## Knowledge for Decision-Makers

## vocatus:

## Behavioral

 PricingWe will show you how to unlock completely new margin potentials and significantly increase your profits in the process. Find out why it pays to finally say goodbye to the idea of the rational customer.

## Behavioral pricing a new approach with new potential

Based on our behavioral pricing model and our empirical research into buying behavior, we regularly and reliably identify the sweet spot through which margins can be significantly increased. Since the year 2000 we have been working with our customers to successfully implement behavioral pricing in hundreds of projects, and in doing so we have helped them to make quantum leaps in terms of margin and profit.

Behavioral economics has been the word on everybody'slips at least since Kahnemann won the Nobel Prize for his work on the topic in 2002. The academic research on behavioral economics has produced huge numbers of studies over more than five decades, highlighting interesting effects that demonstrate how people make predictable decision errors. These research findings are also regularly and enthusiastically cited in discussions on the topic of behavioral pricing.

This includes Ariely's already classic example on the pricing of "The Economist" (see figure 1). Although nobody ever purchased the print-only subscription, buying behavior changes fundamentally when this option is removed from the
portfolio. When the anchor price of the print subscription is removed - which served to make the print and online product combination appear attractive - there is suddenly a significant reduction in the number of customers opting for the combined print and online subscription option, as more

## Behavioral pricing looks at the customer's overall decision-making process.

people decide to subscribe to just the online version instead. This results in a reduction in average revenue per customer from $\$ 114$ to just $\$ 80$, with disastrous consequences for the margin.

Figure 1:
The Economist: Decision-making behavior fundamentally changes when an offer is removed.

## Subscription prices for "The Economist"



However, the majority of discussions become much vaguer and more tenuous when we start to ask where behavioral pricing is already being profitably implemented in reallife companies, and how this can take place systematically beyond the scope of individual, emblematic research examples.

Pricing experts in companies have been racking their brains for years to figure out how they can make profitable use of these fascinating effects. Generally speaking, it is not so easy to transfer an observed effect to one's own immediate sphere of application. To put it simply: the example of "The Economist" is of no help to anybody who needs to set the price of a new painkiller, a mobile phone tariff or a fork-
lift truck today. Irritatingly, customers appear to behave differently towards each product, meaning that effects cannot easily be transferred between sectors and products. What's more, the effects also appear to depend on the way the price is communicated.

For these reasons, Vocatus developed a theoretical model in 2000 that can be used by companies to harness the effects of behavioral pricing in highly specific ways, both in B2C and in B2B settings (Bauer (2000): "The psychology of pricing structures"). Building on this model, we have continuously developed our toolbox for systematically implementing behavioral pricing across many hundreds of projects over the last 15 years.

The majority of companies with more innovative pricing strategies have by now abandoned cost-based and competitionbased pricing. Their approach generally follows that of "valuebased pricing", which is often cited as the "best" approach. However, behavioral pricing goes far beyond value-based pricing, which can no longer be viewed as state-of-the-art today since the only factor it takes into account as a source of price acceptance is the perceived "value".

By contrast, behavioral pricing focuses on the systematic assessment of all sources on which price acceptance is based. This is significantly more extensive in scope than value-based pricing, which only assesses the price acceptance derived from the product itself, and is based on the assumption of a customer who makes completely rational decisions. To go back to the example of The Economist: the customer's willingness to pay is evidently based not only on the product itself, but primarily on the context of the offer - even if this should not play any role from a purely rational perspective. The print-only offer serves as a pricing anchor. However, value-based pricing and its associated methods (such as conjoint analysis or choice

> Unlike value-based pricing, behavioral pricing does not just assess the price acceptance derived from the product itself.

modelling) only assess the price acceptance derived from the features of the product itself, without taking into account the context or any other factors. Yet the product features of the subscription models on offer are identical in both cases. From the perspective of value-based pricing, then, it is impossible to imagine that there would be any difference in price acceptance. This results in valuable margin potentials being overlooked that can be systematically assessed and exploited through behavioral pricing. Nonetheless, behavioral pricing remains a closed book to many companies, as well as to their consultants.

Behavioral pricing is about understanding the real-life purchase decision, the systematic irrationality of the customer (both B2B and B2C), and how price acceptability develops in context and over time. Based on this understanding, the purchase decision can then be influenced in a targeted way in order to benefit the company, and price


People make rational decisions.

## Customers will

 buy more if we offer bigger discounts.Customers know our prices and those of our competitors.

$$
\begin{aligned}
& \text { The more fund- } \\
& \text { tions a product } \\
& \text { has for the same } \\
& \text { price, the better. }
\end{aligned}
$$

Regular increases in price will scare our customers away.

The bigger the selection, the better for
the customer.

Figure 2:
Myths and fallacies concerning the rational customer
acceptance can be constantly increased. This brings us to another key finding of behavioral pricing: namely, that price acceptance does not just exist in the customer's mind, but can be actively increased by companies - and can also be quickly destroyed by applying the wrong measures.

Behavioral pricing is revolutionising perspectives on customers particularly in one key respect: all empirical research into behavioral economics has shown time and again that it is absurd to assume that customers make rational decisions. For most people, this point is intuitively self-evident when applied to their own buying behavior. Hardly anybody would claim that they are in possession of all the available information whenever they make a purchase decision; or that every decision they make is rational. Or perhaps you know how much you paid for your last cappuccino? Did you buy your most recent TV exclusively for rational reasons? Nonetheless, when the very same people take on the role of decision-makers in a company,
they unconsciously assume that their own customers make rational decisions. This dogma is the biggest obstacle on the path towards the systematic implementation of behavioral pricing in companies (see figure 2).

Many companies are confused by the fact that the effects of behavioral pricing do not work in every situation, or cannot be applied directly to every product. Yet this is very easy to explain: people simply do not make decisions in the same way in every situation. Do you base your choice of

## Valuable margin potentials are lost when

 companies continue to assume the existence of rational decision-makers.deodorant on the same criteria you use for buying a new car, picking a new electricity provider or taking out a life insurance policy? Of course not. People make decisions differently depending on the situation, and with good

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reason. As such, the Vocatus behavioral pricing model does not come with pre-defined effects that can simply be hitched on to any product or sector. Behavioral pricing is about developing a detailed understanding of your specific customer's specific decision to buy your particular product. This is why we generally carry out an empirical study in order to analyse this particular purchase decision on a channel-specific basis. And our theoretical model ensures that we actually cover all behavioral pricing effects in the course of this empirical study. This allows us to find the exact sweet spot you need to aim for in order to achieve fabulous margin potentials.

The great thing about behavioral pricing is that we are not talking about invisible, incremental increases in margin of 3.2 or 4.6 per cent. For the majority of our customers we are talking about directly measurable successes, with achievable price increases well into the double figures. This is why we have twice been awarded the international prize for the project with the highest return on investment (in 2012 and 2013). A 9.6 million euro jump in profits or a 70 per cent increase in conversion rate speak for themselves.

Naturally, we were not content merely with the insight that customers do not make decisions rationally. We wanted to know whether there are any recurring patterns in people's buying behavior, even if they do not make rational decisions. In order to develop a well-founded understanding of this issue, we conducted a global study in 2008 that took in numerous industries and has since won multiple awards. After 150,000 interviews in 26 different countries, it became clear that all human purchase decisions in both the personal and professional spheres can be divided into just five different types of decision-maker (see figure 3).

The success of this typology is based on the fact that it makes the apparently irrational behavior of consumers suddenly predictable. None of the five types make decisions in a completely rational way, but each one follows a particular logic. And the price is ultimately only relevant to the decisionmaking process for two of these types: the bargain hunter and the risk avoider.

## Figure 3:

## Five types of decision-maker



## Loyal Buyer

A loyal customer who has a great deal of confidence in the brand and product


## Bargain Hunter

Enjoys searching for and comparing products, and loves discounts, gifts and bonuses


## Risk Avoider

A cautious consumer who is afraid of being cheated


## Price Accepter

Gets excited about products and often spends more than originally planned


## Indifferent Buyer

A low-involvement customer who is uninterested in product and price comparisons

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Figure 4:
When a magazine publisher knows that its target group consists primarily of price accepters and indifferent buyers, it can adapt its strategy accordingly.


One important aspect of this international study was the finding that a single person can follow a different purchasing logic for different products. That means that a person who negotiates the biggest possible discount when buying a car (a bargain hunter) might not care about the price of a magazine (an indifferent buyer), but when it comes to mobile telephony their highest priority could be to avoid being swindled (a risk avoider) (see figure 4).

As such, when we conduct an empirical study within the framework of a behavioral pricing project, we always determine the distribution of the different buyer types within the market in question. This provides some important initial information as to the significance of price in this market. The influence of the price on the purchase decision differs not only from sector to sector in this regard, but is also dependent on the channel involved, among other things.

This can be seen very clearly if we take pharmacies as an example: customers of traditional bricks-and-mortar pharmacies are predominantly loyal buyers ( 42 per cent) and indifferent buyers ( 12 per cent), whereas online pharmacies have a completely different customer structure with bargain hunters making up 60 per cent of their customers. That pharmacists are afraid of online pharmacies and their special offers is, of course, understandable; however it is not a reason to imitate their pricing strategies. If a pharmacist were to try to emulate the discount policy applied by online pharmacies, not only would they misjudge their clientele, but they would also turn price into an issue for their indifferent customers for the first time, and this would ultimately only benefit the online pharmacies. The price-focussed strategy used by online pharmacies may make sense for that particular channel, but it is never a good idea to simply imitate a strategy for a completely different channel.

# Behavioral pricing in practice 


#### Abstract

When people focus on rational decision-makers, they often only think about pricing in terms of the amount charged. In behavioral pricing, however, we consider many other dimensions too. And in our projects we often find that these dimensions contain a great deal more potential than when we concentrate exclusively on the actual amount of the price.


The pricing research methods used today, such as the conjoint technique, still fundamentally assume the validity of the model of the rational customer. After all, only a rational decision-maker would weigh up the alternatives against each other in the way that is simulated in conjoint analysis. But what about customers who do not know the price of the product - let alone the competitors' prices? What about customers who do not even pay any attention to the price?
> "Vocatus‘ approach is based on analytical and pragmatic thinking, and it works brilliantly."


Markus Orth
CEO
L'TUR Tourismus AG

Only when a company has truly understood how and why its customers or its potential customers decide whether or not to buy its products can it start to systematically influence these decisions. To do this, we assess the following factors: price motivation, price knowledge and price assessment.

## Price motivation

Our first step is to analyse how interested the customer actually is in the different product features and the price. The following example shows how price often only plays a subordinate role:

L'TUR is Europe's largest provider of last-minute holidays. Through an empirical analysis of the purchase process we established that even in a price-sensitive market like that for last-minute holidays, fairness is for many customers an even more important decision-making criterion than the price. As such, we developed a search machine in partnership with L'TUR that also shows L'TUR customers their leading competitors‘ prices for the selected holiday - even when L'TUR is the more expensive option.
While this may at first seem paradoxical, it was a resounding success. Customers acknowledged the fairness they perceived, and this allowed L'TUR to increase the number of holidays sold online by $70 \%$. For this project, Vocatus and L'TUR were awarded the 2010 German Prize for the Best Study by the German association of market researchers (BVM).

## Figure 5:

## Price knowledge: Only $32 \%$ of people know how much they pay for their current account.

"How much does your bank charge for your current account each month?"


## Price knowledge

During the next stage, we investigate how much the customer knows about the product features or the actual price.

The example in figure 5 shows that only $32 \%$ of customers are able to say roughly how much they pay for their current account. The remaining customers‘ estimates were either much too high or too low, or they had no idea at all what they currently pay. Astonishingly, this even applies to customers who stated that price was one of their essential decisionmaking criteria for current accounts. This naturally gives the bank a great deal of room for manoeuvre when it comes to pricing structures.

## Price assessment

During the third stage, we analyse how customers assess prices based on situations. In one project that we carried out for the Frankfurter Allgemeine Zeitung, we were able to use the price assessment to achieve significant increases in profit. Previously, price increases at the Frankfurter Allgemeine Zeitung had been based on instinct and tended to be cautious. The project with Vocatus showed that the overwhelming majority of customers were uninterested in the price of their newspapers, or were even unable to say how much they cost. This finding allowed the Frankfurter Allgemeine Zeitung to significantly increase its price without any loss in circulation. The annual profit from sales revenues grew by 9.6 million euros as a result. For this project, Vocatus and the Frankfurter Allgemeine Zeitung won the 2012 global award for the project with the highest return on investment.

> "Vocatus helped us to recognise our price potential in the reader market and to utilise this optimally without running any unnecessary risks."

Tobias Trevisan, 2014
Managing Director of the Frankfurter Allgemeine
Zeitung

Figure 6:

## Pricing structure: The same vehicle is perceived as more or less expensive based only on variations in pricing structure.




Once we have thoroughly determined whether the price has any influence on the purchase decision and if so, to what extent and in what phase of the purchase it is relevant, we turn to the price itself. Here too, many companies take far too narrow an approach to the range of different courses of action, and concentrate exclusively on the amount of the price when determining their pricing strategy. Yet our projects show that the pricing structure, price dynamics and price communication are often much more important to the purchase decision than the absolute amount of the price.

## Pricing structure

The same product can appear more or less expensive to the customer depending on the pricing structure, even when the overall price is identical. In a project for a car manufacturer, we were able to empirically demonstrate that the exact same vehicle was perceived by customers as significantly lower in
price when the pricing structure was optimised based on the logic of behavioral pricing (see figure 6).

## Price dynamics

Price dynamics refers to all changes to the price over time - from constant price increases or reductions to discount management and special offers. It has become clear that discounts do not necessarily have a positive effect on buying behavior. In a project for a large insurance company, we empirically showed the influence of discounts on the purchase decision. The astonishing result: customers who asked for a discount and did not get one actually had a slightly higher completion rate than those that asked for a discount and received one. So much for the rational customer.

## Price communication

In our projects, we often find that the real barrier to purchase
for customers is not the amount of the price, but the way in which it is communicated. This goes right back to the choice of name for the product: the same product can achieve higher price acceptability if it is named "A300" instead of "A200" (for example) and achieves a different subjective position in the product portfolio as a result.

Behavioral pricing thus looks not just at the price assessment, but also analyses a range of different dimensions and factors. In this way, we have been able to implement direct or indirect double-digit percentage price rises in over 100 projects for our customers without impacting on sales volumes. And by the way, please remember that a $10 \%$ price increase with an assumed margin of $5 \%$ corresponds to a $200 \%$ increase in profit. With figures like these it quickly becomes clear why companies for whom Vocatus carries out even complex empirical projects on behavioral pricing find that it often pays for itself within just a few days.

The first stage in our behavioral pricing projects is to empirically assess and analyse the consumers' purchase decision. The key to success here is our highly extensive
theoretical model on the one hand, and our empirical approach on the other. This allows us to ensure that the empirical study sheds light on absolutely every aspect of buying behavior, so that the maximum leverage for influencing purchase decisions can be unlocked.
During the second stage, which we call "behavioral reengineering", we systematically break down the business model into its constituent parts and reassemble it from a behavioral economic perspective. However, behavioral pricing covers not just the formal definition of the pricing strategy, but also has similarly clear implications for its implementation in practice ("behavioral selling"). This relates consistently to price implementation at all levels between customers and retailers as well as between retailers and manufacturers. Behavioral pricing thus creates a new foundation for optimising incentive or condition systems, or for providing the sales team with clear recommendations for action with the help of battle cards.

Yet it is not necessary to examine the entire business model during the very first project. Behavioral pricing is also very suited to initial implementation as a pilot project in a clearly delimited subsection of the organisation.

"Vocatus is an excellent sparring partner for innovative ideas and never loses sight of the essential issues, even during complex projects."

Christoph Vilanek, CEO of freenet AG

## "The irrational customer"

The world of behavioral pricing seems complex and unstructured at first.

Our book "The irrational customer" (Bauer/Koth 2014) provides a simple and practical explanation of behavioral pricing - from its theoretical principles to concrete examples and case studies.


# Quantifiable success through a pilot project 

Behavioral pricing brings about fundamental changes in company strategy - so it's understandable that it comes up against resistance. A pilot project on behavioral pricing is the perfect solution, as it quickly provides tangible results and lays initial suspicions to rest through improvements in margin.

For a large company based until recently in the traditional world of cost-based or competition-based pricing, it would be unthinkable to reorient the entire company towards behavioral pricing overnight, and this would come up

## Launch your own pilot project on behavioral

 pricing now.against a high level of internal resistance. That's why we typically demonstrate the power of behavioral pricing to our customers by means of a pilot project. Our projects generally achieve a return on investment in just a few days or weeks, as behavioral pricing achieves not just small optimisations measured in single-digit percentage figures,
but genuine quantum leaps in a short space of time. The immediately quantifiable and demonstrable success that we can achieve by means of a bottom-up pilot project then allows companies to generate the openness to change that is required for the wider implementation of behavioral pricing across the organisation.

Behavioral pricing can serve as a strategic foundation for the overall pricing strategy, or it can be used on a partial basis for individual products and areas. We guide companies not just through the creation of a new pricing strategy, but also through its step-by-step implementation. After all, even the best behavioral pricing strategy can only achieve the desired effect on the company's overall results once it has actually been implemented.

## Get in touch with us now:

## Dr. Florian Bauer



Dr. Florian Bauer studied psychology and economics at the TU Darmstadt, MIT and Harvard, and has been researching decision-making behavior and applying behavioral economics in companies for over 25 years. He is one of the founders of Vocatus and sits on its executive board.

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He has published several international economics bestsellers on the topic of new customer strategies. He is also the President of the International Research Institutes (IRIS) and promotes the development of new methods based on international studies.

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## vocatus:

Vocatus is an international and innovative market research and consultancy firm that specialises in decision analysis, price optimisation, customer satisfaction and employee commitment. In all projects, the main focus is always on problem-oriented solutions, concrete recommendations and the efficient implementation of results.

Vocatus has won multiple international awards for its innovative studies and practically oriented concepts.
Vocatus is an active member of the Association of German Market and Social Researchers (BVM) and the European Society for Opinion and Marketing Research (ESOMAR).

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## vocatus:

offers you regular updates on current trends, innovative methods and relevant findings for decision-makers.

