

# PRICING BEYOND THE 'HOMO OECONOMICUS'

## EXPENSIVE MISTAKES AND PROFITABLE OPPORTUNITIES IN PRICING RESEARCH

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### INTRODUCTION

It's undoubtedly paradoxical that when German dairy farmers protested in front of bottling plants and chain stores in 2008 and demanded higher prices for producers, the majority of consumers were right behind them, even though this solidarity meant that they would ultimately have to pay more for their milk. Some dairies are nowadays even using the fact that their product is, for example, 10 cents dearer to conduct successful advertising campaigns, whilst naturally reassuring people that this money goes straight to the farmers (see figure 1).

**FIGURE 1**  
**PRICE MOTIVATION CAN BE DIVERSE –**  
**MORE DIVERSE THAN THE ASSUMPTION OF A “HOMO OECONOMICUS” WOULD SUGGEST**



Price motivation can be diverse – it can even make sense to use price increases to advertise

**Support local producers!**  
**An extra 10 cents go to German agriculture**

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At roughly the same time, similar price increases in the German energy sector (be it gas or electricity) were causing feelings to run high. There was considerable disquiet, with people even talking of being 'ripped off'.

So whereas people in the one case voluntarily and knowingly accepted a significant price increase and even "welcomed" it as being fair, they were virtually apoplectic with rage about the price of a different product being increased. How can this be reconciled? From the perspective of classic pricing management, it is totally incomprehensible since in this context everybody is assumed to equally share the motivation of a homo oeconomicus who simply wants to pay as little as possible for the best possible product or service – especially when it comes to commodity products like milk or energy.

People may not decide rationally, but they don't decide in a totally erratic manner either. Instead, they make predictable errors – particularly when dealing with price. The challenge for pricing research is to decode this "psycho-logic" of consumer choice. Pricing research has to understand the role of price throughout the decision process without prematurely falling back on unrealistic assumptions resulting from a normative and rational consumer model. But this is precisely the problem of all classic pricing research tools, from price sensitivity meter (PSM) through to conjoint analyses (CA): however familiar and popular they might be, they're totally unsuited to recognising the price potentials that are hidden behind the myth of the "rational consumer".

This is even more critical as price optimisation is the most efficient lever to maximize profits: if Fortune Global 500 companies had been able to realise only a 1% price increase in 2008, their profits would have been boosted by 103%! At the same time, studies have shown that managers regard pricing decisions as their most difficult task – especially in times of economic turbulence. Finally, this is the only area in market research where respondents have an inherent motivation to systematically distort their responses. Given this background, this paper tackles the way in which our conventional pricing tools have to be re-invented to better meet this growing need for more valid pricing research.

### THE TRINITY OF EMOTION, COGNITION, AND BEHAVIOUR ('PSYCHOLOGICAL PRICE PROFILE')

In order to successfully optimise pricing, one has to understand the emotional and motivational level: what price motivation predominates in a given situation for a given product or service (e.g. price fairness: the increased price of milk vs. the increased price of energy)? However, the cognitive level also has a crucial role to play. Here it's about issues such as: to what extent are consumers actually aware of prices (price knowledge)? How important are they to them (price interest)? And finally: how much are they willing to pay (price acceptance)?

For example, depending on how one frames the questions about individual willingness to pay, totally different results will be obtained. Assume, for example, a face cream costs €40 today. When asked about their absolute price acceptance, consumers may be willing to pay €50 for it, i.e. €10 more, since it is only when this amount is reached that a noteworthy price threshold becomes apparent e.g. in a PSM analysis. However, companies should treat this response with considerable caution. If one had instead asked the same consumers what absolute price increase they'd accept, the consensus increase may well be only around €2. By contrast, they would probably accept a 10% (i.e. €4) increase if they had instead been asked what relative price increase they would accept. This demonstrates how contradictory consumers' responses can be, depending on how the question is asked. However, pricing researchers must understand

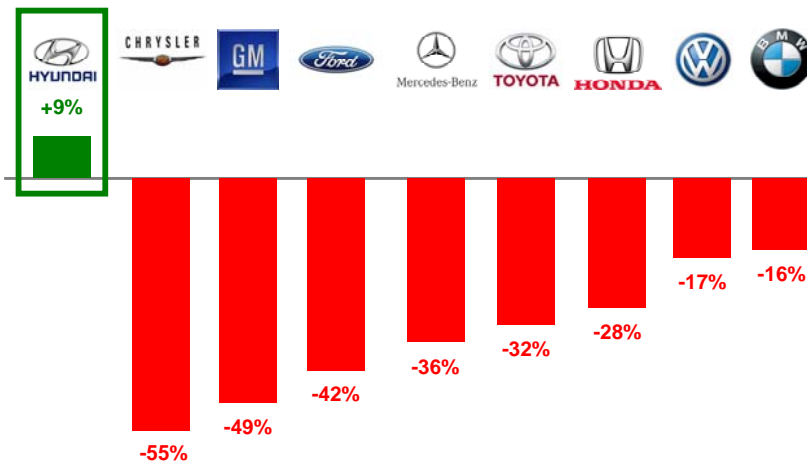
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this puzzling variety of perspectives and not rely upon indications of the absolute price that people would be willing to pay.

As a third level, pricing researchers must also understand behavioural aspects. Depending on the situation and Point of Sale, consumers demonstrate quite different decision strategies and heuristics. If pricing research tools and designs are not sensitive to capturing the real decision-making process, but instead assume the rational choice behaviour of the homo oeconomicus, expensive pricing mistakes are unavoidable: particularly during last year’s economic crisis, US car manufacturers reacted with drastic additional discounts based on the logic of the economics textbook, namely that if the economy goes down, then price sensitivity goes up. Only one manufacturer in the United States obviously questioned this assumption. When analysing consumers’ decision processes, one finds that people become reluctant to lease cars in an economic crisis – not because their price sensitivity has become more acute, but because they fear they might not be able to meet their payments if they lose their job in the coming year. If this is the reason for their reluctance to acquire a new car, then discounts will not be an appropriate pricing strategy since they would not only fail to resolve the consumer’s issue, but would also lastingly undermine the price level. Instead of a discount, Hyundai added an insurance package to every car leasing deal. This insurance covered the cost of returning the car if consumers lost their jobs within a year of purchase. This smart pricing strategy based on a better understanding of real consumers’ decision processes instead of textbook assumptions was indeed much more successful than other manufacturers’ discount strategies: whilst others significantly lost volume (up to -55%), Hyundai grew (+9%) in the same year (see figure 2). Incidentally, this effect remains stable even if corrected to allow for potential differences in price level or mileage, which points to the differentiating power of alternative pricing strategies.

**FIGURE 2**  
**IT’S VITAL TO UNDERSTAND THE REAL DECISION-MAKING PROCESS**

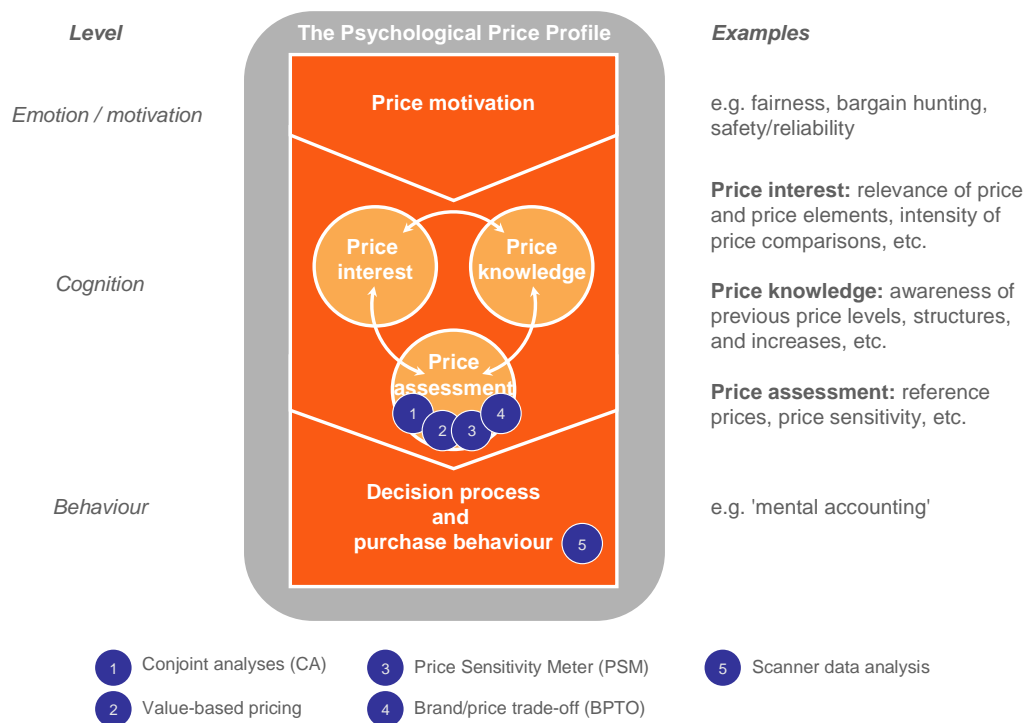
**Understanding consumer’s decision process will provide new pricing options beyond simply giving discounts**



US Car Sales (Jan 2009 vs. Jan 2008)  
 Source: www.autoincar.com

What this means for the optimal pricing strategy is that the entire ‘Psychological Price Profile’ has to be decoded – from price motivation via the cognitive aspects of price interest, price knowledge, and price assessment right through to the actual decision process and purchase behaviour (see figure 3). Nevertheless, classic pricing research methods all have blind spots rather than providing insights into the ‘Psychological Price Profile’. The most prominent research tools exclusively focus on price assessment whilst relegating every other aspect. In fact, none of the tools tackle price motivation, price knowledge, or price interest in an appropriate way.

**FIGURE 3**  
**THE PSYCHOLOGICAL PRICE PROFILE DESCRIBES EVERY FACET REQUIRED FOR A SOUNDLY BASED PRICING STRATEGY – CLASSIC PRICING TOOLS FAIL TO COVER EVERY RELEVANT ASPECT**



**New insights into pricing psychology**

After countless price optimisation projects based upon the ‘Psychological Price Profile’, we now wanted to go one step further: we wanted to see whether its constructs would allow us to identify customer segments that differ in how they deal with price during the decision process. In order to do this, we recently conducted an international empirical study where we used the ‘Psychological Price Profile’ to systematically investigate the qualitative differences. We surveyed more than 7500 consumers in 16 countries across the globe (from Canada to China, and from Ireland to Australia) about their price-related decision behaviour in

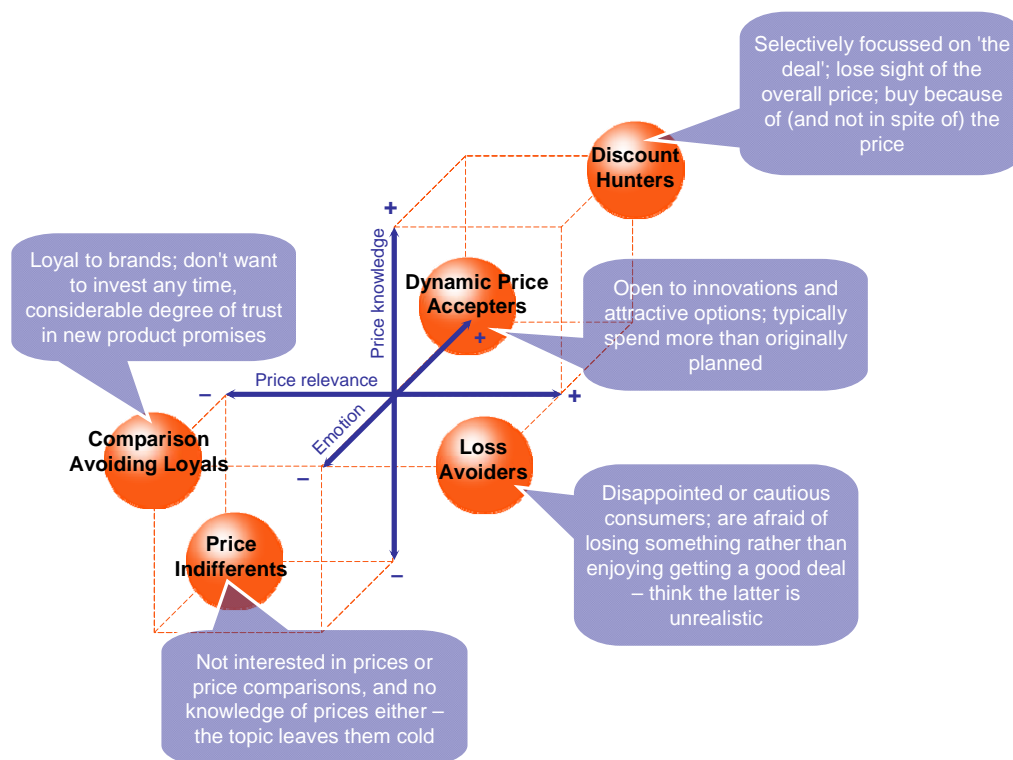
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ten product categories and six sectors (from cars to drinks, and from mobile telecommunications to flights). Each respondent was screened with regard to purchase experiences in one of these categories, and was then interviewed with regard to a specific purchase if it had occurred very recently.

The questionnaire included every conceivable price construct embraced by the 'Psychological Price Profile' in respect to the given purchase decision as well as people's general financial and sociodemographic background. The resulting data was analysed for specific countries as well as for every country combined, and for specific products as well as combinations of products. In order to achieve this, factor, cluster, and discriminant analyses were conducted in various iterations in order to discover a decision typology that was as distinctive as possible yet at the same time exhaustive. The outcome was five totally different decision strategies in relation to price that can be found equally in every country we investigated and every sector we examined – although their incidence is totally different. Taking our cue from the 'Grand International Pricing Study', we christened these five segments as 'GRIPS types'.

The five consumer types can be shown in a space that is determined by three dimensions: price knowledge, price interest, and the emotional attitude towards the purchase decision. This emotional attitude can range from openness and pleasure when finding and comparing new offers to indifference and even fear, mistrust, or total reluctance to undergo a conscious decision process or change habitual buying patterns (see figure 4).

**FIGURE 4**  
**GRIPS – THE PRICE-RELATED CONSUMER TYPOLOGY**



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These five stable consumer types immediately prove two things: firstly, consumers are not identical when it comes to their attitude towards price; secondly, none of the types we found even remotely resembled the homo oeconomicus.

**Five different consumer types and their decision strategies ('GRIPS')**

The best-known consumer type is undoubtedly the *Discount Hunter*. As the name suggests, they are primarily interested in attractive discounts, so they make in-depth comparisons and want to be 'successful' consumers who are better at shopping than others. They focus excessively on price and occasionally enjoy buying products because of, and not in spite of, the price. Thus, for example, they fly to cities they never wanted to go to simply because the €9.90 flight seemed like a bargain. In the heat of battle they tend to overlook the fact that this price inclusive of fees and charges is ultimately much higher. Despite everything, the *Discount Hunter* isn't purely a cheapskate: they buy at every price level and are quality-oriented too – the only thing that's important to them is getting a good deal.

*Loss Avoiders* likewise pay considerable attention to the price – although their interest in it stems from a totally different motivation and perspective. Whereas *Discount Hunters* derive pleasure and satisfaction from their purchases, *Loss Avoiders* are likelier to associate negative emotions with shopping. Maybe due to earlier bad experiences, they tend to be mistrustful and want at all costs to avoid falling for a supposed bargain where they are nonetheless ultimately ripped off. For this reason they also dislike lurid price-related advertising that's likelier to spark their mistrust than their interest. In addition to the price level, *Loss Avoiders* mainly pay attention to other factors that engender confidence, such as straightforward pricing structures or maximum price guarantees. One can picture a mobile telecoms customer who, given the complexity and multitude of different tariff options, has given up trying to find the best tariff for their call pattern. They may adopt another decision strategy whereby they try to find a tariff where the risk of being ripped off is minimized, instead of hoping to find the 'absolute' best tariff.

Price plays a totally different and much less important role for *Comparison Avoiding Loyals*. They aren't especially interested in discounts, intensive bargaining, or long-winded decisions. Instead, they simply want to buy what they know and trust. They are highly brand-loyal and rarely take a closer look at prices. They may always grab the same brand of washing powder, totally ignoring the price at the shelf or the checkout. If they accidentally notice the price and are surprised how high it is, they may even buy a smaller pack size instead of switching brands.

By contrast, *Dynamic Price Accepters* act out of genuine conviction. Quality, brand, and image also matter to them, but they are far more open in terms of their relevant set: once they're convinced by a product, they're quite easily persuaded to spend significantly more than they initially wanted to. Whereas *Comparison Avoiding Loyals* deliberately restrict their relevant set to familiar brands, *Dynamic Price Accepters* often look for things that are new and innovative. One may picture someone who's buying a new premium car: there might have been an initial budget at €30000, but this is easily exceeded once the soft leather has been stroked and the fancy navigation system has been admired.

*Price Indifferents* in turn make decisions in a completely different way. They aren't interested in prices or price comparisons, and sometimes not even in a product's USPs either – all of this might leave them cold. Instead, they seek a solution for a certain need without devoting too much attention to the purchase

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decision. Nevertheless, it wouldn't always be accurate to see this as pronounced reluctance to consume. There just happen to be products, situations, and people where it's rare to pay attention to the price.

If one now looks at *Discount Hunters* and *Loss Avoiders* for example, one may ask: "If both of them are equally interested in prices, what is the additional value of this typology?". This question is best answered by looking at a concrete example: Figure 5 shows Orange's "Optima" mobile telecoms tariff in Switzerland. This tariff especially targets "*Loss Avoiders*" while largely ignoring "*Discount Hunters*": it actually comprises five sub-tariffs, and guarantees that each customer is individually assigned to the best sub-tariff on a monthly basis. Whilst this offer perfectly targets the *Loss Avoider's* 'price fairness' motivation, it takes no account of the *Discount Hunter's* need for perfect cost control, since one's actual tariff might change from month to month, thereby making tariff comparisons pretty complicated.

**FIGURE 5**  
**ORANGE OPTIMA - SPECIFICALLY TARGETING LOSS AVOIDERS**

	Optima 30	Optima 100	Optima 200	Optima 400	Optima 600	Optima 1200
<b>Incl. minutes</b>	30	100	200	400	600	1200
<b>Monthly charge</b>	25.-	42.-	78.-	128.-	173.-	333.-

Source: www.orange.ch

Just by looking at this one example, it already becomes obvious that this new pricing research perspective enjoys considerable practical relevance.

**Interdependencies of pricing and purchase behaviour**
















Whether a consumer decides in one way or another isn't a matter of character; instead, it depends on the product in question and sometimes on the Point of Sale too. Thus consumers may normally buy their potato crisps from a discounter where they pay considerable attention to prices and offers. However, if it's late in the evening and they've unexpectedly exhausted their supply or get the munchies, they're more than willing to pay twice or three times as much at a petrol station for exactly the same bag of crisps without ever having seen the price.

The fact that the product, the brand, or even the sales channel influence which decision strategy a certain consumer follows is not only demonstrated by the varying distribution of consumer types within the individual sectors, but also by a critical look at one's own purchase behaviour: cars are bought in a different way to mobile telecoms contracts or detergents (see figure 6). Whereas in the first case many people would perhaps tend to decide like a *Dynamic Price Acceptor*, they often act like *Loss Avoiders* when it comes to mobile telecoms contracts, and in the case of detergents they are, for example, *Comparison Avoiding Loyals*. Incidentally, this differentiation is continued at the level of different brands in a given sector: depending on

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the pricing strategy, different providers do in fact attract a totally different consumer profile in terms of the GRIPS distribution in the customer base

**FIGURE 6**  
**EXAMPLES OF HOW THE GRIPS TYPES ARE DISTRIBUTED IN DIFFERENT SECTORS**

	<b>Discount Hunters</b>	<b>Dynamic Price Accepters</b>	<b>Loss Avoiders</b>	<b>Comparison Avoiding Loyals</b>	<b>Price Indifferents</b>
<b>New cars</b>	 51.5	 20.0	 13.8	 10.8	 3.9
<b>Mobile telecoms contracts</b>	 22.5	 7.3	 36.3	 26.3	 7.6
<b>Magazines</b>	 10.8	 37.4	 2.3	 14.9	 34.2

The hybrid consumer thus tends to be the rule rather than the exception. If one ignores this and uses classic pricing research tools that fail to record the relevant dimensions in order to finally detect the different consumer types and pricing strategies, this will eventually lead to wrong recommendations and suboptimal pricing strategies. Pricing research has to start by understanding the decision process, and not by assuming that it will be rational and that the only thing we need to question is price assessment and the resulting willingness to pay. Pricing is too important to be left to inappropriate tools, no matter how popular they are.

One further important insight can be drawn from the study: people adapt their decision behaviour to the pricing strategies that are commonly encountered in the individual sectors. It's an unfortunate fact that one can, for example, easily change an initially low interest in prices by running campaigns that are excessively price-oriented. The company's strong belief in the homo oeconomicus and the resulting price-oriented marketing campaign will thus eventually make consumers more price-interested: if consumers realise that they'll be offered significant discounts in any car dealership as early as the initial discussion (and without asking for them), even those amongst them who are the least interested in prices will sooner or later become *Discount Hunters*. So it's no surprise that *Discount Hunters* are encountered around five times more often in the automobile market than in markets that deal in a far more cautious way with the topic of price. The fact that a certain consumer follows a certain decision strategy vis-à-vis a certain product is as much the result of individual preferences as it is of the industry's marketing strategies. Highly price-sensitive consumers may well be the effect of an aggressive pricing strategy rather than the reason for it. Price sensitivity can therefore not only be measured - it can be managed. Companies are by no means simply the innocent victims of consumers' willingness to pay; they are agents that influence it in a much broader sense than is typically recognised.

Yet it's particularly tragic that aggressive pricing strategies frequently don't even lead to the desired result. For example, if one looks at the Austrian mobile telecoms market, its prices are some of the lowest in Europe. A price war initially started because of the providers' shared conviction that every consumer is best thought of as behaving like a rational homo oeconomicus, thus making the tariff level the core focus of

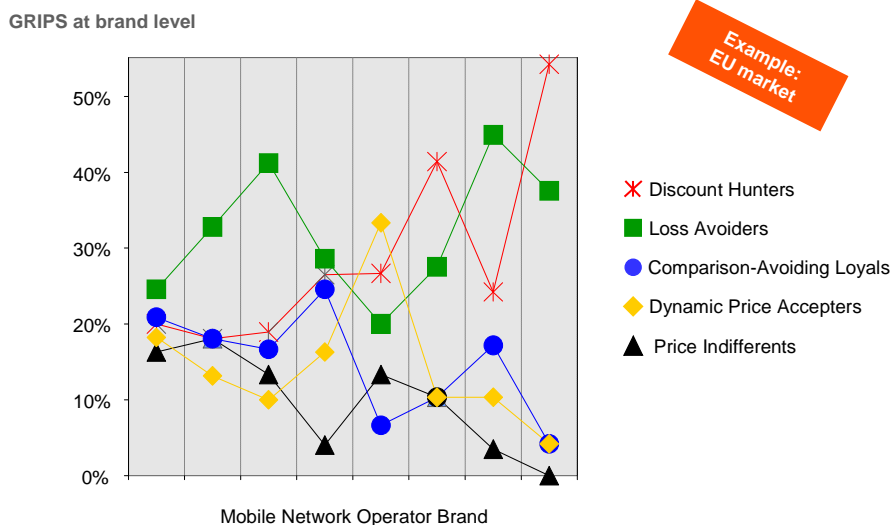
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marketing. This conviction must lead to a price war, and this price war will in turn lead to higher price interest and sensitivity on the part of consumers, since all they ever hear is “price, price, price”. However, today’s Austrian mobile telecoms customers are neither more satisfied with prices nor more loyal than people in other countries. On the contrary: providers’ ‘tariff tricks’, which become necessary when prices are so low, have led to extreme mistrust, a much increased interest in prices, and a high churn rate. The consequence is that prices are at rock bottom, and the sector’s reputation and customer retention have suffered a similar fate. By contrast, it’s quite a different story in high-priced neighbouring Switzerland – not least of all because providers there have never let themselves in for such a relentless price war, but instead have tended to additionally gear themselves towards consumers’ other potential price motivations, such as fairness, reliability, and transparent costs (cf. Figure 5 and Orange’s Optima tariff).

But GRIPS not only highlights differences across sectors: this price-focused consumer typology also clearly differentiates between different brands within one industry. As one can see from the example in figure 7, different mobile network operators do in fact attract quite different GRIPS customer types on the basis of their individual product and pricing strategy. This again means that different pricing levers are decisive for different brands, and different customers are more or less easy to acquire from the perspective of a certain brand. It is thus obvious that different operators have to be analysed with respect to their mutual competitive proximity. In the end, each brand’s “pricing fingerprint” strongly differentiates beyond the mere price level alone, and this widens the strategic marketing and pricing perspective to include other options besides the alternatives of either fostering or avoiding a price war.

**FIGURE 7**  
**EXAMPLES OF HOW THE GRIPS TYPES ARE DISTRIBUTED ACROSS BRANDS WITHIN A GIVEN SECTOR**

**‘GRIPS’ also reflects market conditions and the distinctive pricing and product strategies of individual brands**



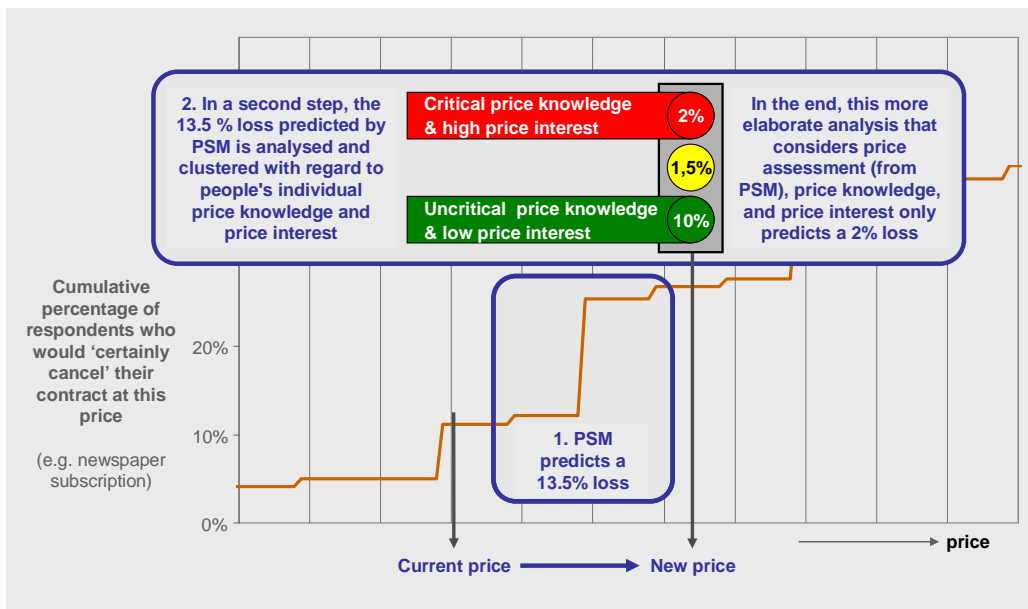
**The implications for pricing research and pricing strategies**

Understanding the 'Psychological Price Profile' and the resulting GRIPS typology duly holds the key if one wants to intelligently stimulate consumption and develop sustainable and profitable pricing strategies. This new perspective on pricing requires significant changes in the way we conduct pricing research or develop pricing strategies:

1. Pricing research: it became obvious that pricing research is more than simply measuring willingness to pay. We need to capture every relevant aspect of the 'Psychological Price Profile' in order to deduce better recommendations. Nevertheless, our classic tools have hitherto only measured price assessment. This is problematic, but luckily it can be resolved: for example, if we use PSM, the analysis of price thresholds can pretty easily be substantiated if we take a closer look at those respondents who indicate that they do not want to pay a price above a certain threshold. For example, figure 8 shows a simplified version of this more elaborate analysis that not only considers price assessment (classic PSM), but also price knowledge (what people know about the actual price they are paying) and price interest (how important price is in the context of other attributes). This does in fact deliver more valid predictions by correcting notorious overestimates of price sensitivity that are caused by classic price assessment tools such as PSM. We have been able to validate this methodological enhancement in well over 50 pricing studies.

**FIGURE 8**  
**SIMPLIFIED EXAMPLE OF AN ANALYSIS COMBINING PSM WITH RESULTS REGARDING PRICE KNOWLEDGE AND PRICE INTEREST**

**Classic PSM would predict a 13.5% loss at the new price level; an enhanced analysis combining price interest, knowledge, and assessment more validly\* predicts only 2% loss if the price is increased to the new level**



\* These predictions have been validated in over 50 studies

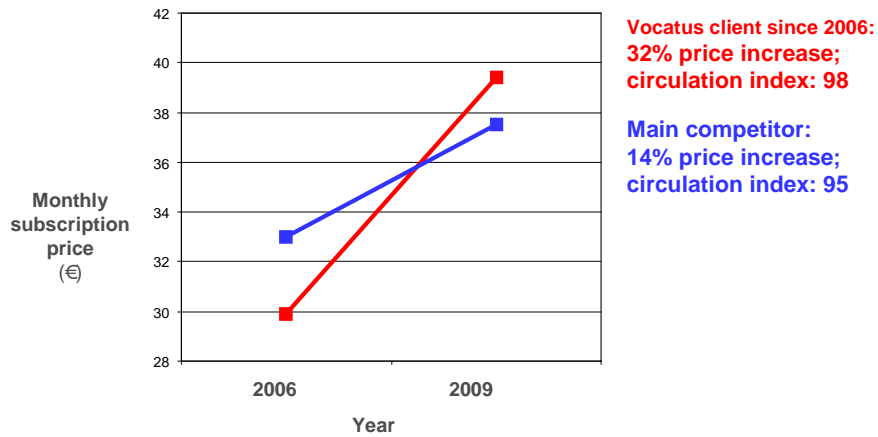
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With this rather simple methodological amendment we were for example able to help a client (a national newspaper) to identify price and margin potentials far beyond their traditionally implemented annual price increases. In fact, we supported this client in identifying and managing a 32% price increase within three years without losing circulation. The client’s main competitor was only able to implement a 14% price increase in the same time period – presumably relying on standard pricing research tools (see figure 9).

**FIGURE 9**  
**THE OUTCOME OF A MORE ELABORATE APPROACH:**  
**IDENTIFICATION OF PRICE POTENTIALS FAR BEYOND NORMAL EXPECTATIONS**

**The ‘true’ price acceptance was found with this amended version of PSM identifying significant additional price increase potentials**

Case Study – nationwide newspaper



Hence classic tools can be amended to combine their advantages with a more holistic and realistic view of customers’ reactions to prices. This is also the case for conjoint analysis, which is sometimes thought to be “the pricing research tool of choice”: the modelling of partial utilities can easily be combined with an analysis of the GRIPS consumer types where individual sensitivities are moderated on the basis of which consumer type a certain respondent belongs to – similar in notion to the amended PSM approach described above. By using just a few items, this typology can be included in any questionnaire – a small amount of extra effort that can save one from wrong (and expensive) decisions. Conjoint analyses would thereby be broadened in scope to reflect the impact of every aspect of the ‘Psychological Price Profile’, but one would still have the practical conjoint “output” format that allows for intensive modelling and simulations.

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2. Pricing strategies: in the same way, pricing is more than merely defining price points. The many examples above have shown that pricing is more than a price list: much of it is about price communication and the definition of the channel strategy. Whilst classic pricing research will at best only deliver optimal price points, understanding the 'Psychological Price Profile' and the GRIPS consumer types will by contrast also help to find the right marketing, communication, and sales strategy, based on an understanding of why consumers have a certain 'willingness to pay' and how they deal with prices throughout the decision-making process (cf. the implications of the example in figure 7).

These conclusions become even more important in times of economic turbulence, since the most aggressive warrior on the battlefields of major price wars is not the real-life consumer, but a tenacious spectre that is unfortunately found in every textbook: the homo oeconomicus. We as market researchers have to be very careful to avoid our own research approaches being implicitly guided by such a plausible yet mistaken model of consumer choice.

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