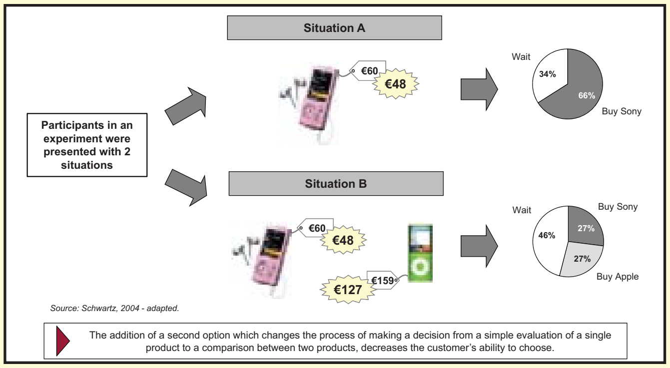
Behavioural Pricing: Rational Marketing for



Are buyers more likely, when presented with a purchasing option, to make a rational or irrational decision? In recent years, behaviourists have supported the former citing the concept of "homoeconomicus", which views buyers as powerful, calculating decision makers. However, in this article, the authors present an alternative view, citing that the real challenge for pricers is to provide incentives to help buyers overcome their inherent irrationality.
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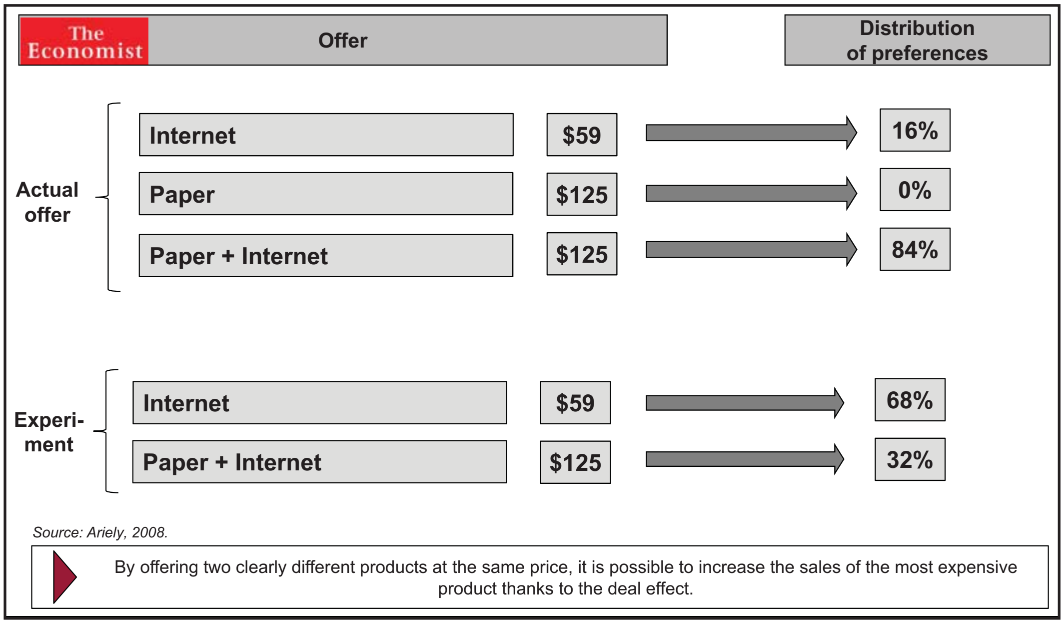
Based on the works of Daniel Kahneman, Amos Tversky and Richard Thaler, one of the main contributions of behavioural economics has been to go beyond the concept of "homo oeconomicus", which views people as powerful, calculating actors able to pursue their goals efficiently and selfishly, led by subjective, consistent and rational preferences. As an alternative to this simplified methodology, behaviourists have developed an anthropological concept closer to the one found in real life. This concept has two main developments. Firstly, it states that the way people perceive and understand reality is highly influenced by heuristics. Heuristics refers to mental strategies, used to simplify and reorganize information to promote problem solving. Secondly, there are psychological mechanisms that push the decision maker towards making predictably irrational choices.

Let's take a closer look at these mechanisms by considering what is known as the deal effect. According to the rational choice theory, under normal market conditions, the sacrifice buyers are willing to make, i.e. the price they are willing to pay, depends on a product's expected value and the expected value of complementary products (spending utility). A product's value is eventually influenced by the alternatives the market provides to avoid paying that price (substitution products) and is limited by the effective economic power to sustain direct and indirect costs (purchasing capability deriving from the balance constraint). Together, these three elements create a certain willingness to pay for a potential buyer. If this willingness exceeds the cost of the product, a purchase is made. Nevertheless, it has been noticed that willingness to pay often has less to do with the product itself and more to do with the context in which it is sold and how it is presented. Herein lies the deal effect which implies that the advantage a product offers depends not only on its quality and features (utility of acquisition), but also on the advantage it offers while keeping in mind the customer's expectations (transaction utility).

Let's consider the following situation. You are on a beach on a summer day and you feel like drinking a beer. A friend of yours, who has to make a call, offers to buy you one at: a) a small rundown grocery store; b) a fantastic tourist resort. What price are you willing to pay for the beer in both situations? If your answer is "the same", you're an exception! In one of his experiments, Thaler (1985) posed the same question to a sample of carefully selected subjects and the outcome demonstrated how willingness to pay varies with the framework. People interviewed named two completely different prices for the two suggested cases. In case a) the average price was $1.50 whereas in case b) it was $2.65. The difference in the willingness to pay for the same beer lies in the idea that a "fair price" depends on the place where it is purchased. It is the product source, i.e. the seller, who influences the price we believe is appropriate. It is not necessarily a difference in terms of "delight in buying" or "eloquence in selling argumentations". In fact, in the given example the people interviewed were not within close proximity to a beautiful shop or speaking with a clever sales person. They were only imagining the place where the beer was sold. The simple thought of a luxury hotel or an old grocery store changes one's expectations on price thereby creating differences in willingness to pay.

Based on this example, it is clear that not only the product or service generate value, but also the situation in which the product is offered. In turn, value is generated not only by the objective experience of the purchase, but also by how the individual visualized this experience. What can companies do to take into consideration this effect and to increase the attractiveness of their offers by exploiting situations and contexts? An interesting example is the one offered by Ariely (2010), a scholar of MIT. Noticing the offer proposed by *The Economist*, in which the annual subscription for the online version of the magazine was sold for $59 while the subscription for the paper edition and the one for both versions together were sold for $125, he decided to test the effect of the same offer without including the disfavoured version, i.e. only the paper edition. The result was that the structure of the offer adopted by *The Economist*, exploiting the deal effect, was able to enhance the sales of the most expensive product, which compared

Figure 1: Deal Effect



to the alternatives, seemed like a deal. In the scenario involving these 3 options, 84% of those asked preferred the package "paper & online". When the package was sold without the only-paper alternative, the percentage decreased to 34%. It is evident that the package's attractiveness was not intrinsic, but more relative. It was determined by its convenience with respect to the paper option. It was not the package which was good, but the paper version on its own which was bad.

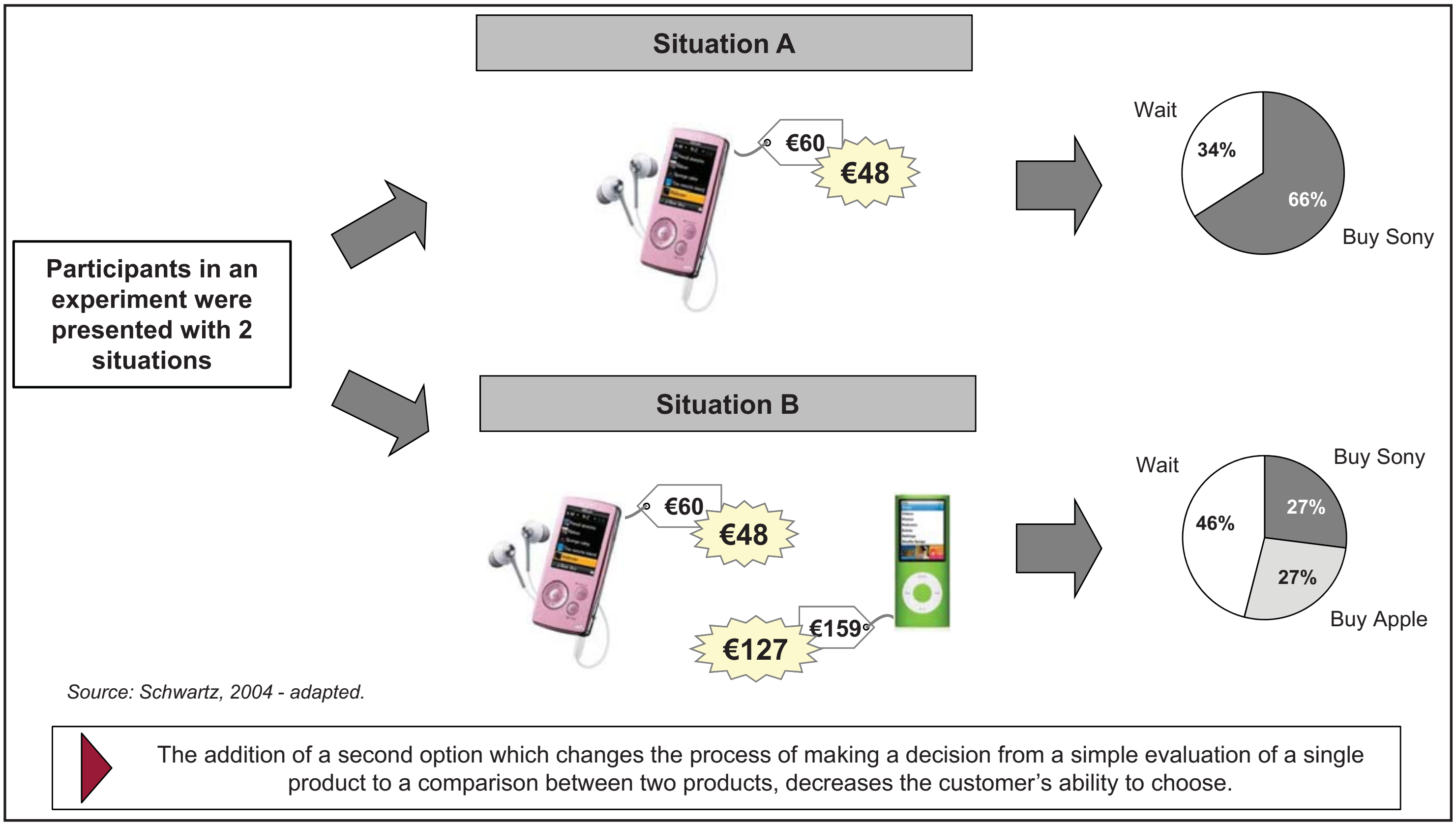
Another effect you can find in many purchasing situations is the so-called separation effect. This states that the split between the moment of payment and the moment of consumption can influence the purchasing decision and/or the level of utilization. This in mind, the classical economic theory assumes that such a time split between payment and use plays a role only in two cases: when the utility of an item today exceeds the utility of that same item tomorrow and/or when a potential buyer foresees a change in the resources at their disposal within the reference period. But often the actual effect of the split of these two moments goes beyond reasonable expectations in terms of possible capitalization or risk related to the goods or to the expected change in the available resources.

Consider for example the case of credit cards. Being able to separate the moment of purchase from the moment of payment appears to increase the level of expenditure to an extent not justified by the fact that payments are delayed on average by a few weeks. What seems more plausible, and can be confirmed empirically, however, is that consumers do not have the same "memory" for purchases paid for immediately i.e. in cash and those paid for later i.e. with a credit card. In this regard, Soman (1997) intercepted 41 students upon their exit from the bookstore of an American campus where they had made a purchase. Students were asked which payment method they had used and to remember how much they spent. When cross-checking the receipts shown by each interviewee, Soman gathered that 12 out of 18 students (66.7%) who paid cash remembered the price they paid accurately, whereas the other 6 underestimated or overestimated the amount by a maximum of $3. Among the students who had paid by credit card instead, only 8 out of 23 (34.8%) could remember the exact amount; the other 15 stated an amount lower than what they actually paid or confessed to having no idea at all. The effect of separating the moment of buying from the one of payment cannot be explained by simply applying a reasonable high-discount function. It is far more realistic that this separation influences the utility function itself, overdrawing the utility coming from consumption and lowering or eventually eliminating the disutility coming from payment.

Concerning the consumer's ability to choose, the economic theory works with the assumption that a consumer is able to evaluate the characteristics of goods and services offered in the market efficiently. A consumer will stop his/her selection process as soon the margin utility expected from their next search is smaller than the expected utility of the product itself. This should be an efficient system to manage complexity and number of the alternatives. Based on this, the theory assumes that having more alternatives means a greater likelihood of finding the most suitable offer – but this is not always the case. In fact, empirical studies have proven that there are cases in which a wide range of choices is more a problem than an opportunity. Often the consumer is not able to choose the most suitable option given the high number of references to evaluate, weigh up and compare, a phenomenon which can be called the paradox of choice. This occurs because the effort needed to make a choice is too great and/or because the many alternatives left on the table create a disappointing sense of regret. The opportunity costs of choosing exceed its expected utility.

Let's look at the Iyengar & Lepper experiment (2000), reported by Barry Schwartz in his book about the psychology of choice (2004). In a gourmet shop, where the researcher had arranged a shop window showing an exotic line of high-quality jams, anyone coming in could taste some samples and would receive $1 off if they bought one. In the first part of the experiment, it was pos-

Figure 2: Paradox of Choice: Might a Second Alternative Affect the Outcome?



sible to taste 6 types of jam, in the second one 24. In both cases all the 24 varieties were available to purchase. The experiment showed that the higher number of jams was able to attract more people, although in both cases people tasted, on average, the same number of jams. Regarding sales, 30% of people who had faced the lower number of displayed testable jams (6), actually bought one, compared to just 3% of those who was allowed to taste the entire set. This type of result can be found in a large number of various selling situations and industries. In the following case for example the number of people intending to buy an MP3 player increased depending on the simplicity of the purchasing choice.

Another mechanism worth mentioning is the endowment effect. The rational economic theory assumes that all out-of-pocket costs can somehow be reformulated in terms of opportunity costs. This means that the costs or sacrifice perceived to acquire a specific object and those stemming from giving up that object should feel the same, but the opposite is true. In fact it seems that often the value we assign to a product that we have to buy tends to be lower than the value we assign to the same product in the moment we own it. In essence, spending for buying seems to be more annoying than cashing in for selling, and losing a product seems to be more annoying than simply not owning it. Kahneman, Knetsch & Thaler (1991) carried out an interesting experiment to verify this hypothesis. A class of students was divided randomly into 2 groups. One group received a mug, the other did not. Next, both groups were asked to negotiate freely with each other a trade of the mugs in order to verify how much the owners of the mug would ask to get rid of it and how much the students without a mug would be willing to pay to obtain one.

As shown in figure 3 on the next page, the experiment demonstrated that the owners of the mug (the sellers) were ready to sell it for $5.25, while those without the mug (the buyers) were not willing to buy it for more than $2.75. Even though the students had not developed any kind of sentimental connection or had even used the mug (the negotiation started only minutes after the mug's allocation), their owning it influenced the perceived value. Again, it is not only the product itself that generated its value for the customer, but also the context and the perspective from which we think about that product.

But how can this be translated in everyday business situations? To explain how this can work, here's an anecdote of what happened to me after my first daughter was born. My wife and I decided to trade in my car for a family model. After first selecting a specific German car, we went to the dealer to acquire some specifics regarding its features and price. Here we were approached by a salesperson (I will call him Mr. Black) who immediately started giving us the technical and functional benefits of the car and then described our dream car. Next he printed out 3 pages of details about the car — item by item, accessory by accessory — and presented us with his analysis.

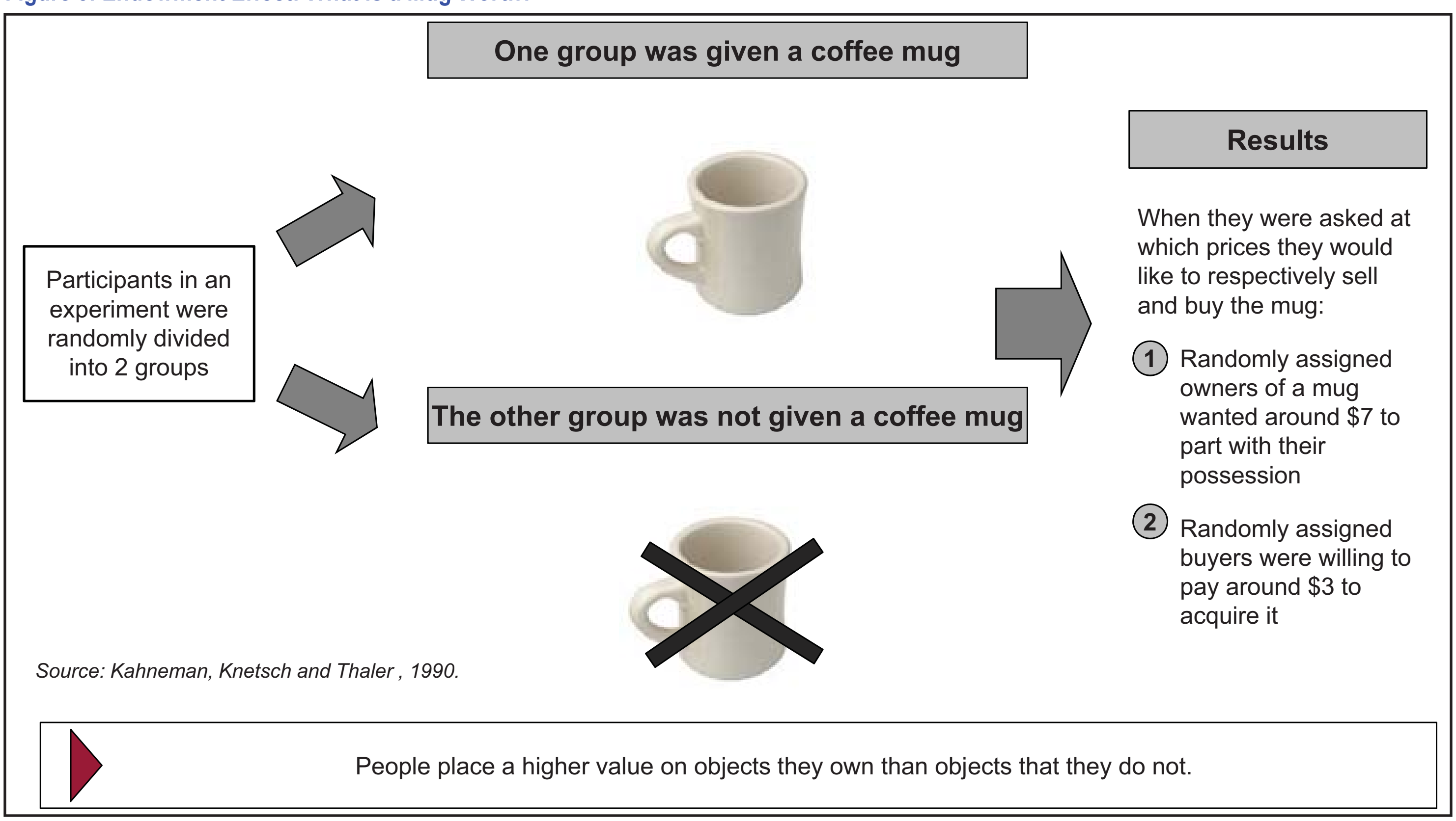
Once we had the papers in our hands, Mr. Black started to explain to us, point by point, what he had included in the package and why these features were important to have. At the end of the process he concluded: "With this configuration the car costs X euros. With our very advantageous leasing offer I can let you have it for a monthly installment of Y euros. The contract lasts 3 years, 20,000 km per year included and a starting payment of Z euros." At this point, in view of my rather shocked expression and the following request for a discount, Mr. Black remained calm and again mentioned the car's exceptional value. But he did so in a very clever way i.e. using (maybe unconsciously) "the endowment effect". He said: "Mr. Trevisan, I understand this is a lot of money. Unfortunately, the discount margins for this model are now minimal, what we can do is guarantee very favourable financing conditions compared with current market offers. And I can definitely bring the price down, but then we have to reconsider the car's configuration. For example, the European navigation system has a list price of X euros, which is equivalent to Y euros in the monthly installment. Would you be willing to give this up?" My answer: "I don't know. Actually I spend a good deal of time driving between countries. At the moment I have a navigation system that forces me to switch DVDs each time I cross a border. It would be easier if I didn't to have to deal with this problem anymore. I think I'm going to keep the European navigator". Mr. Black's reply: "I can see why that could get annoying. Let's consider the leather seats. They have a price and affect the monthly installment very similar to the navigator. Maybe we can give them up." My wife's answer: "I don't think that's a good idea. Our baby plays, her hands get dirty, she drops things; she might feel sick and throw up. You know how children are – having cloth seats means going to great lengths to keep them clean and possibly having a car with stained seats for the next three years."

So, around 30 minutes later the car was configured the same as Mr. Black's original proposal, my discount request was compensated with value propositions that reminded me systematically how badly I wanted the new car, thus succeeding in reinforcing my willingness to pay. The result of the negotiation was actually a best practice scenario of what is classically defined as "value selling", where the value perception was not derived only from a direct rational idea of utility of certain accessories but also from the endowment effect obtained through the car's initial configuration, and the written quote together with the salesperson's calmness and patience.

This example demonstrates an interesting selling strategy for situations in which a series of similar products, with progressively superior quality, are sold, or alternatively for identical products configurable with an increasing range of features and accessories. In these cases, it is advisable to begin by proposing to the client the top-of-the-range product, when possible avoiding mentioning the price or exceeding the maximum expenditure limit in which the client may be interested. The aim is to get the client to develop a feeling of possession towards the product in question as quickly as possible. After this, it will be more difficult for him/her to renounce specific characteristics and enhancements of the premium product, because doing so will no longer be a sort of opportunity cost (if I spend that amount, I could get these additional features), but more a direct cost, far more disagreeable to face (I should renounce these features in order to save money).

There are additional mechanisms to those listed above that show differentiation from what the rational choice theory forecasts. For example, think about how the way a product is registered and organized in our minds (mental accounting) influences our purchasing and saving behaviours, the difficulties we have to behave coherently with our plans (weakness of will), and how we cope with irrelevant information (anchors). To address effectively what the market demands and to anticipate customers' needs, companies have to consider these mechanisms and use them in real commercial situations in order to verify their importance, implement their application and measure their effect. By studying the behavioural mechanisms that rule customers' behaviour, companies can understand how a specific commercial offer can be perceived by each customer, how this perception can be influenced from the other references proposed by the seller (alternative

Figure 3: Endowment Effect: What is a Mug Worth?



products), and how this trend can come together in real buying and consumption decisions to subsequent differences between announced intentions and achieved actions.

There are 2 strategies on which companies could focus: more aggressive marketing, in which companies will leverage on customers' limited rationality to influence their purchasing choices, and more paternalistic marketing in which companies will help customers to overcome their irrationality by developing suitable products, prices and sales strategies. It is, therefore, essential that companies be aware of and utilise this new knowledge to anticipate and/or prevent customers' behaviour which is often difficult to predict. In deciding on their own prices, companies must not only investigate which elements actually create value for the customer, but also in which context and with which information strategy they really do it.

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