



Digital Article

Decision Making and Problem Solving

To Make Better Choices, Look at All Your Options Together

According to a series of studies. by Shankha Basu and Krishna Savani

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We make thousands of decisions every day. Some are fairly simple — we decide when to wake up, what to have for breakfast, what to wear to work, which email to reply to — while others are more complex, requiring us to weigh different options. For example, when buying a laptop, we want to compare different models to find the best one for our budget; when choosing a retirement plan, we compare options to find one with the highest returns for our risk appetite; and when hiring, we compare multiple applicants to identify the best candidate.

When faced with such decisions, we can examine one option at a time or review all our options together. For example, when deciding which job candidates to interview, a hiring manager may evaluate one candidate's résumé at a time, form an opinion about it, and then move on to assess the next one. Alternatively, she may lay out the résumés of all applicants on a table, evaluate and compare them, and then decide whom to interview. Similarly, an investor may view the details of one mutual fund at a time or visit a mutual fund comparison website. And a supply chain manager may consider information of the suppliers individually or view them together on a spreadsheet.

In a <u>study</u> recently published in the journal Organizational Behavior and Human Decision Processes, we examined how these two ways of evaluating options can influence people's choices. We recruited 2,783 research participants in the U.S. from an online panel (Amazon

Mechanical Turk) and a university in Singapore. Across seven experiments, these people were asked to make choices from options that were presented either sequentially or all at once. Some decisions were simple, such as which camera model to buy; others were complex decisions that a manager would make, such as which supplier to award a contract to. Overall, we found that people were, on average, 22% more likely to choose the objectively best option when they viewed options together rather than one at a time.

In the first experiment, we asked 201 online participants to choose different models of five types of electronic products (e.g., laptop, microwave oven). For each type of product, there were six models to choose from, each with varying attributes. For example, for each laptop model, we provided information about the processor speed, RAM, storage capacity, battery life, and warranty. The best option was the model with the highest value for these attributes.

We randomly selected half of the participants to view options together. For each product, they viewed the information of all six models together on their screen and then chose one. The other half of the participants viewed the options one at a time — information about the first model was displayed on the first screen, the second model on the next, and so on. Once they viewed all the models for a product, they could go back and forth between screens and choose one. We found that those who viewed options individually chose the best option 75% of the time, while those who viewed options together identified the best product 84% of the time.

In another experiment, we asked 472 online participants to imagine that they owned a restaurant and had to order weekly supplies for five items, such as milk and ketchup. For each product, the person had to choose one of five different suppliers, each quoting a different price

for a given quantity of the product. For example, participants could choose to buy milk from a supplier selling 35 gallons for \$73.50, another selling 29 gallons for \$69.60, and so on. We designed the options such that there was always one supplier that had the lowest price per unit of quantity but people would have to do some calculation to figure out which supplier that was. As in the previous experiment, half of the participants viewed all the suppliers for each product together and made a choice; the other half reviewed one supplier at a time and then made a choice. We found that participants who viewed options one at a time identified the cheapest supplier 55% of the time, whereas those who viewed the information together did so 61% of the time. We found the same pattern of results in another experiment, where we statistically controlled for people's math ability.

Why is it the case that people make better decisions when they view options all together rather than one at a time? One possibility is that with all the information in front of them, people can compare the options more thoroughly and can more easily identify the best option. But when people view options one at a time, they form an overall judgment about each option and then have to go back and compare.

We tested this possibility in another experiment, which employed a setup similar to the previous two but also asked participants to write down the thoughts they had when making their choices. We used a text analysis software called LIWC, which categorizes words into different classes, to analyze their written responses.

Once again we saw that people who viewed options together selected the best one more often than those who viewed options individually. We also found that compared with those who viewed options one at a time, people who viewed options together used more phrases suggesting deep thought (e.g., "I *think* X is more than Y" or "*Hence*, I feel Y is the correct

option"). This finding provides support for our assumption that people compare options more thoroughly when they view them all together.

But people don't always evaluate their options simultaneously. In a separate survey, we asked 211 online participants to recall some past decisions and report whether they generally viewed options together or one at a time. These participants reported that they viewed options sequentially in about half of the decisions they made.

Similarly, companies don't always help consumers look at their options all at once. In analyzing the websites of leading auto manufacturers and life insurance providers, we found that all websites had pages for individual products (allowing people to consider one product at a time), but only some websites allowed people to view multiple products together on the same screen. Most websites had a comparison tool, but it only allowed people to compare options on a few dimensions.

How we appraise and present options might seem to be a trivial matter. But our research indicates that it can have a real impact on the ultimate quality of our decisions.

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