability to avoid making a decision. Consumers can pick the middle-ground option which will help them make a more informed decision, however not choosing anything is also a method to make a more informed decision. As a result, when buyers are committed to purchasing something, compromise works
best. The influence is substantially less if they are free to move away.

While this may restrict the kind of products that might profit from a Compromise choice of goods, this could reveal how a business may place itself. If your clients are determined to purchasing your kind of items but not from you, the Compromise Effect advocates displaying your brand as a middle ground between your rivals to attract the most people.

5. CONCLUSION

This paper addresses the Decoy Effect and also offers advice on how to prevent the negative influence it would have on decision-making; it does not demonstrate the effectiveness of the guidance. As a result, extensive studies would be conducted to determine the advice's capability for changing customer behavior and preventing the Decoy Effect. Nonetheless, the following are some important insights from the decoy effect:

1. Regardless of alternative possibilities, consumers tend to be drawn to things that seem better compared to other option in their selection (a decoy).

2. They are also drawn to things which are perceived as middle ground between other possibilities, particularly if they determine to buy anything.

AUTHORS’ CONTRIBUTIONS

This paper is independently completed by Mingdao Cui.

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