# **Inducing Choice Paralysis: How Retailers Bury Consumers in an Avalanche of Options**

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#### **ABSTRACT**

The number of options might have an influence on the process of decision-making in our life. The previous research called the jam experiment showed that extensive choices may be negative for the consumers to make the final decisions. However, the previous research focused on consumers and they seldom paid attention to retailers. This essay will discuss the reasons and limitations behind the jam experiment. Also, the essay will try to find the effect on retailers and tried to provide solutions.

Keywords: Consumers, Choice, Retailers

## 1. INTRODUCTION

With the increasing complexity and variety of products available in various markets, it is easy to see that retailers tend to increase their turnover by offering a wide range of choices to consumers. More options tend to be more attractive to consumers. To investigate how big choice sets affect consumers' purchasing choices and retailers' revenue, this study proposes that "extensive choices will result in a great number of sales" and analyze it at both the retailer and consumer levels.

# 2. LITERATURE REVIEW AND **METHODOLOGY**

Studies of the cause and effect of assortment size use a variety of experiments and case studies to measure the consumers' reactions and retailers' purposes. Methods in these studies include a theory-based meta-analytic approach, laboratory experiment with simulated choosing conditions, and field study that investigates consumers in the real condition. Most studies use laboratory experiments, although they employ choice sets of different sizes, recruit participants with various filters,

and have assorted control over other variables. For instance, Aner Sela, Jonah Berger, and Wendy Liu [1] investigated the influence of assortment size on the types of options consumers choose; Leilei Gao and Itamar Simonson [2] explored the potential interactions between decision order and choice set the size to affect consumers' purchasing behavior.

In previous studies, there was a view on the experimental assumption of choice overloading, which was that finite, manageable selection sets were more motivated to buy than broad choice sets [3]. A psychological study designed a jam experiment to test a similar hypothesis-based on the real-life and created two experimental groups with limited choices and extensive choices [4]. The study is also based on several social psychological theoretical supports such as attribution theory, dissonance theory, and resistance theory. But there are also several issues thought to be addressed in these two papers, the first being the failure to screen participants, for example, excluding some with strong personal preferences for jam, and failing to consider the effect caused by income level. The third point is that this experiment still does not exactly match the reality of the situation; the categories given in the experiment are

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simplified, whereas consumers may encounter a much larger selection in reality.

To fathom the problems in existing retail stores, a case study is used: Suning and Japanese Convenience Stores. Seeing from the consumers' perspective, the paper focuses on the way these retail stores assort their products can have various effects on the consumers, which could explain what needs to be changed in the retail stores to achieve what impact.

For consumer aspects, the paper chose to use a laboratory experiment, as it has tighter control of variables like limiting the participants. Also, it is less time-consuming and easier to collect data compared to the field experiment done by other research teams.

## 3. RETAILERS' ACTION

In the free market, retailers implement various policies on selling products to maximize profit, which may vary between different fields, but stay the same within an industry. Specifically, shared strategies to increase selling rates are advertising and promotion, free

samples, and discounts. In some cases, professionals are hired to make strategies to increase the sell number. This essay focuses mainly on the strategy to increase options and its influence.

# 3.1Possible Explanations for Large Assortments

There are several reasons for consumers' preference for a higher diversity of options. Firstly, the possibility of finding a closely matched purchase goal is higher when the assortment size, or the number of options in the set, is Also, distinguishing more significant. alternatives runs at higher efficiency in the case of onestop shopping, in which large assortments are offered. In addition, the large assortment provides the option value, allows flexibility under uncertainty regarding the future taste, and permits consumers' variable choosing behaviour. Furthermore, the marginal benefits perceived by consumers might increase with the diversity of the choice set because it establishes the freedom of choice and augments the joyfulness of the shopping. Lastly, large assortments reduce the likelihood of failing to represent all potential options.

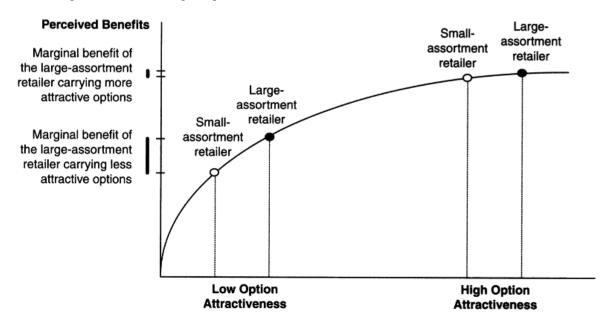


Figure 1 Perceived Benefits as A Function of Assortment Size and Option Attractiveness [5]

As mentioned in figure1, if consumers are dealing with low-attractive options, such as the daily necessities, larger assortments will benefit consumers more by increasing the likelihood of matching their purchasing goal with products in the store. Yet, large assortments demand higher cognitive resources, which might counteract the additional benefits if people are overwhelmed by potential choices. That will be further explored in consumer behaviour analysis.

# 3.2Suning Case Study

Suning is a large-scale retail store in terms of the

variety of items it sold. When consumers open the official website of Suning, they are usually presented with numerous information, including a list of different types of items that Suning has available in their stores. Suppose the consumer wants to buy beef from Suning, they will click on the button that says 'food' and type 'beef' in the search box. The consumer will be presented with a total of fifty pages of different kinds of beef available, and they all pretty much looked identical. Although the platform does sort the products in various ways like prices and qualities (based on consumer reflection), the number of products would still overwhelm the consumers by not knowing which product will be the most suitable. Usually,



consumers will not have the patience to look through all the products, so they will pick from the choices that they see first. Thus, many stores will pay Suning to appear at the top of the search results. This act further reinforces the idea that such a large number of products is unnecessary. Moreover, there is a high possibility that consumers do not have the patience to check all the products. In recent years, Suning has been seizing the chance of different festivals and holidays to present its consumers with selected options by Suning itself so that consumers would not have difficulty choosing. Such a trend proves that choosing difficulty of Suning's consumers has gradually become a problem nonnegligible.

# 3.3 Japanese Convenience Stores Case Study

Convenience stores are introduced to Japan in the 1970s. Based on the research from [6], the business strategy implemented in Japan is contrary to that in the United States and European countries initially. Specifically, convenience stores outside Japan develop in suburban residential areas, contrary to the dependence on shopping areas and main roadway locations. Also, the convenience store has high attractiveness, which means the number of potential customers in densely populated areas is vast. Secondly, increasing assortments of personal services established in the store gives customers more perceived benefits. Thirdly, the time convenience is more intensely focused. Stores have opened throughout the years and have a 24-hour business hour. These are innovative selling technologies welcomed by consumers.

Lastly and most importantly, the assortment strategy for Japanese conveniences stores is widening their product line. They achieve this with the direct management system. It permits strict standardization of the supply chain of stores—providing both national and private products. Nowadays, private label products usually characterize a convenience store. For instance, Lawson is known for the bento boxes, 7-Eleven features the coffee, and Family Mart labels its ice cream. This additional category of goods expands the assortment size and increases the option attractiveness, which further raises sales.

# 4. CONSUMERS' ACTIONS

To explore the consumers' actions when facing an avalanche of choices, this study decided to build an experiment that contains limited and extensive choices of jams, and finally record the data to draw a valid conclusion about whether consumers will increase their expenditure on jams that provided more choices or not.

# 4.1Experimental Design

The experiment preparation can be divided into 2 parts: selecting participants and jam brands. Above all, a

questionnaire will be designed to exclude participants who dislike jams or those who prefer a particular flavor of the jam. Therefore, exceptions from random samples that cause inaccuracy can be avoided. This way of controlling the variables can make the experiment more accurate.

Then, the jam brand is confirmed. To limit the possibility of consumers' special preferences, the study investigated what the most appropriate jam brand is. The chosen brand was Wilkin & Sons Jam. There were several reasons for that. Firstly, the result showed that subjects were most familiar with it, which could eliminate the abnormal preference for brands. Secondly, this brand had a wide coverage of flavors, but some common ones such as pear and strawberries were removed from the experiment to ensure no existing preferences for participants. Lastly, it is an inexpensive brand such that participants would not be concerned about the price.

# 4.2Experiment Procedure

Participants were invited to a pretended market to do shopping. Two different showcases were established to place 6 types of jam (limited choices) and 24 types of jam (extensive choices). Then, the percentage of people who stopped at the 6-types-of-jam showcase and 24-types-of-jam showcase would be recorded separately, and the percentage of deals for those who faced limited choices and extensive choices were also calculated to draw a valid conclusion.

#### 4.3Result

The results of this paper, based on experimental data, are "a wide range of potions will attract customers at first, but will not increase sales effectively. " With 24 jams available, 60 percent of the participants were attracted to the stall, but only about three percent of them ended up buying. In contrast, when faced with six jams, 40 percent of participants approached the stall, but it was found that almost a third would choose to buy the product. It seems that participants were much more willing to buy six types of jam than they were to buy twenty-four types of jam, with the difference in numbers between the two being nearly ten times greater.

# 4.4Analysis

The result shows that people are more interested in extensive choices at first but they tend to choose from limited choices at last. Here are some reasonable analyses about that. The jams don't have a large difference because most of them are sweet or sour and they seldom have other tastes. The group with 24 flavours has a more detailed classification. Also, jams are not a necessity and many people don't want to spend much time on them. As a result, the group with limited choices seems clearer than



the group with extensive choices because the division of flavours seems to be obvious.

Also, the consumers face different opportunity cost which means potential benefits the consumer give up when choosing one alternative over another in the process of choosing flavours of jams. If they spend time considering which flavour to choose, they cannot do other things like working or entertaining during that period. So they may tend to use the least time to finish the decision to reduce the opportunity cost. Moreover, the size of opportunity cost may be different for each person because of their different income level or the utility other things can bring to them.

Furthermore, the personal competence of everyone is different. Everyone has unlimited desire, they may want to try all flavours of jams at once if they don't need to consider other factors. As a consequence, most consumers were attracted to the extensive group at first. However, there are many influence factors, such as they don't have enough money and they cannot afford all the jams they are worried the jams go bad quickly because they cannot consume a lot by themselves or they do not want to use too much space in the fridge to store the jams because the space is limited. There are many reality factors that they must consider before making the final decision. As a result, more consumers decided to choose from the limit group because that is much easier to choose.

# 4.5Limitation

However, the experiment has some limitations. First, it is a laboratory experiment so the designers use only several options as a variable. However, in the real-world situation, many factors can influence the results the consumers make, such as their income, tastes, consumption concept, and so on. The real-world situation is much more complicated than the laboratory situation and it may not reflect the choice made in the real-world situation. Also, the laboratory experiment may bring extra pressure on the people being tested. The whole experiment will be observed and it may be a kind of burden for them. As a result, they may do the options they don't like, even opposite their mind.

Secondly, the sample the designer choose may not exclude some extreme cases. For example, some people be chosen may not like jams at all and the number of options seems to have no influence on them because they are not willing to spend time choosing the goods they don't like. Another extreme sample may be the crazy fans of jams. They may want to try all the flavours and the difficulties for them may not be the number of options but to try which flavour this time. Thirdly, the process of decision-making may influence by some implicit factors. The habit of different consumers may be typical. Some consumers live a hectic life and they tend to use the least time to make the decision. As a result, some of them may

just choose one randomly and they may not realize the number of choices at that time. By contrast, the consumers who have enough free time may tend to consider more carefully, so they may consider the number of choices.

## 5. POLICY IMPLICATION

To encourage sales and reduce the impact of choice paralysis for retailers, the policies focus on making the shopping process simple and straightforward from two aspects: online retailers and offline retailers.

### 5.1For online retailers

Categorizing choice. Online retailers like Suning can categorize the choice through the card-sorting method could define the groups of products functions, and help to sort the products into higher levels of categories, which encourages consumers to narrow their range of choices make the process of making decisions easier.

Obscuring complexity. For online retailers, rationing the process and showing just part of the shopping or payment process, reduce the choices shown to consumers. This will also prevent consumers from leaving due to the complicated process of online shopping and online payment. (Time recording? to help analyse the page which bothered consumers the most?)

# 5.2For offline retailers

Range the products. When selling products inside a store, retailers could choose to range their products with different categories that help consumers to match their preference range. For example, for jams, retailers can sort the jams into different flavours such as sweet, and sour.

By Asking for consumers' preferences and recommend products, retailers could arrange shopping assistants to understand consumers' daily preferences on these types of goods, and recommend similar products which might help consumers to have limited choices, as they may be able to choose only from the recommendation.

# 6. CONCLUSION

In the research, three case studies were presented to find the effect of the number of options when consumers make choices. by analyzing the data, this study focus on both the perspective of the consumers and the retailers. The result shows that people are more interested in extensive choices at first, but they tend to choose from limited choices at last. However, there are some limitations in the research.

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