

GfK

Marketing

Intelligence

Review



# MARKETING *meets* PRODUCT DESIGN

Strategically Integrated Design

Design for Affect

Design and Self Affirmation

Predicting Design Preferences

Form and Function

Design and Iconic Brands

Designing the User Experience



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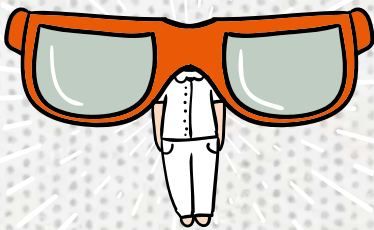
accessible, relevant insights  
from academic marketing research, to further  
marketing management without  
having to study long and  
hard to understand original papers



insights on how modern  
marketing research techniques can support  
marketing management

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Readers of GfK MIR  
have their fingers right on the pulse  
of marketing science.



# Editorial



A world without product design is unthinkable. A near infinite number of objects we encounter every day – the alarm clock that wakes us in the morning, the shower head that revives us, the clothes we put on, the knife we use to butter our toast – were all developed by a designer. Whether created specifically with aesthetics in mind or not, every object created by the human hand has a certain visual appearance and was therefore designed.

From an aesthetic perspective, a product's design can be either appealing or unappealing. Beyond this, the corporate perspective also wants to know if there is a connection between a product's aesthetic and its market success. The current issue deals with this and other questions at the intersection of design and marketing. And let's anticipate the gist of this issue: In order to reach its full potential, a product's design not only has to be aesthetically pleasing but it also has to match its brand. The bad news: This is easier said than done. Effective design has to be integrated into the development process early on and not simply tacked on at the end as a cosmetic consideration. The good news: Design can go above and beyond the mere pleasant sensory experience it provides. For customers, design furthers emotional connections. It raises the consumer's self-confidence and can even influence how customers assess the performance of certain features.

We wish you happy reading! May you have many epiphanies in the exciting new world of product design.

Sincerely,  
Jan R. Landwehr and Andreas Herrmann

*Editoren*

Handwritten signatures of Jan Landwehr and Andreas Herrmann. The signature of Jan Landwehr is on the left, and the signature of Andreas Herrmann is on the right. Both are written in a cursive, handwritten style.

Frankfurt, July 2015

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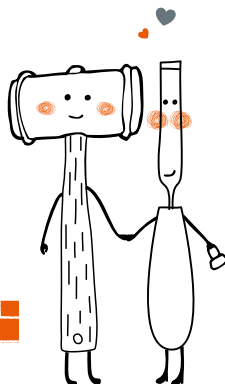
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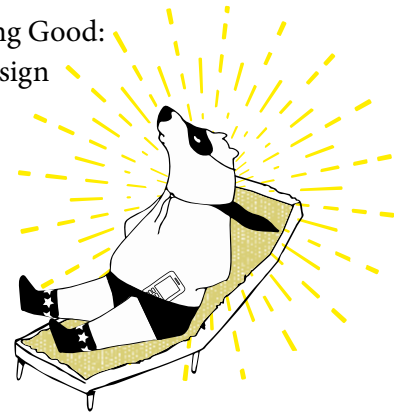
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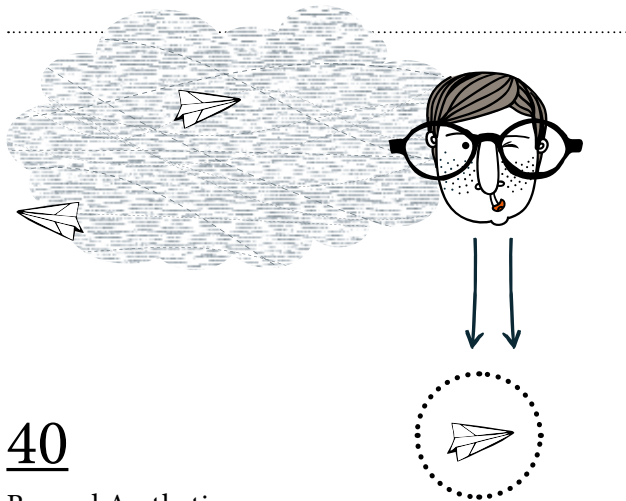
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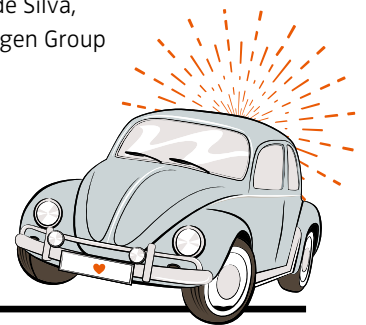
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Prof. Dr. Jan R. Landwehr is professor of marketing at Goethe University Frankfurt. A certified psychologist, Prof. Dr. Landwehr's research focuses primarily on questions of consumer psychology. He specializes in product design, aesthetics, symbolic communication and emotional preferences. Further, his research deals with advanced market research methods and statistical data modeling. His research has been published in leading academic marketing journals. He has collaborated with renowned companies, in particular in the automobile industry, and shares his expertise in talks, trainings and of course in his lectures, which have won several awards.

## **ABOUT ANDREAS HERRMANN**

Prof. Dr. Andreas Herrmann is the Director of the Center for Customer Insight at the University of St. Gallen. After receiving his undergraduate and graduate degrees in business management at the WHU Otto Beisheim School of Management near Coblenz, he held a research position at the University of Mannheim. From 1997 to 2002, he was the Chair of Marketing at the University of Mainz. In 2002 he left Mainz for the Institute for Media and Communications Management at the University of St. Gallen. He has led the Center for Customer Insight since 2009 together with Prof. Dr. Torsten Tomczak and Prof. Dr. Wolfgang Jenewein. In joint industry projects, the center focuses on marketoriented product creation, pricing, brand management, product design and individual decision-making. Since 2013 he has also been the Academic Director of the Global School of Empirical Research Methods at the University of St. Gallen.

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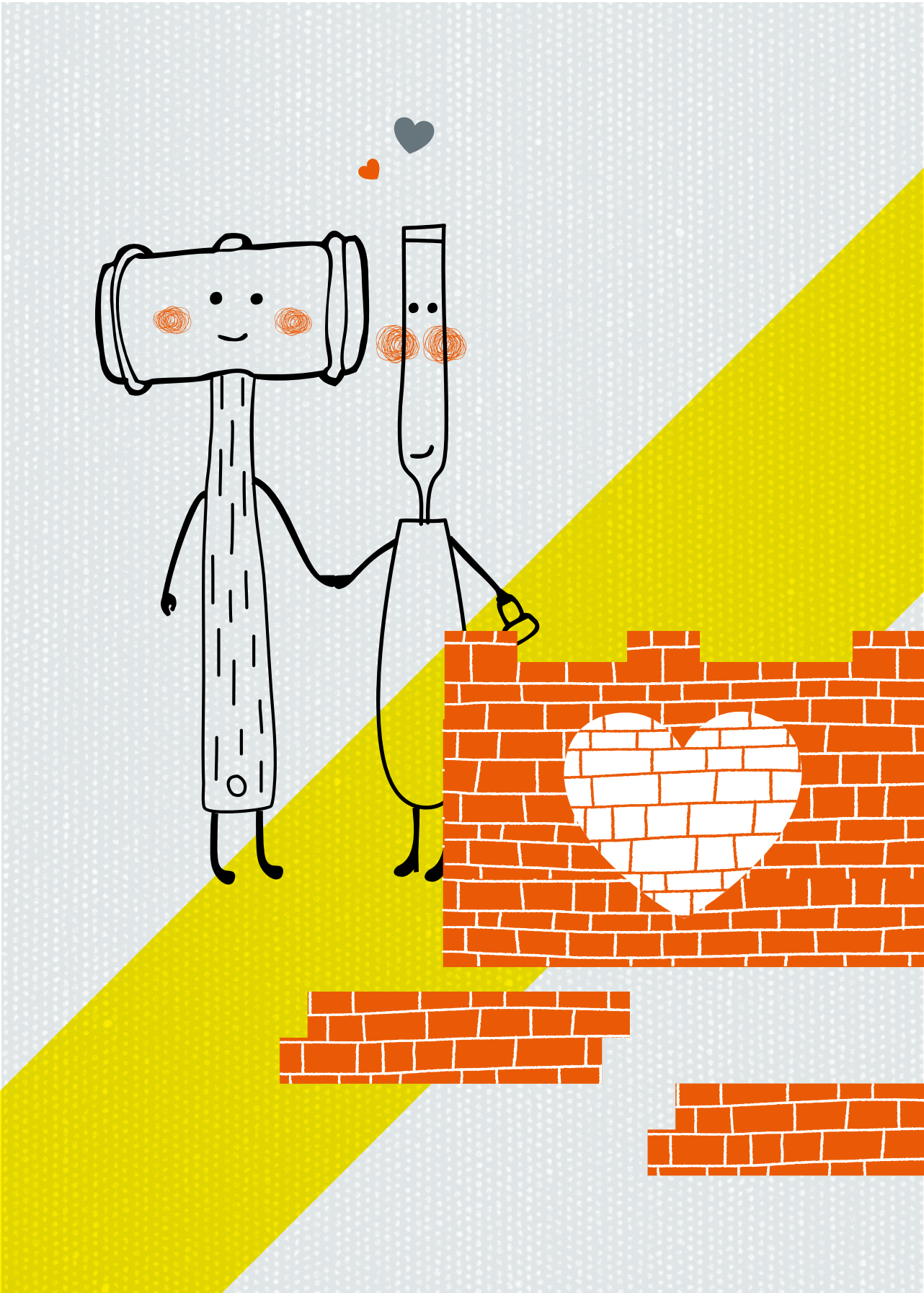
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# Marketing and Product Design: A Rocky Love Affair

*Jan R. Landwehr and Andreas Herrmann*

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KEYWORDS

*Product Design, Aesthetics,  
Design Evaluation, Design Strategy,  
Forecasting of Market Success*

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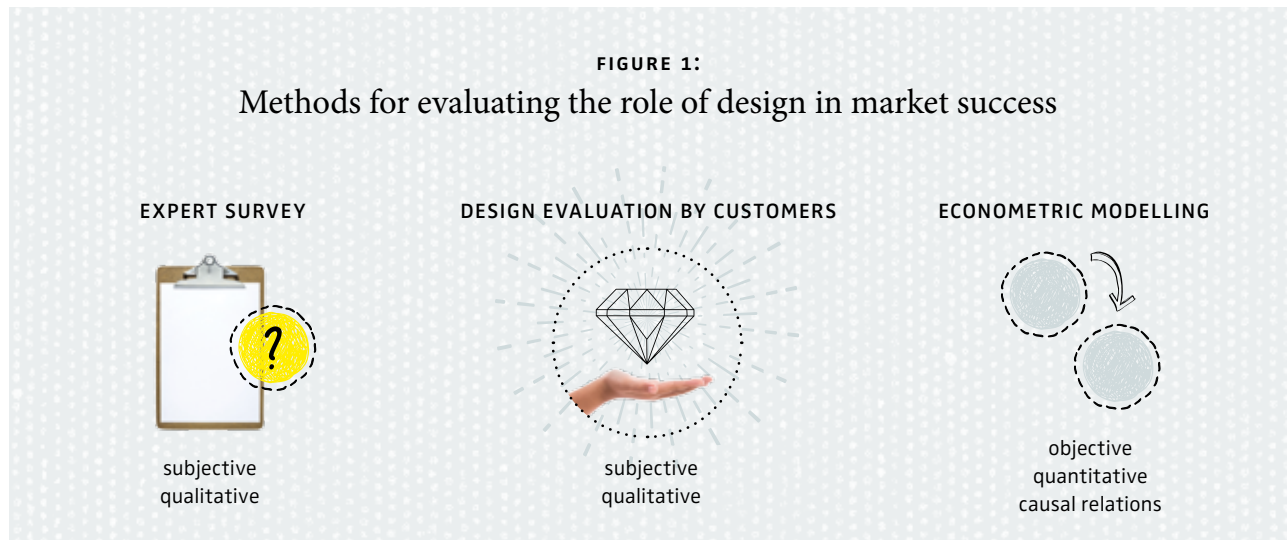
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**Design's long road to the marketing agenda** /// In all cultures, there have always been everyday products that have been lovingly and artistically made. Yet, the work of industrial designers was only clearly defined and recognized as its own profession at the beginning of the 20<sup>th</sup> century. Through their products, designers have significantly shaped consumers' visual experiences over the course of the 20<sup>th</sup> century and have created some timeless design classics, such as those by Dieter Rams (Braun), Erwin Komenda (Volkswagen Beetle, Porsche) and the furniture by Charles and Ray Eames.

Even though designers have been making careers out of giving products their form for over 100 years, products' selling points were structured around functionality, quality and price for a long time. In the middle of the 20<sup>th</sup> century companies like Procter & Gamble, General Foods and Unilever began developing professional brand management divisions and added branding to the list of success drivers. Instead of emphasizing purely rational product functionality, marketing increasingly turned its attention to developing and fostering customers' emotional attachments to a brand. Large investments in advertising and communication were the primary ways for companies to realize their new focus on branding. Until very recently, marketing departments had tended to treat product design as a secondary component and not as a primary focus of sales efforts. Foregrounding design is a relatively new phenomenon, and Apple stands out as the company that has implemented this more thoroughly than almost any other.



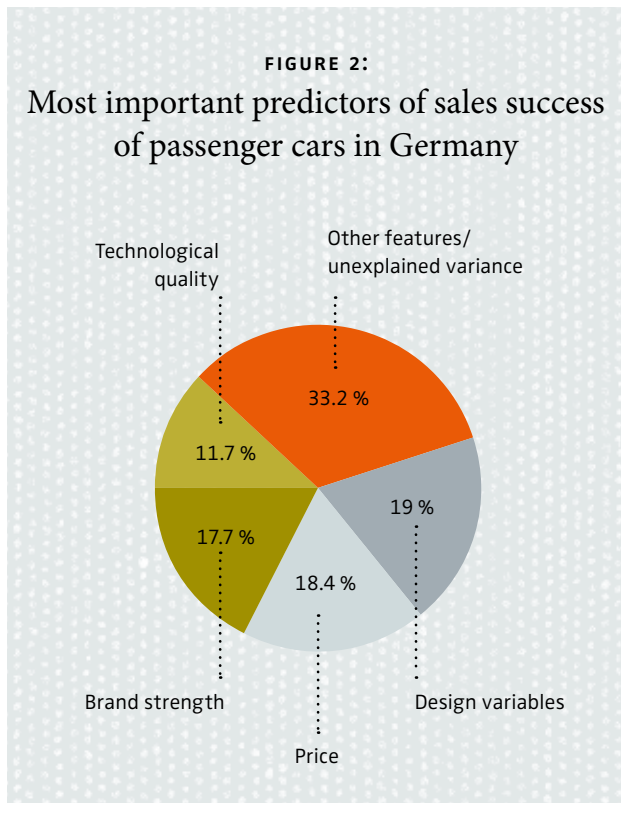
CEO Steve Jobs and his Chief Design Officer Jonathan Ive created a veritable cult around their exceptionally designed products, including the iMac, iPod, iPhone and iPad. With Apple products, the design is no longer the means to an end, but rather the end in itself. Apple's marketing consistently presents the advances in product design as a key selling point and as the focus of advertising communication.

A similar trend can be observed in the automobile industry, where advertising is focusing more and more on vehicle design. Their slogans increasingly reference design, and terms like aesthetics, form, elegance and impression have by now become everyday vocabulary in advertising. Interestingly, the increased significance of product design is best exemplified by the automobile brand whose central slogan – "Vorsprung durch Technik" – emphasizes more traditional product qualities. In 2006, when Audi first publicly presented the second generation of their Audi TT sports car, which had already become a design icon, they chose to do so not at a traditional auto show but rather at a design trade fair – the Design Annual in Frankfurt. With promotional events like this and further daring design changes, Audi has earned a reputation as a stylish and trend-setting automobile brand in the premium segment (see Interview, p. 46).

These design-oriented companies' success stories have put design on the agenda in many marketing departments, which has raised a whole series of practical questions. Accordingly, many marketing researchers have begun to study the topic of design in recent years. Above all, the six key questions (see Box on page 13) tend to characterize the discourse between the academics and the practitioners.

**Product design and marketing success** /// In marketing, there is a clear trend towards evaluating the effectiveness of marketing measures quantitatively using "return on marketing investment" ROI metrics. Hardly any marketing manager would be able to carry out a costly marketing campaign without convincingly forecasting its success in monetary terms. The development of aesthetically pleasing product design is no exception to this rule. After all, successful design requires highly qualified designers and thus generates high costs. Therefore it is not surprising, that market success is a central and practical concern when it comes to product design. Until recently, research was dominated by two approaches. On the one hand, there were expert surveys intended to let managers assess the importance of a product's design for its success on the market. On the other hand, there were studies that predicted market success based on subjective design evaluation criteria. Yet both approaches are problematic because neither method proves a connection between product design and market success; they just offer subjective speculation about it. These approaches are thus not considered adequate for the strict accounting of marketing costs, and furthermore they offer no specific information about which concrete design aspects contribute to market success.

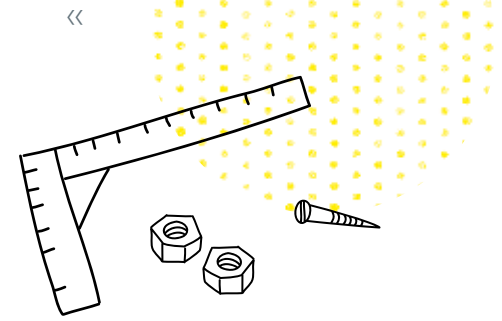
In our research groups at the Goethe University Frankfurt and the University of St. Gallen we were able to develop new approaches in the past several years that make product design more objectively measurable. These approaches allow to econometrically identify the importance of design to market success.



In the context of automobile design, we were able to develop objective metrics for visual typicality and visual complexity that allowed us to predict an automobile's success on the German market using an econometric forecasting model. These two indicators of aesthetic design quality alone can be used to explain up to 19 % of the variance in sales figures. By comparing this figure to price (18.4 %), brand strength (17.7 %) and technical quality (11.7 %) we were able to demonstrate the special importance of product design for market success (Figure 2). What's even more interesting for practical applications: Our objective metrics for product design can be translated into concrete recommendations for developing successful designs. With this, companies can assess the market potential of early-stage design drafts.

In the coming years we expect fundamental progress in objective design measurement, particularly in the areas of image statistics, pattern recognition and machine learning. It will be possible to uncover more thorough and detailed information than ever before about the most central design success factors. The fact that product design plays a vital role in market success has thus been proven so that we can now turn to the question of why product design increases the benefit to the consumer and to its role in purchasing decisions.

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Our objective metrics for product design can  
be translated into concrete recommendations  
for developing successful designs.



**Product design and consumer satisfaction** /// Product design offers no direct or rational consumer benefits as do aspects like product functionality, but it offers other advantages.

- > **Emotion.** Product design evokes an emotional visual experience. It is hardly understandable from a rational viewpoint and can hardly be described in words, as the Head of Volkswagen Group Design, Walter de Silva, describes convincingly on page 46, Viewing a product creates a visual experience that gives the consumer pleasure, and this creates a singular kind of consumer benefit.
- > **Self-expression.** Furthermore, aesthetic product design can play a communicative role: People engage in aesthetic consumption to communicate something to their peers about their own good taste. It serves to cast themselves in a positive light and to maintain their own image.

These two properties of product design are relatively clear and do not necessitate further explanation. However, new research has identified yet another exciting and beneficial effect of product design.



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If a product cannot offer reasonable  
functionality, even the most attractive  
appearance cannot help sell it.  
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- > **Self-confidence.** In her article (p. 22), Claudia Townsend demonstrates that consumption of aesthetic products does not only cause an immediate feeling of personal well-being but that it also increases consumer self-esteem and reinforces consumers' values. This then gives consumers increased self-confidence, which can have a positive effect on later situations. Today, consumption is frequently represented as something negative – something that is materialistic and not ecological. It may provide a temporary high, but in the long run it harms consumers' well-being. Claudia Townsend provides another way of looking at the consumption of high design: Aesthetic products not only increase short-term satisfaction, but they also positively affect one's sense of self over the long term. Therefore, they can be said to influence consumers' satisfaction and well-being. In addition to the immediate and temporary sensory pleasure they offer, aesthetics in product design seem to create a sustainable and long-term benefit for customers. This has exciting implications for the time frame during which product design results in positive ROI effects, for example, through word-of-mouth or repeat purchases.

**Product design in market research** /// The fact that product design can not only cause short-term market success but can also create long-term customer enthusiasm raises another question: How should the short-, medium- and long-term market potential of design concepts be determined? At this point it is worth mentioning the interview with Walter de Silva once again. He explains well that results from traditional surveys, like car clinics or one-time target group surveys provide no relevant information concerning future market success. In his experience, consumers can only judge the aesthetic potential of a design based on the here and now. Predicting which design could be successful on the market in three to five years is difficult for the untrained eye and therefore frequently leads to fundamental misjudgement.

As a solution to this problem, Claus-Christian Carbon developed the Repeated Evaluation Technique a few years ago (p. 34), which we successfully applied and confirmed in our own research. The method is based on simulating consumers' familiarization with a design within the framework of a survey, which otherwise would take several years. Researchers are able to more easily draw realistic conclusions from surveys about a product's long-term market success. Through intensive and repeated engagement with the details of a design during a relatively short market-research session, one can assess much more accurately whether the design will just be a brief success on the market or whether it will hold consumers' attention for a longer period of time.

**Product design and other marketing factors** /// Can product design alone ensure a product's success? Walter de Silva gives a clear answer from his practical experiences: No. Only when the interplay of product characteristics, brand and design is carefully coordinated can successful products be created. The past several years have also seen some interesting findings on the interplay of marketing factors and product design.

In his research, Ravi Chitturi (p. 16) convincingly demonstrates that a product's technical quality is a hygiene factor that consumers use as a deal-breaker when making product decisions. If a product cannot offer reasonable functionality, even the most attractive appearance cannot help sell it. But once consumer expectations concerning functionality are fulfilled, the principle of hedonic dominance comes to the fore. This principle states that if a product offers satisfactory functionality, design dominates the purchasing decision. Our own recent research has shown that a strong brand helps make design

aesthetics a central decision criterion. In other words: Combining quality with a strong brand creates so much trust among consumers that they will make their purchasing decisions based completely on their emotional enthusiasm for a design.

In her research on the effect of design on the perception of a product's quality, JoAndrea Hoegg shows how complicated the interaction between product design and quality can be in reality (p. 40). The key conclusion in her research is that it is often difficult for consumers to determine the objective quality of a product. A product's design can, however, subliminally communicate subjective expectations of product performance. Simply put: Consumers believe that a product with an excellent appearance will also deliver excellent quality. The purposeful design of certain features of a product's appearance evokes associations of quality and functionality in consumers, which are independent from the product's actual performance. This could convince companies to invest in design as a way to boost the apparent quality of a product while saving on actual product quality. While this type of strategy of misleading consumers may produce short-term success, it is doomed to fail in the medium and long term and is thus not something that any serious company should consider.

### Product design and materializing ideas and concepts

/// A product design is not only an aesthetic experience; it is also the act of making ideas and concepts material. The design of an automobile carries designers' impressions of aggressiveness, sportiness, luxury, etc. In this way, a product's exterior also forms people's impressions of what aggressiveness, sportiness, etc. look like. The heart of product design is to make tangible abstract impressions, thoughts, and maybe even life goals. Groundbreaking design occupies a leading position in the interpretation of these abstract mental states and is able to trigger willingness to spend for these concepts. Whenever the topic of elegant, sleek and high-quality design is discussed, it doesn't take long for the name Apple to come up. It seems Apple has materialized how most consumers interpret the ideals of elegance, sleekness and high quality. In this way, the company reigns supreme when it comes to interpretation, and this is certainly an enormous competitive edge in many markets.

Most companies understand that they need high technical standards and implement them consistently. Because aesthetics help consumers interpret the everyday world around them, we also see an important competitive factor in design.

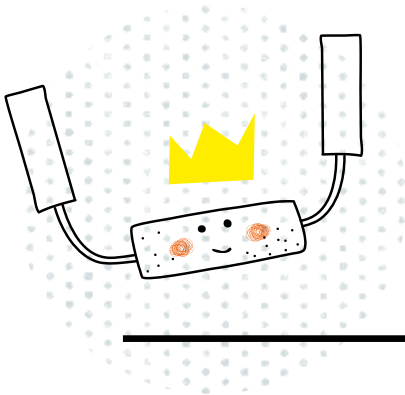
{Box 1}

## KEY QUESTIONS ABOUT THE EFFECT OF DESIGN

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- > How much actual influence does a product's design have on its market success?
- > Why is product design important for consumers?
- > How can market research help identify potentially successful designs early?
- > What conditions increase the importance of a product's design? What conditions decrease it?
- > What is the relationship between material product design and the immaterial experiences of consumers?
- > How can product design be sustainably integrated into corporate strategy?

Thus, it is important for a company's success to be on the cutting edge of not just technology, but also design. Even if this is more difficult to implement, it provides sustainable competitive advantages and protects a company from its competitors. Superior aesthetics should be a top priority in cases where efficiency-oriented Asian competitors are able to offer functionally similar products at much lower prices.

**Product design and corporate strategy** /// Our main reasoning suggests that products can only be successful when their individual components complement each other well. Balancing all product elements naturally requires excellent coordination and communication within the company. But cultural and linguistic differences often collide in this endeavor, making productive cooperation difficult. Designers' creative, imagery-focused language has to be aligned with a highly analytical and metrics-driven marketing culture, as well as with the physical and mathematical language of technical development. Based on his many years of both theoretical and practical experience as an active designer, Michael Krohn (p. 28) shows that early integra-



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With all other aspects being equal,  
the product with the best design will always  
be the most successful.

«

tion of all involved areas is essential for product success. He argues that product design can take on an integrating role because all available information comes together in the form of the product and thus shapes the consumer experience.

The holistic role that design plays also becomes clear in our GfK article (p. 52). The authors of this text present a survey tool that goes beyond a product's ergonomics or functionality

to evaluate the whole user experience, including the aesthetic quality. The underlying idea of designing a holistic consumption experience is consistent with the academic and practical insight featured in this issue of the GfK MIR: To achieve market success, a product has to create a positive consumer experience in its entirety. And with all other aspects being equal, the product with the best design will always be the most successful.

**FIGURE 3:**

The MacBook's materialization of elegance, sleekness and high quality



**Implications for management** /// Which companies will have the most success in the coming years? The academic research and practical business experiences presented in this issue all tell the same story: Companies that offer excellent products within a strong brand and match them with a fitting and aesthetically excellent design will be the most successful. In order to reach this goal, the following points in particular should be taken into consideration:

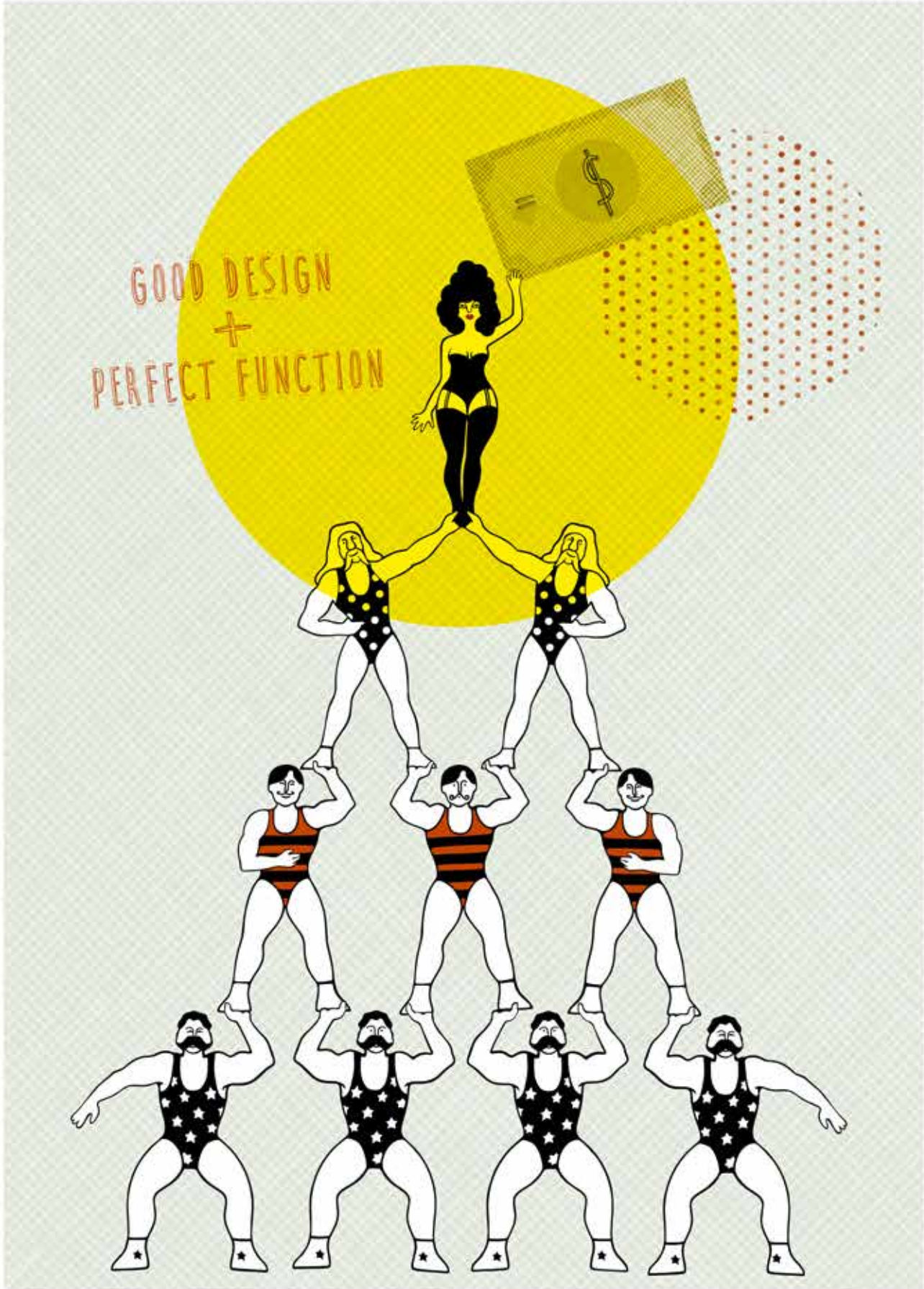
- > **Start cooperation early** /// Technical development, marketing and product design have to cooperate closely to bring together the strengths of the individual disciplines and overcome any hurdles in communication. Only when all departments of an organization pull together can irresistible products be developed: products that make the consumers happy in both the short and long term and that ensure success sustainably. In many companies, cooperation between development, marketing and design does not function well. In our experience, this has been the biggest challenge.
  
- > **Collect market feedback as part of the process** /// Product development often flows from the “inside” to the “outside”: The developer produces a product, the designer rounds it out and makes it more appealing, and marketing takes responsibility for sales. But development and product design departments need market feedback as part of their processes; it is possible to miss market requirements not only in terms of technology but also in terms of aesthetics. The articles in this issue show that recent market research techniques are able to provide insight into customers’ aesthetic sensibilities. However, these new techniques are seldom implemented in applied market research and rarely accepted by development and design departments. This problem does not stem from developers and designers not being open to market insights; rather, the problem lies in the fact that most conventional methods do not deliver what is needed.
  
- > **Understand customer emotions** /// The concept of the rational consumer, who evaluates product components without letting emotions interfere, is dominant in practically all approaches to market research. A good example is the popular method of conjoint analysis, which is often used to comprehend customers’ product decisions. It is underpinned by the assumption that customers make trade-offs between product features and their form. The product that shows the highest level of overall benefits

will be the one that customers buy. This decision-making pattern may play a role in certain partial decisions; nonetheless, in most cases people arrive at product preferences in entirely different ways. Thus it seems indispensable to us that marketing and market research revise their image of the customer by allowing for emotions, spontaneity and many other impressions and impulses in choice situations. This kind of approach would allow for the examination of aesthetic experiences and would then necessarily lead to a much stronger focus on product design. Occasionally, one needs to achieve new ways of accessing the phenomenon known as the “customer” in order to get one’s priorities straight.

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# Design for Affect: A Core Competency for the 21<sup>st</sup> Century

*Ravindra Chitturi*

■■■■■  
**KEYWORDS**

*Design, Emotions,  
Hedonic, Utilitarian,  
Aesthetics, Functionality*

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It is not an accident that the most valuable firm on the planet is known for its core competency in DESIGN. Steve Jobs, the founder of Apple Inc., instinctively understood the power design has to emotionally connect with consumers and their wallets. Most would agree that his design-driven vision continues to generate unprecedented levels of cash flow years after his departure – making it not just the most valued but also the most loved company of this generation. Apple consumers are emotionally invested in their products, leading to superior profit margins and intense loyalty for Apple.

But, can other manufacturers compete with Apple or develop a similar core competency in design to dominate their market? They can, provided they develop an understanding of how consumers value product attributes and associated emotional benefits differently in relation to each other. Furthermore, designers can design emotionally appealing attributes and benefits into products to deliver desirable financial performance. There is clearly an opportunity for all manufacturers to leverage the connection between design, emotions and profit margins. This would require an understanding of design principles that govern consumers' relative preferences and purchase decisions depending upon their wants and needs.

**The role of design in purchase decisions** /// Design can be seen as a planned organization of elements that are interconnected with a specific purpose. In product development, design serves to create a good mix of attributes and benefits and to evoke desirable emotions. For example, people making a horror movie design sets, makeup, costumes, sound effects, etc. to create a sense of suspense that evokes anxiety and fear in consumers.

Steven Spielberg created blockbuster movies such as JAWS and Jurassic Park by perfectly selecting and integrating the right mix of elements of filmmaking to deliver an ideal emotional experience. Similarly, Starbucks has successfully designed their outlets to create a unique and delightful coffee consumption experience. The assumption is that well-designed products create a better overall emotional experience compared to unbalanced alternatives. Hence, design strategy is critical to creating a desirable, delightful and emotionally fulfilling consumer experience leading to greater profit margins and customer loyalty.

### Design attributes and consumers' emotional experience

/// Most consumer choice decisions involve making trade-offs among a variety of product attributes either because budgets are constrained or certain attributes are not available in a product that is otherwise desirable. But how do such trade-offs work? When buying a car, for instance, how does a consumer choose between a functional, utilitarian attribute such as an ABS braking system and an aesthetic, pleasure-related feature such as a panoramic sunroof? The answer depends upon the consumer's goals. According to our findings there is a consistent relationship between the types of product attributes, types of goals and types of emotions experienced by the consumer. While some features have the purpose of preventing undesirable feelings, others instead promote positive emotions. Functional attributes are designed into a product to fulfill consumers' prevention goals, and they evoke the positive prevention emotions of confidence and security. If they are missing or underperform, they cause anxiety or distress. Similarly, fun or aesthetic attributes are designed into a product to fulfill consumers' promotion goals and to evoke the positive promotion emotions such as excitement and delight – which are known as promotion emotions because the attributes promote or bring about these emotions. When they are not reflected

very well in the overall design, they cause disappointment and sadness. This relationship can be illustrated with functional automobile attributes such as seat belts, ABS, vehicle stability assist, and four-wheel drive. These features collectively increase the feelings of confidence and security and decrease the feelings of anxiety and distress for the driver, especially under bad weather conditions. However, if a car has only seat belts and no other safety features, then the driver will experience strong anxiety or even fear, especially under hazardous weather conditions with little or no feelings of security and confidence. On the promotion side, automobile attributes which promise fun and sensory pleasure, such as a panoramic sunroof, a 12-speaker premium audio system, or a leather interior collectively increase the feelings of excitement and cheerfulness. On the contrary, absence or reduction of such hedonic attributes would evoke feelings of sadness and disappointment. Therefore, emotions experienced by the consumer depend upon the attributes product designers choose to design into the product: Different emotions can be leveraged by design.

### Consumer choices: enhance pleasure or reduce pain? ///

Consumers purchase products with the objective of reducing pain, increasing pleasure or both. Product aesthetics primarily contribute to enhancing consumer pleasure, and utilitarian attributes such as product functionality primarily contribute to reducing consumer pain. So the question is how consumers choose between the goals of reducing pain and enhancing pleasure. Do their choices follow certain principles that designers can follow to design useful and desirable products?

Based on the consistent pattern of choices and purchase behavior across multiple product categories, our research did indeed reveal situations when either the principle of functional or hedonic dominance explained consumer choices. The pattern and the experienced promotion and prevention emotions are described in figure 1.

In the case of functional dominance consumers attach greater importance to fulfilling their minimum utilitarian needs compared to their minimum hedonic needs. If consumers have to choose between two products and one product meets their minimum functional requirement but does not meet their minimum aesthetic expectations, while the other meets their minimum aesthetic expectations but does not meet their minimum functional requirement, they prefer the product that ensures a basic level of functionality. Consumers want the chosen product to meet a certain threshold of usefulness before they can begin to enjoy its aesthetics.

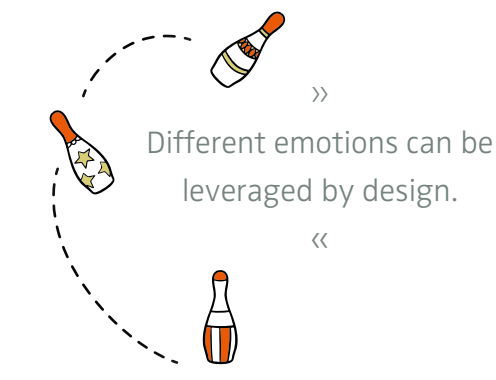
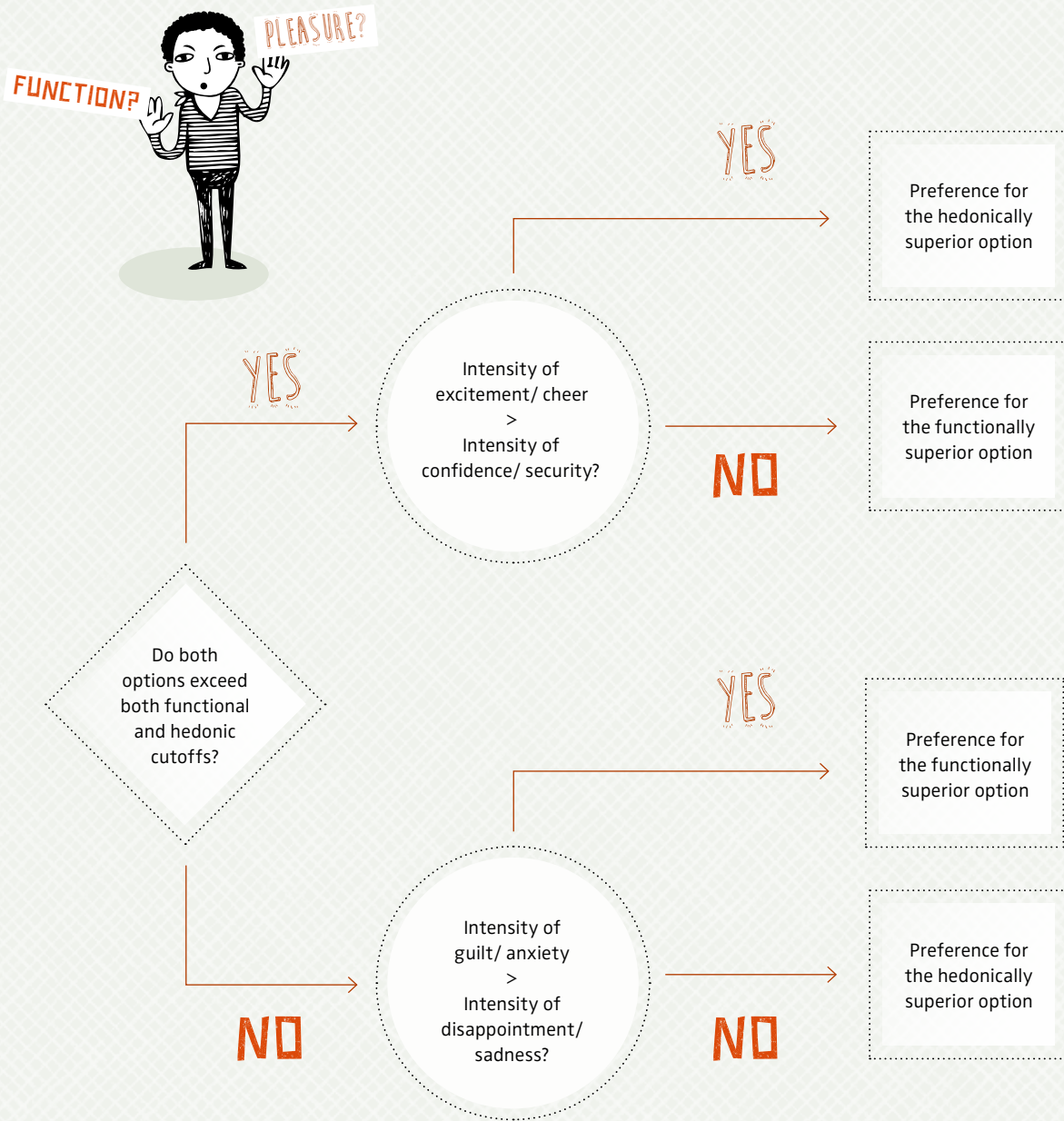
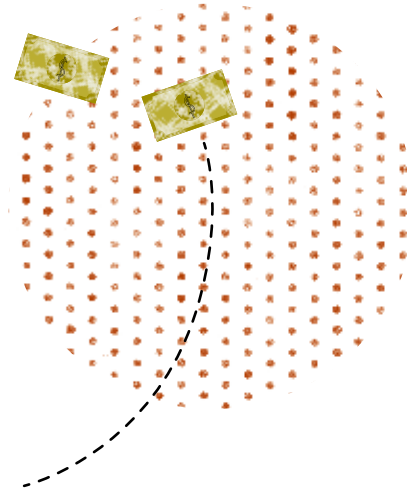


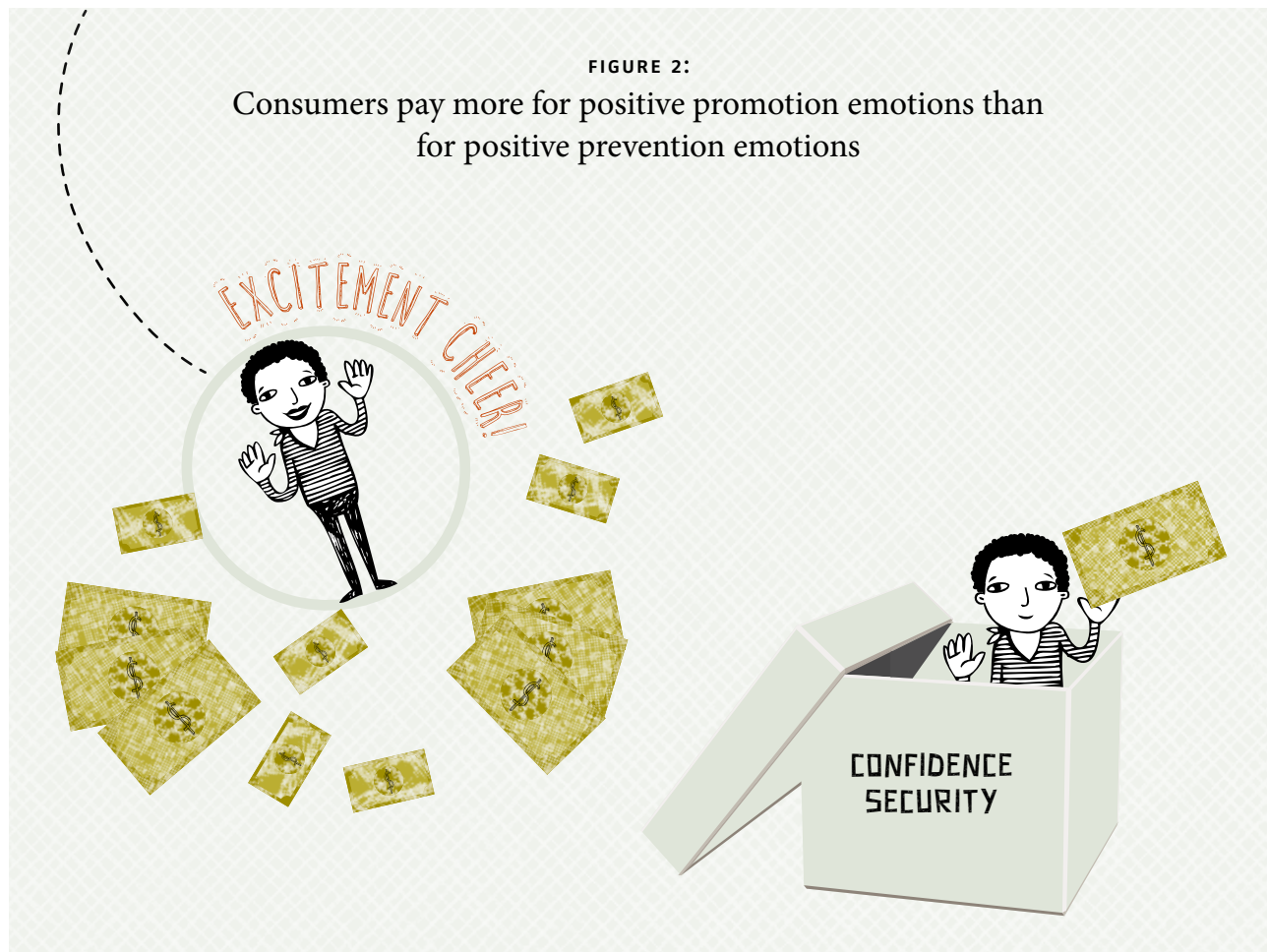
FIGURE 1:  
Product design attributes, emotions and consumer choice





But what happens after the minimum functional needs are fulfilled? Is there a change in the relative value consumers assign to product functionality vis-à-vis product aesthetics? Yes. In this case, the principle of hedonic dominance applies. If consumers have to choose between two products and one product meets their minimum functional requirement

but exceeds their minimum aesthetic expectations, while the other meets their minimum aesthetic expectations but exceeds their minimum functional requirement, they go for the product with superior aesthetics. Consumers want to maximize pleasure by choosing a hedonically superior product after fulfilling a certain threshold of usefulness.



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Consumers want to maximize pleasure  
by choosing a hedonically superior  
product after fulfilling a certain threshold  
of usefulness.

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**“Design for affect” is a highly profitable core competency** /// Consumers purchase products to fulfill their emotional wants and needs. They buy access to GPS based map services for driving directions to lower the anxiety of losing their way in an unfamiliar location. They visit Disney World or pursue scuba diving depending upon the level of excitement they seek. But how much are those different experiences worth to the customer? We also investigated willingness to pay and found that consumers are likely to pay more for goods and services that help them experience positive promotion emotions such as excitement and cheerfulness compared to positive prevention emotions such as confidence and security.

Apple has applied this principle very successfully, and their products have historically garnered 20 – 30 % higher profit margins than their competition by designing superior aesthetics into their products. However, other brands can use these insights as well. Designers can significantly improve consumer preference for the products they are designing by complying with the principles of functional and hedonic dominance. If they ensure that products meet minimum functional needs, these options will be considered for purchase. And if their design, on top of that, evokes promotion emotions of excitement and cheerfulness, they will motivate consumers to pay a significantly greater price for the experience. Firms who want to dominate their market and enhance their profit margins are well advised to develop a core competency in design. They should form a design group that understands the relationships between design principles, fun and aesthetics versus function, promotion and prevention emotions as well as consumers’ willingness to pay. A balanced design with an optimal combination of attributes and emotional experiences will reach a greater price on the market and ensure higher profits.

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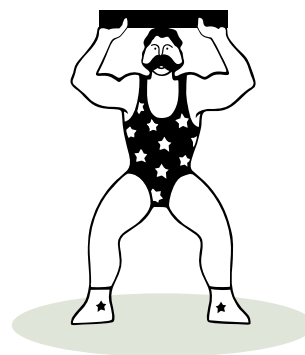
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# Choosing Beauty and Feeling Good: How Attractive Product Design Increases Self-Affirmation

*Claudia Townsend*

KEYWORDS

*Aesthetics, Design,  
Beauty Premium,  
Self-Affirmation*

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**The beauty premium** /// Good looks make a difference. Studies of interpersonal perception have found a universal and innate bias to equate beauty with goodness in people. Attractive people are, for the most part, rated higher than less attractive people on apparently unrelated positive traits, including intelligence, social skills, ethical behavior or competence at one's job. And just as good looks bestow an unconscious "beauty premium" on people, high aesthetics bestows a benefit on consumer goods as well. Choosing beautiful products not only pleases our senses but also enhances our self-confidence.

**Product choice, design and self-assurance** /// From consumer research we know that product choice is often related to consumers' perception of themselves. For example, people use brands – and the personality or lifestyle they represent – to express who they are and who they are not. In other words, consumers construct and maintain self-concepts through the use of branded consumer products. But product choice not only *reflects* an actual or desired image of the self; it can also directly *influence* a person's sense of self and even boost self-esteem. The aesthetics of a product is an attribute that has the power to transform how consumers perceive themselves. In a series of experiments we found that the mere act of choosing a beautiful product over a less good-looking one affirmed people's sense of self – who they are and what their values are. The result is that, like other manners of self-affirmation, choosing high aesthetics generally makes people more open – to points of view different from their own and to admitting their own mistakes.

**FIGURE 1:**  
Examples of high and low design versions of  
products used in the experiments



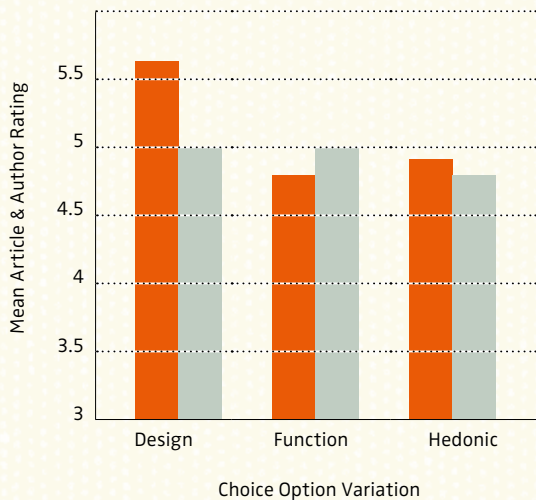
(Note: The high price difference was used for research settings that favored the low design version. In the setting that favored high design, the indicated prices for both versions were the same.)

**Beautiful products assure individuals** /// In a first study we tested if people with lower and higher levels of prior self-assurance differ in their preference for aesthetic products. The results of the experiment showed that those in a state of lower self-assurance preferred nicely designed products more than others. When an individual's sense of self was affirmed experimentally before the choice task, they were less likely to select the highly aesthetic option. It seems that part of the motivation to select high design is an effort to boost one's sense of self. Interestingly, there was no such effect for price variations or variations in functionality. The drive for self-affirmation was specifically directed at the more aesthetically pleasing option.

**High design fosters open-mindedness** /// While our first study tested the connection between self-affirmation and the choice of products with high design, the next experiment examined the psychological impact of choosing high design on subsequent attitudes. When individuals do not feel secure in themselves, they tend to be biased against information or people who disagree with them. Psychologically it is easier to see the argument or presenter as wrong than to admit that one's point of view may not be right. However, when people feel more assured in themselves, they are more open to new information that might differ from their own point of view. Thus, we assumed that if choosing high aesthetics can affirm a person's sense of self, such a choice should lead to

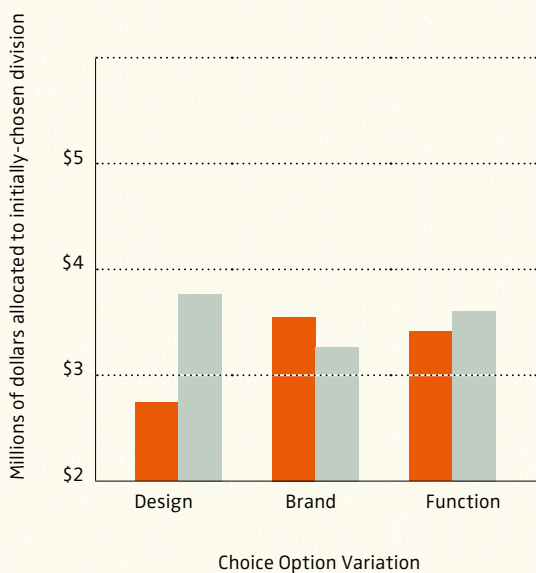


**FIGURE 2:**  
Openness to counter-attitudinal argument after choice



greater acceptance of counter-attitudinal arguments. To test this, first, participants were presented with a choice between two products that varied in design, price, function and other pleasure-related, hedonic attributes. Then the participants stated whether they were for or against the use of animals for medical testing and research. After explaining their view, they were asked to read a half-page argument against their position. They were then asked to evaluate the article and its author in an effort to measure how open they were to the argument presented against their own point of view. Specifically, respondents indicated how convincing, valid and reasonable the article was perceived to be and how intelligent, informed and biased they found the author. The results were amazing: Those who selected the more aesthetic option rated the counter-attitudinal article as more convincing and reasonable (Figure 2). Moreover, choice of a preferred product on function or brand did not have the same effect. Only choice of the more beautiful product had an impact, and that impact was comparable to more explicit manipulations like positive feedback for affirming the self.

**FIGURE 3:**  
Escalation of commitment after choice



**Choosing design reduces escalating commitment** ///

Like willingness to accept new and contradicting information, opting not to escalate commitment requires an individual to admit that they may be wrong. However when considering commitment, not only attitudes but also actions are involved. Individuals often allow previous actions to motivate future ones even if there is evidence that the first action might have been a failure. Such escalation of commitment to a failing course of action has been interpreted as an attempt to affirm the appropriateness of the first investment. Changing one's course requires admitting to oneself that the original action may have been flawed. Again, this is psychologically difficult to do. In the past, overt manipulations that bolstered a person's sense of self helped them to be open enough to admit the pervious action may have been a mistake and refrain from throwing "good money after bad" or "staying the course." In our experiments we tested if high aesthetics have a similar benefit of decreasing escalation to a failing course of action. We compared how choice of higher and lower versions of design, function and brand affected escalation of commitment. While there were no significant effects for choice of a well-known brand compared to a generic brand or a functionally superior product against an inferior version, choosing a high design product made respondents significantly less likely to escalate commitment to something shown to be flawed (Figure 3).

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 Choice of high design works  
 as a unique form of affirmation.  
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**How good design differs from other attributes** /// But why does design assure people whereas superior functionality and other qualities do not? Aesthetics is, indeed, a universal value common to all of us. While other basic values such as economic, social, political or religious values differ among individuals, beauty is innately appreciated by all. Also, aesthetics has a direct expression in consumer products. Without inference or learned response, a product can be aesthetically pleasing. In contrast, for a product to be symbolic of a religion or a political view, the consumer must have learned an association or meaning behind a symbol. The creation, acquisition and appreciation of beauty have always been considered demonstrations of virtuosity and surplus resources. Just like a peacock's beautiful tail feathers attract mates but also predators owning a product that looks nice regardless of whether it helps or hinders functionality may make us more attractive to others and similarly boost our sense of self. Therefore, without being aware of it, we value beauty, and the mere choice of a more attractive product can lead us to feel better about ourselves and, in turn, act in a less biased manner.

**The consumption of beauty is more than personal image management** /// We have known for a while that goods provide consumers with more than just fulfillment of their apparent functionality and, moreover, that aesthetics, even without function, is incredibly important. Consumers construct and maintain their images through buying and using products and their features. However, the choice of a beautiful product goes beyond personal image building and self-presentation; its impact is also turned inwards. The mere choice of a pretty product over another seems to affect security in one's self. Choice of high design works as a unique form of affirmation. Purchasing an attractive item causes a person to feel better about themselves. In contrast to more typical ways to assure people, it does not directly involve feedback or motivate thoughts about themselves, their performance on a task, or their values. It works unconsciously. High design may

even be a particularly powerful form of affirmation precisely because its relationship to the self and one's values is not obvious. And design is more powerful than other features in this respect. Comfort and ease of use, taste and brand do not have the same self-affirming quality as design. It is not simply that "treating" oneself or going for the pleasurable option has an affirming effect; it is specific to the choice of aesthetics.

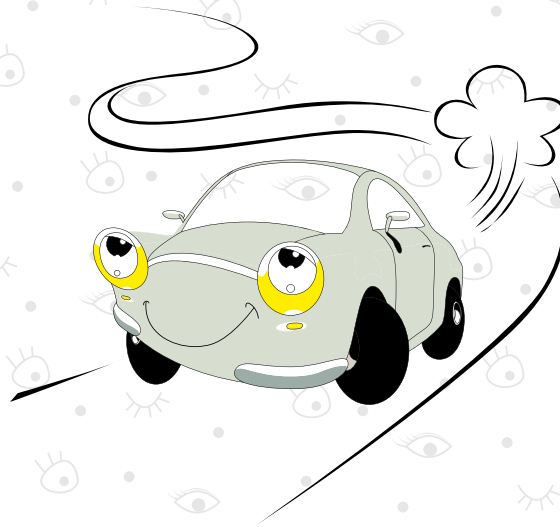
**Benefits of the beauty premium effect** /// While consumption as a response to negative emotions is – at least in its extreme forms – considered unhealthy behavior, our research offers a more optimistic perspective. Consuming aesthetics can bolster self-esteem and reduce the need to affirm oneself by further action. Our findings suggest that "retail therapy" may, in fact, be beneficial. Specifically, if consumers focus on selecting one or a few beautiful products rather than binging on multiple purchases, they may be able to reap the benefits identified in this research without inflicting too much damage to their bank accounts. The implication is that choosing beautiful products might not only be helpful in everyday situations but also in extreme behavior as well.

Decision-making is another application and it goes beyond the field of marketing and consumer behavior. Choosing high design was shown to increase a person's openness to counter-attitudinal arguments and to reduce their propensity to invest in failing courses of action. It frees them up, mentally, to admit errors in their ways. Therefore, it should improve the quality of decision-making. Be it politics, public policy or organizational behavior, the implication is that aesthetics and the general look of a choice option are capable of affecting the outcome of both current and subsequent decisions.

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## Here's Lookin' at You, Kid: On the Instinctive Attractive Effect of Product Faces

*Jan R. Landwehr*

In human history, it has been of essential importance to correctly interpret the intentions of other people to survive: Is the other person friendly and cooperative, or is the person aggressive, and do they present a danger to your own survival? This information can be read from facial expressions, and therefore our brains have evolved specific areas for processing human faces. We still have this evolutionary heritage within us, which is why human faces draw our attention instinctively and with great force.

In product design, you can selectively bring this peculiarity of human perception into play. If design characteristics are fashioned in such a way that the shape of the product is reminiscent of a human face, the design will involuntarily draw the

attention of consumers. The effect is especially strong if emotional facial expressions are used as the model for the design. This not only catches the attention, but can trigger very specific emotional reactions such as joy or surprise in consumers.

You see product faces especially in the frontal views of cars, where the headlights look like eyes and the grill looks like a mouth. But other product categories like notebook computers, coffee machines, clocks and vacuums also generally aim for a face-like arrangement of switches and knobs to evoke the impression of a human face with all of its positive side-effects. Look a little closer when a product is looking at you next time!

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# Strategically Integrated Design – Helping Brands to Keep Their Promises

*Michael Krohn*

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KEYWORDS

*Design Strategy,  
Brand Strategy,  
Integral Design*

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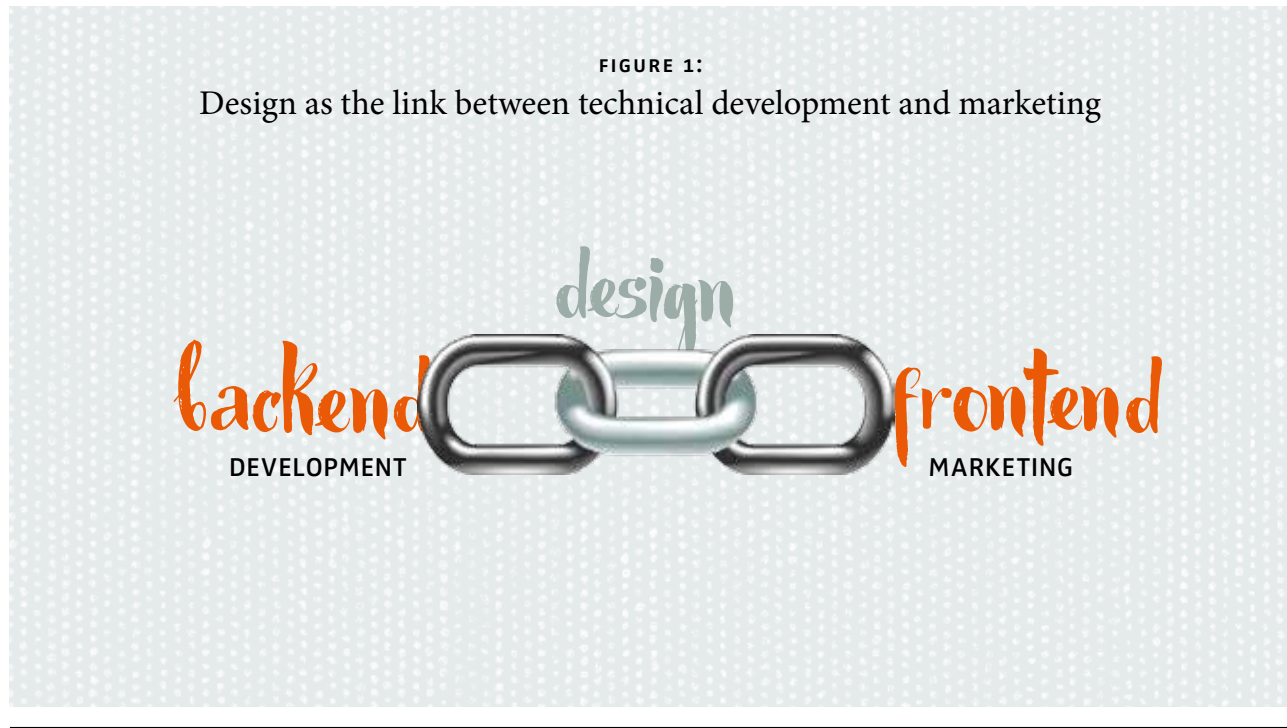
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**Things that don't look nice don't sell** /// “Between two products that are identical in price, function, and quality, the one with the most attractive appearance will win the race.” With these pragmatic words, design pioneer Raymond Loewy outlined his view of design in the middle of the twentieth century, and was one of the first to describe the importance of design for marketing. It is common knowledge today that poorly designed products don't sell well. In order to establish a clear and unique position in the market, companies consider product design a comprehensive set of artistic, communicative and strategic measures. In a globalized world of goods and brands it is not enough to just bring aesthetically pleasing products to the market. The whole experience chain has to be designed and made tangible. Frequently innovation, closeness to customers or unique services are the basis for successful companies – and rightly so. But these strengths can only be made visible, communicable and brought to life with design. Design, when applied wisely, thus becomes a strategic tool that can only be effective when it looks at problems without bias and solves them creatively in new ways.

**Design between the frontend and the backend** ///

When we develop innovative design solutions for clients, both in university research and practical applications, we are always dealing with two different stakeholder groups and therefore very different starting points.



On the one hand, we're cooperating with a company's product or service development, i.e. the department in which a new offer is developed from the ground up to market maturity. On the other hand, we're also working with marketing and its focus on launch strategies and communication.

Both positions more or less define the two "ends" of the value chain of a company. The design tasks, and often the available budgets, are very different depending on which group you are cooperating with. Also, the long-term quality of the result varies depending on the initial situation.

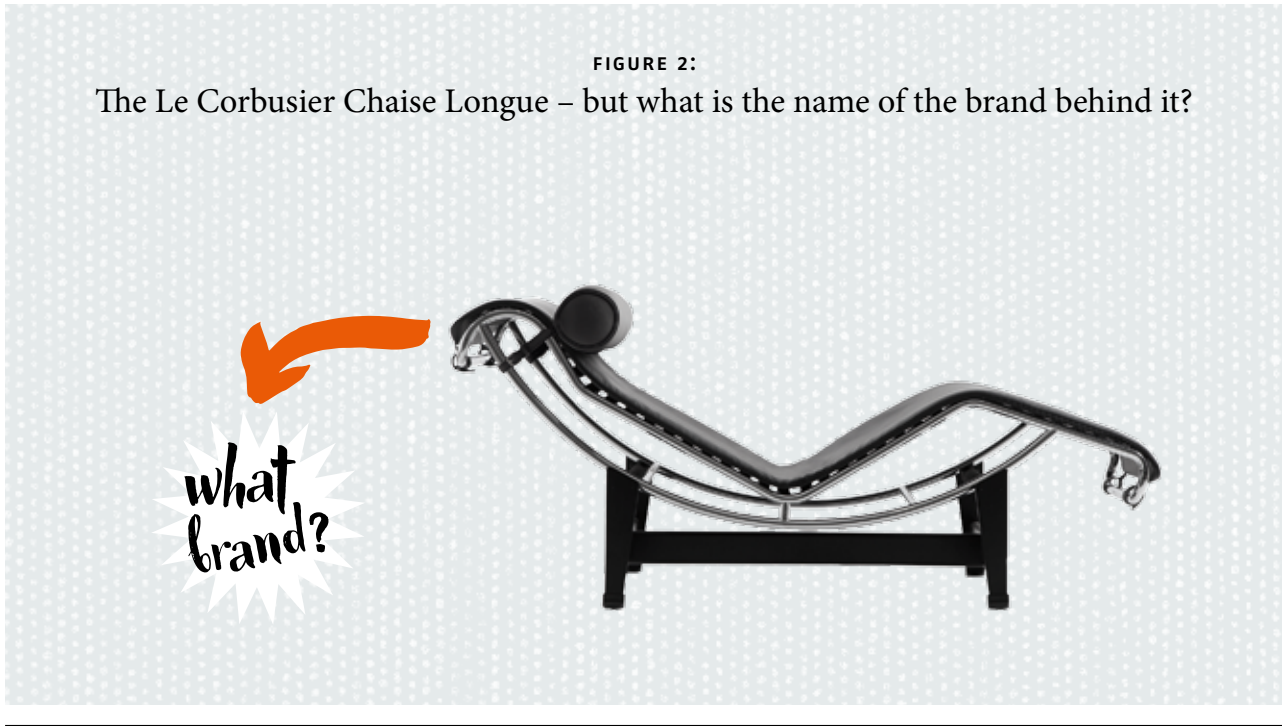
**Is design just marketing cosmetics? ///** What happens when design decisions are made at the end of the value chain during the marketing process? Many companies actually incorporate design into their processes much too late, and work sequentially instead of in an integrated manner. If, however, the important conceptual, technical or market-relevant decisions have already been made and the product or service is almost ready for launch, then design "cosmetics" won't help much. Design creates images that stick in your mind, and if these images are thought out at the last minute, there's a risk that they will not optimally promote the overall brand image.

This danger also exists for design authorship, which is usually driven by marketing. Some companies try to increase the attractiveness of their own offers with a more or less well-known designer. In specific markets such as fashion, accessories or furniture design such an approach can be successful. At any rate, authorial design refers less to the products or the services of the company but more to the designer as a personality. This is part of the marketing strategy and can definitely lead to sales success. Studies have shown, however, that only big names are effective. Further, products might become associated with the famous designer instead of with the company or the brand. For example, who can spontaneously name the brand behind the world famous "Le Corbusier Chaise Longue"? This way you are putting your chances for building your brand long-term at risk.

Particularly companies who discover design during the marketing process like to declare that "design is at our core." Emphasizing this everywhere all the time is counterproductive, especially when the implied promises are not kept. You shouldn't overemphasize design in the function of marketing. Well thought-out design is often "invisible", as the Swiss social researcher Lucius Burckhardt pointed out in the early 80s. In saying so, he indicated that good design incorporates

FIGURE 2:

The Le Corbusier Chaise Longue – but what is the name of the brand behind it?



whole meaning systems of objects and interpersonal and emotional relationships. This, however, requires an integrated approach to design, starting already at the beginning of the value chain.

**Only integral design communicates value** /// How do designs evolve that are incorporated into product conceptions right from the start? Integrated design not only gives form to innovations but makes them more user oriented and suitable for marketing efforts. In this case, design – among other aspects – is the actual driving force that adds magical attraction to a brand and its many touchpoints. A few iconographic images are often more effective than a thousand clever arguments. The examples which are cited over and over, be it Apple, Nike, Audi or others, perfectly demonstrate this integral understanding of design and brands without being overbearing. If design is going to have an effect, it has to be strategically integrated. Design conveys arguments and facts, but it is more important to also convey emotions and imagination.

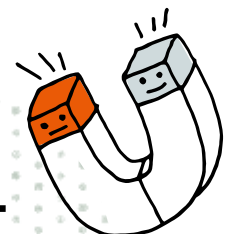
“Poorly designed products don’t sell well.” These days you can add to that: “If a product has a bad narrative or no story to tell, it won’t be noticed.” Brand image and design have

a close relationship here. The oft-quoted concept of “form follows function” no longer applies in its oversimplified form. Design, rather, pursues an expected emotional value that consumers expect and that helps connect with the brand and offers orientation. Designers must therefore understand the target group and their sensory needs, and translate these into shape, color, material, surface and other aspects. Cleanly integrated functions, fitting ergonomics and intelligent detail design are expected in any case.

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Design – is the actual driving force that adds magical attraction to a brand and its many touchpoints.

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## DYSON: HOW MARKETING AND DESIGN CAN AMPLIFY EACH OTHER

A distinctive example for product design as a starting point for successful marketing is the Dyson brand. It became famous for its vacuum cleaners and in the meantime has become known for other household devices. Essentially, the company varies three similar elements:

- > An innovative, often revolutionary basic technology that has not been established in the market environment.
- > A design that conveys this innovative function expressively in its narrative without coming off as insincere.
- > A consistent language of color and shapes at all touchpoints, which creates a unique style and makes the brand and its products unique.

The design of the objects plays into the hand of marketing, is a part of the corporate strategy and is understood by the consumers. It adds value to the brand and helps to build its long-term potential.

FIGURE 3:

### The Dyson Canister Vacuum: Unity of design and brand



**Design needs dialogue** /// Design can be a strategic link between development and marketing, as illustrated in Fig. 1. In order to become effective, design needs a dialogue between a sponsoring company on the one hand and a good designer with creative freedom on the other. In a well-prepared briefing, the core products must be described as well as the desired emotional and cultural value for the result. A comprehensive design briefing does not just define the desired functions and price but also the marketing requirements: How will the product tell its story? In a world in which technical performance and prices are interchangeable, design often remains as the essential, unique and decisive factor. "Fostering desire" is the magic phrase here.

This is how design creates a connection to the users and buyers. An important point is also interculturality. Products and services

are not just developed globally, they are often also consumed globally. India is not the same as Brazil or Finland. Globally active brands can afford to speak a clear language. However, companies that are regionally grounded or are just starting out often need to take into account cultural differences between consumers. This can be accomplished through design.

**Design is strategic innovation** /// The most important capabilities of many companies are ideas and innovations. These are developed into products and services, and they fill market niches or gain new market shares with clever marketing. When Steve Jobs was asked how Apple tests market needs, he replied that Apple does not test its products at all – a leading company simply has to know what the customers need and then produce it. With this statement, Jobs practically tied the two ends of the value chain together.





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It is not only the object  
that is used in visual marketing  
but rather its symbols  
and meaning.



Development and marketing should be thought of as one and the same. Companies should know, feel and – during the implementation – also design what the customers want. Their design strategies should serve this common but ambitious goal.

Design measures, cleverly implemented from the beginning on, are already a part of marketing. Visual marketing understands the object as the headliner and the center in order to be convincing with its iconographical and semantic effect. Objects and their images are the most important conveyors of the message. The more distinct and emotionally loaded, yet understandable and customized this language is utilized, the more powerful the design of things will be. Put simply, it is not only the object that is used in visual marketing but rather its symbols and meaning.

#### How unused design potential can be better exploited

/// Our experiences in the development of innovative design solutions can be summarized with the following recommendations.

- > Incorporate design considerations as soon as you begin drafting new products. If the design process does not begin until the frontend, it risks having a cosmetic effect only and no substance.
- > Use design as a link between all functions of the company. Emotional added value and meaningful symbolism can only be created through dialogue.
- > A smart design briefing and creative design agencies who understand how to think integrally about design and marketing are the basis of successful cooperation. Freedom for designers is a requirement for developing their creativity.

- > Good design can definitely be “anonymous.” The quality of the services can be combined with marketing more easily if no famous designer name is in the foreground. Good design doesn’t exist in a vacuum; the images and desires of the future are already anticipated in the minds of the consumers. If you take into account the preconditions of good design, it becomes real and authentic. Then, the promises of design and marketing can be fulfilled at the same time. /.

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# Predicting Preferences for Innovative Design: The “Repeated Evaluation Technique” (RET)

*Claus-Christian Carbon*

KEYWORDS

*Prediction, Familiarization, Elaboration, Liking, Aesthetic Appreciation, Acceptance*

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**The dilemma of innovative products** /// Markets with a lot of competitive pressure move quickly. Innovations can be used to interest consumers in products, motivate them to purchase, or even get them so excited that they recommend the new products to others. Innovations offer enormous chances, but conversely also tie up many resources in a company’s research and development department. They are also not always successful, not by a long shot. Above all, the acceptance of innovations by the user is a big challenge. How can you assess or evaluate whether a product will be adopted and be successful in a future market? Predicting whether an innovation will align with the tastes and needs of consumers presents a very specific challenge for market and consumer research. If we improve in this field, we can differentiate more accurately between “good” and promising innovations and “bad” innovations lacking potential. Apple founder Steve Jobs boiled this challenge down to the following thought: “Sometimes when you innovate, you make mistakes. It is best to admit them quickly, and get on with improving your other innovations.”

**The basic problem: predicting acceptance** /// A few historical examples show that Steve Jobs’ statement about innovation is very true. In every industry, companies have failed because they focused too much on innovations that didn’t meet consumer tastes. A classic example from the auto industry is the *Wankel engine*, which held on too long to its very innovative engine concept at the end of the 1960s. Although the NSU Ro80, futuristically designed, equipped

with the revolutionary Wankel engine concept and using the latest aerodynamic principles, was very innovative from a technical point of view and also helped set a style, the car was nevertheless a big failure. The market wasn't ready yet for this mix of the latest technology and innovative design, and this flop ultimately cost NSU its economic independence. Conversely, though, totally rejecting innovative ideas also does not promise entrepreneurial success. This is demonstrated by products that are hardly developed further and whose producers have forfeited the marketability and relevance of the products, or products that have disappeared from the market completely. This brings to mind the East German Trabant car brand, for example. The challenge lies in confidently differentiating between successful and less successful future innovations.


**The specific problem: lack of familiarity with the new**

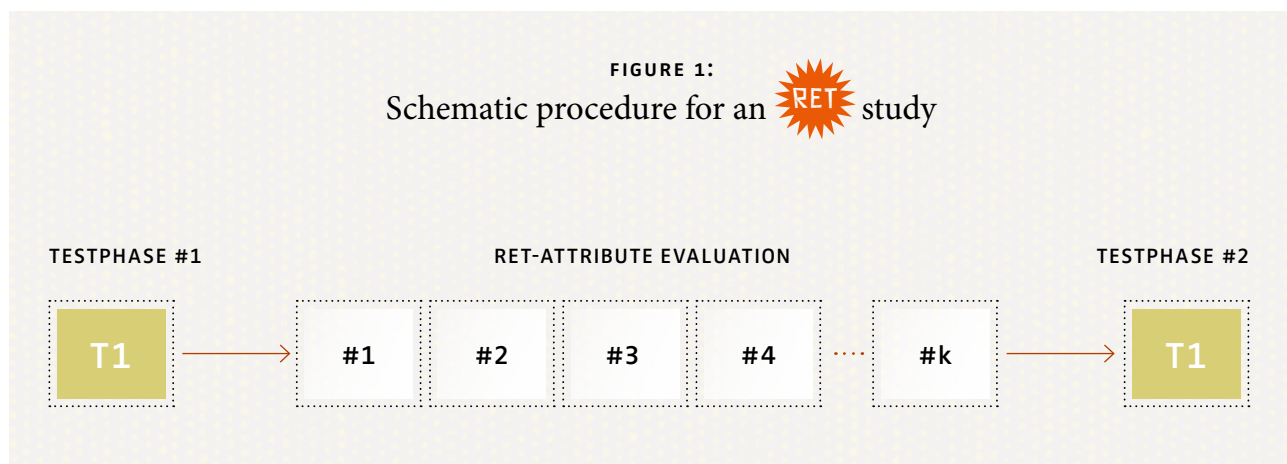
/// Market research must clearly address this exact issue, and often fails at an equally simple yet critical problem: How do you find the right people to realistically assess innovative products? If you ask experts who were involved with the development, then they have a high level of understanding of the innovation, but are biased and can no longer make objective decisions. According to the principle of cognitive dissonance, it's rarely possible to critically assess an issue or object in which you've invested a lot of energy, time or money. If you disregard the experts and rely on unbiased individuals instead, you encounter other difficulties. They often do not understand the nature of the innovation. This standard case in marketing research should be considered in more detail: the unbiased members of the public, potential users,

and the typical market participants who are surveyed about a new product, a new service, or a new brand and who are not experts. A neutral view is actually a sensible requirement to effectively avoid loyalty conflicts to a product. But there is a downside to consider: the Average Joe generally has an aversion to innovation. Typical users are consistently averse to innovations as they usually prefer known and trusted product solutions. This conservative tendency is totally natural, as familiar products don't require any extra learning compared to innovative solutions. They conform to established cognitive routines, and for this reason alone are frequently evaluated more positively. Cognitive psychology likes to speak of the "mere exposure" effect in this context: a "positive recognition effect." On the other side, our culture appreciates innovation, as well: we might love what we know, but we are always searching for something new and exciting. Innovations provide excitement which tempts us and attracts us, but only if we feel secure. This sense of security primarily occurs when we have the time and opportunity to familiarize ourselves with new and unknown things. Many market research approaches do not fulfill such requirements at any rate. There's often no time or means for building familiarity, and a standardized procedure for familiarization is still unknown.

**Systematic familiarization: the Repeated Evaluation Technique (RET)**

/// It is clear from the preceding commentary that a type of "systematic familiarization" is needed in order to obtain valid judgments from typical consumers. Without familiarization, the considerable innovation interest in older individuals is regularly underestimated. The

FIGURE 1:  
Schematic procedure for an  study



“Repeated Evaluation Technique” (RET) was developed especially for the purpose of systematic familiarization with products to be evaluated. Subjects in an RET, for example, typical consumers, are encouraged to explicitly think about a product and its competitors. This is realized through a standardized questionnaire which consists of about 10–25 attributes (see figure 1).

In such a study participants evaluate different products using individual questions. By forcing the subjects to engage with the material, known as the “elaboration,” the consumers begin to understand the product better and distinguish differences. The ascertained judgments come closer and closer to real everyday assessments that one would usually only gain after weeks and months of dealing with products. A typical result is shown in figure 2. In these studies, we tested the effect of the method in people from a younger and an older age group with different rigidity characteristics. All participants were rather skeptical towards innovation at the beginning. People with fixed opinions, attitudes and ambitions are considered to be rigid. Less rigid persons are characterized by being more flexible in their assessments. After assessing the rigidity of the participants we tested the effect of the RET on products with varying levels of innovation. The participants with more flexible attitudes clearly preferred the innovative product over the less innovative product after the RET. The highly rigid participants still preferred the less innovative product after the RET. The age of the participants, on the other hand, had no influence on the results. The familiarization with the RET achieved a consistent dynamic in both young and old people with low rigidity scores.

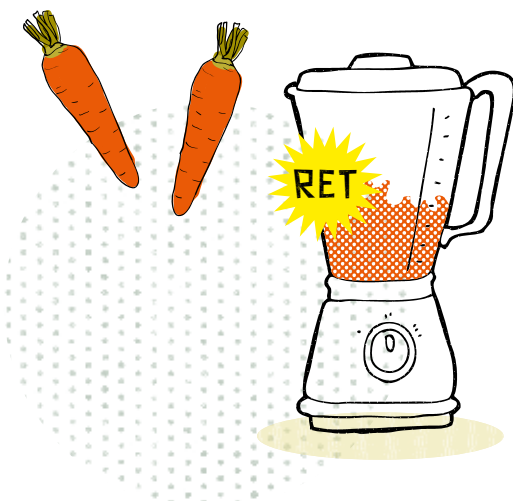
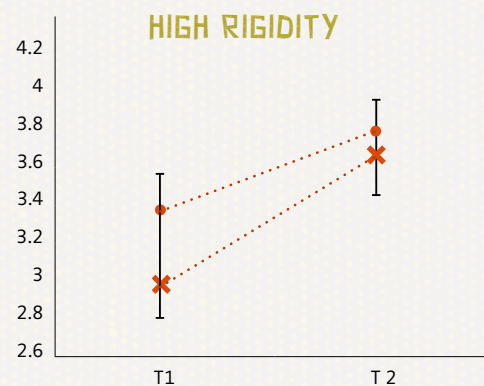
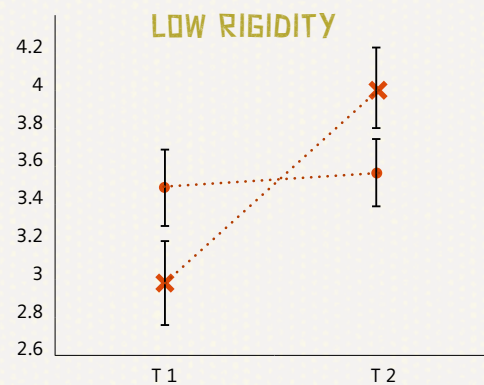


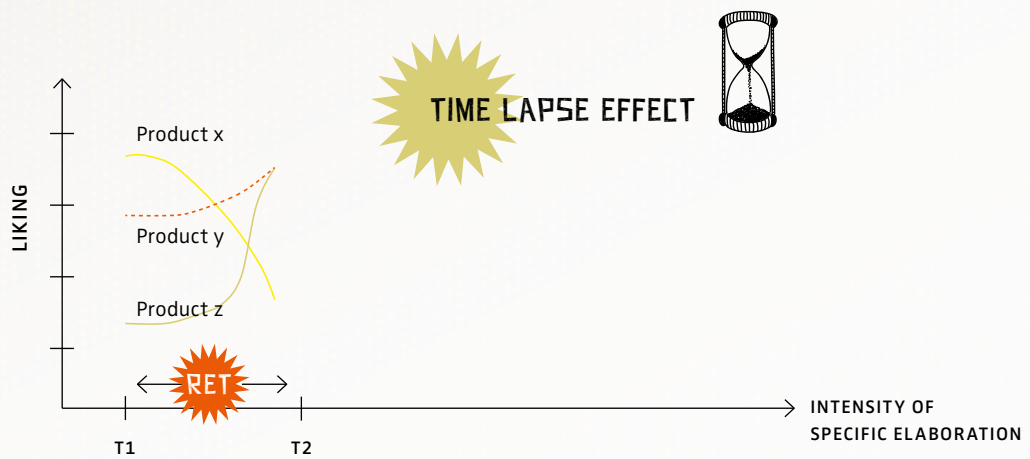
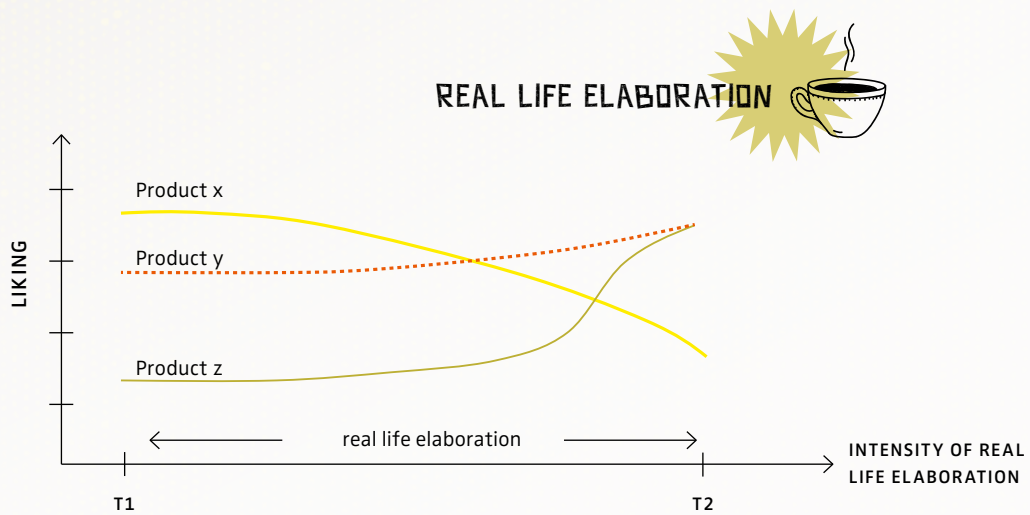
FIGURE 2:

Typical results of an  study for subjects with different rigidity scores



- Low Innovation
- ✕ High Innovation

**FIGURE 3:**  
Illustration of the time lapse effect through systematic familiarization of consumers.



**A glimpse into the future of the Average Joe** /// The RET provides a type of simulation of future perspectives and assessments. Consumers are made familiar with products in such a targeted and intensive manner that they no longer require the typical familiarization phase for new products in the real market environment. After going through just one RET phase, they make specific judgments, which usually would not be made without longer time and concrete experience. The RET functions like a type of time lapse which simulates the daily effect of engagement and familiarization in a short time (see figure 3). It improves the validity of preference evaluations and makes it is easy to distinguish between successful and unsuccessful innovations. The application of RET is of particular interest when the innovation and production cycles last a long time. In the automobile market, where multi-year innovation cycles are typical, the method has already been applied successfully.

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Consumers are made familiar with products in such a targeted and intensive manner that they no longer require the typical familiarization phase for new products in the real market environment.

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When the success of an innovation is not clear before its market launch and the real elaboration with the available product, companies will experience negative effects. Unsuccessful innovations could not be withdrawn from the market, since the cycle of renewal simply takes too long and would cause high additional costs. Using RET, you can recognize the first tendencies for low acceptance already at the pre-development, development, and pre-market launch phases. The company can then either completely stop the market launch or at least modify the product in time. Managers can alter the design, for example, or can change the marketing campaign. At any rate, they can confidently undertake the all-important task of Apple founder Steve Jobs: assessing the difference between sustainable, profitable innovations and unrewarding, short-lived or unattractive innovations.

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# Beyond Aesthetics: Seeing Form and Believing in Function

*JoAndrea Hoegg*

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KEYWORDS

*Design, Product Form,  
Function, Perceived Performance*

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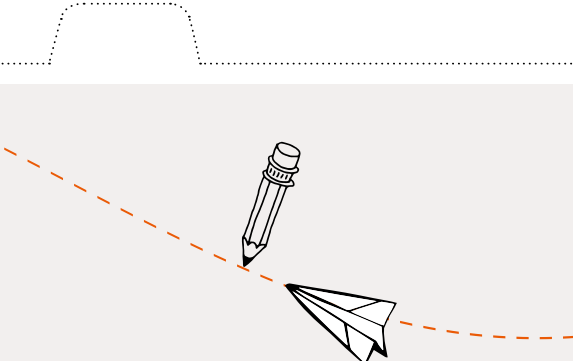
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The design of products has risen from being a mere afterthought in product development to a key driver of success. Good design is primarily associated with aesthetics, beauty and sensory pleasure. Good design charges products with positive emotions and makes them more successful than those that rely on functional superiority only. But apart from the emotional aspect of design, form does also communicate how well a thing might work. Product form is able to influence how consumers evaluate individual product features. And, in some situations, they trust a product's appearance more than factual information on its performance. Seeing can be believing, even if other evidence contradicts the visual clues.

**Appearance and its impact on judgments** /// Perceived functional performance of objects has an interesting parallel in effects of human appearance. It is not only personal attractiveness that impacts our overall judgment of a person. Other physical traits can significantly alter more specific assessments of a person's competence. From particular facial features we assume that the person would possess particular character traits. Researched examples abound: CEOs with a "babyface," characterized by wide eyes and a round face, were considered less responsible for a crisis. Military officers who possessed "dominant" facial characteristics like a high forehead and a square jaw were more likely to be promoted within military ranks than those who appeared less dominant looking. Politicians who were judged as having the appearance of competence were more likely to win congressional elections.



**PITTING PRODUCT FORM  
AGAINST CONFLICTING  
WRITTEN INFORMATION**

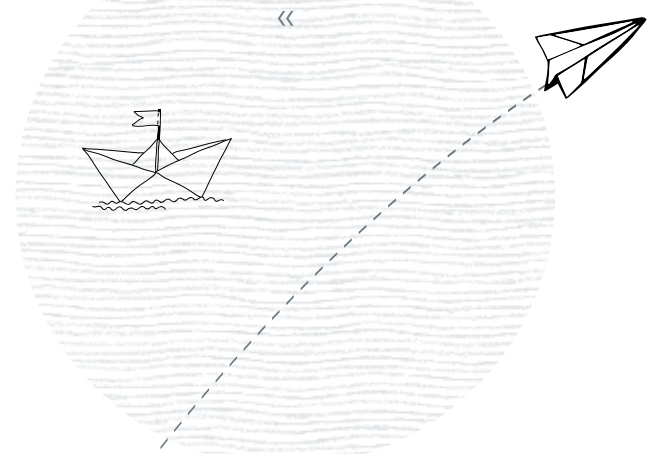
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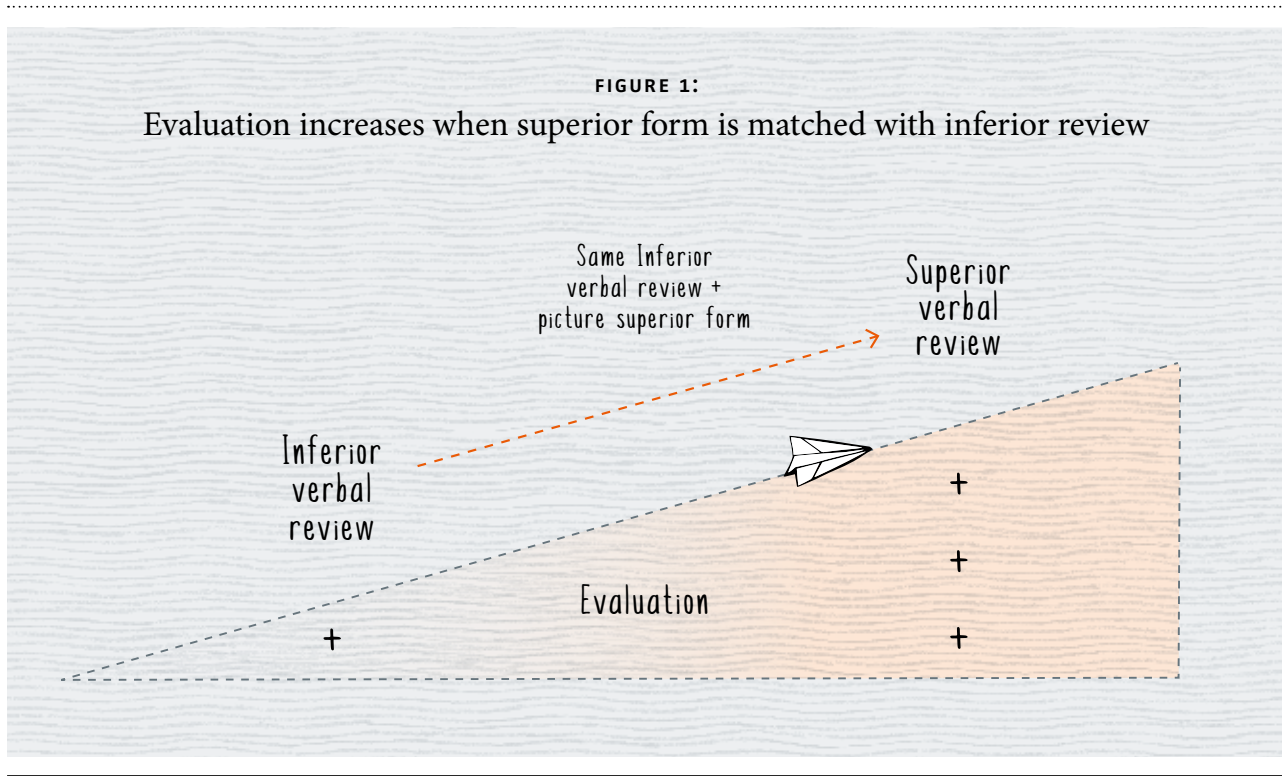
In our experiments, consumers compared expert reviews of two product options and made relative judgments of functional performance based on the reviews. One brand was always described to be more favorable than the other. This information was either presented alone or matched with different pictures of the product. While the product presentations were tested to be equally attractive, they were different in the extent to which their product form conveyed functional performance.

One option had the outward appearance of functioning less well than the other. For some participants the pictures of the product options were mismatched with the written reviews so that the review that communicated high functional performance was paired with the product form that communicated low functional performance and vice versa. Then, participants evaluated products against each other and not in absolute terms because this form of evaluation is the usual one in a typical buying process. They were always instructed to base their judgment on the written expert review to see if product form influences their ability to evaluate objective product information.

The same principle applies not only to judging people but also to products. Their form can create expectations about the functional performance or individual features, such as when construction material implies durability, size signals power or shape suggests aerodynamics. Certainly, in many instances visual design can be a reliable indicator of functional performance. A larger product may indeed be more powerful or a flimsy-looking construction material may, for instance, be less durable. However, product form can also be misleading in other instances, such as when actual product quality is difficult to judge. To shed more light on how design affects the assessment of the performance of products and their features we carried out a series of experiments. Their results have interesting implications for product design and the marketing of products designed to enhance performance perceptions.

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When a product's design  
suggests a particular level of  
functional performance, it can alter  
consumer judgment.





**Design and functional impression** /// Overall the experiments demonstrate an influence of product form that is independent of aesthetic appeal. When a product's design suggests a particular level of functional performance, it can alter consumer judgment, even in the presence of ostensibly more objective written information.

**A high level of functional performances increases evaluation but does not reverse judgment** /// In one setting a shoe with objectively inferior written features was paired with a product form that suggested a superior level of functional performance. We observed that participants' judgments of feature performance were shifted in the direction of the superior-looking shoe. In contrast, there was no shift toward the superior-looking shoe when it was paired with objectively superior written features. It seems that consumers develop expectations about functional performance when they compare different forms. When form and function were consistent, the expectation created by the product forms was simply confirmed by the written information and delivered no incremental advantage.

The same effect was found for the judgment of individual features in four different product categories – cookware,

stereo speakers, in-line skates and electric mixers (figure 2). Design can also operate in a more localized manner, influencing judgments of target features rather than overall perceptions of functional performance. For the target feature, the presence of pictures altered the relative functional performance ratings in favor of the presented designs, but for the non-target features the presence of the picture had no effect. This is evidence that product form can communicate functional performance independently of global attractiveness.

**The order of information presentation makes a difference** /// In addition, we found that functional performance implied by product form exerted an influence only if the consumer had been aware of or interested in particular features first. When consumers saw the pictures before the review and did not know which feature they would evaluate, their rating did not differ from those who received a written review only. They were uninfluenced by the product's form. When, however, they were informed in advance, the picture-first situation had an impact. In this case consumers tended to attend to the target feature when processing the design and their evaluation changed.

**FIGURE 2:**  
Samples of picture/description combinations  
used in the experiments

High performance picture/  
Low performance review



This cookware set includes a large stock pot, three pots, and two frying pans. The pots have well fitting lids that keep heat in nicely and sturdy handles that stay cool to the touch. The set is durable and can be used at the highest heat, even when cooking with a gas stove. Food cooks very evenly because of the flat bottoms that sit squarely on the elements, maximizing heat distribution and minimizing burning. If pans sit out for an extended period, remaining food can be difficult to remove. The lids of the stock pot and medium pot also fit to the frying pans.

Low performance picture/  
High performance review



This cookware has good heat distribution, food generally cooks evenly. The pots and pans have a solid base, durable construction and lids that seal in heat very well. The stay-cool handles are ergonomically designed and comfortable to hold. Very little will stick to these pans, regardless of cooking method, so they can be washed out with dish soap and a cloth; it's rarely necessary to use a scrub brush. The set includes three handled pots of varying sizes with lids, a large stock pot with lid, and two frying pans that fit the lids of the stock pot and mid-sized pot.



These speakers have a straight-line signal path crossover network which divides the signal with minimal processing. Basis response is adequate but not strong, making the speakers perfect fit for a smaller space like a dorm. The sound is clear and accurate, very easy to listen to. You can almost tell the relative position of the different instruments in the recording studio. The balancing technology blends direct and indirect sound almost anywhere in the room, giving the feeling of surround sound with only two speakers.



These magnetically shielded speakers house two angled, full range drivers engineered to generate more air movement from a small enclosure than conventional drivers. They deliver clean, uncolored, realistic sound, which is maintained at higher volumes, provided of course that the accompanying stereo system is adequate. They would be suitable for a home theater system because the direct/reflect system avoids the common problem of a speaker sweet spot and ensures the same quality of sound throughout the room.

**Making the most of designed functionality** /// Research on the effect of design has tended to emphasize the aesthetic dimension of product form and its global, spontaneous and even unconscious influence on overall product evaluation. We were able to demonstrate that design also has the potential to shape perceptions of functionality – of whole products and individual features. Our insights have important implications for design creation and communication as well as for consumers. They highlight the importance of close cooperation between product development, marketing and design.

> **Use design to support performance perceptions** /// Good design provides sensory pleasure and adds emotion even to technical products. For product developers who wish to communicate a high level of performance for a new product, it is important not to overlook the opportunities offered by product form. A design team may be well advised to consider the functional performance communicated by design in addition to design's more traditional aesthetic dimension. That is, when making trade-offs among multiple engineering characteristics and product form, the product developer is not bound by global design and may focus design effort on those features that are driving the buying decision or provide the greatest return on investment.

> **Support design effects with marketing communication** /// Consumers' first experience with a product is often through seeing a picture or the real product itself. To support the effect of form on feature performance perception, consumers should be informed about the elements that are most important and have been reinforced by design. It is critical to direct attention toward relevant target design features to maximize the likelihood that the design efforts to enhance functional expectations have the desired effects. Of course, relative differences in form are on a continuum, and at the extremes consumers would probably notice visual differences in functionality without prior intentions. Nonetheless, with high numbers of firms focusing on product form issues, it is likely that most visual differences in functional performance are not overwhelming and must be emphasized through marketing efforts. Therefore, it is important that marketing communications support the influence of product form on information processing and judgment.

> **Be aware that design-functionality inferences might be misleading** /// From a consumer perspective, the experiments suggest that performance expectations created by product form may be difficult to overcome. Even when instructed to base judgment on the verbal information, the visual clues alter evaluations. For many products, such as those that are used for safety or health, functional performance is far more important than form. If consumers are truly unable to ignore visual information in cases when it is irrelevant, undesirable outcomes may ensue.

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#### ABOUT THE VOLKSWAGEN GROUP

The Volkswagen Group with its headquarters in Wolfsburg, Germany is one of the world's leading automobile manufacturers and the largest in Europe. In 2014, the Group delivered more than 10 million vehicles to customers all over the world. 592,000 employees in 118 production plants in 20 European countries and a further 11 countries in the Americas, Asia and Africa produce nearly 41,000 vehicles per working day.

The Group's share of the world passenger car market amounts to 12.9%. In Western Europe, the 12 brands that the Volkswagen Group produces – Volkswagen Passenger Cars, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN – make up one quarter of all new cars. Each brand has its own character and operates as an independent entity on the market. The product spectrum ranges from motorcycles to low-consumption small cars to luxury vehicles. In the commercial vehicle sector, the products include pick-up trucks, buses and heavy trucks.

The Group's goal is to offer attractive, safe and environmentally sound vehicles that can compete in an increasingly tough market and set worldwide standards in their respective classes.



#### ABOUT WALTER DE SILVA

The Italian-born Walter Maria de Silva began his professional career at the Fiat Design Center in Turin in 1972 and switched to the Bonetto Design Center in 1975. After a short period of employment at Trussardi Design Milano, he moved on to Alfa Romeo in 1986, where he was Head of Design until 1998. There he created a new direction in design for the brand with the Alfa Romeo 156. Starting in 1999 as the head of the SEAT Design Center, he developed the brand's design line. In 2002, de Silva took over responsibility for design at the Audi Group. His vision for the new Audi design language is embodied especially in the sixth generation of the Audi A6 and the first generation of the Audi A5 Coupe, which de Silva has called "the most beautiful car that I have ever drawn." In 2007 he assumed leadership of Group design at Volkswagen AG and thus for the design of all its brands. De Silva sees the core of his task as establishing and fostering a brand-spanning design culture that ensures each brand's independence on a high level of design.

De Silva has received numerous design awards – among them the Red Dot Award and the renowned Italian Compasso d'Oro (Golden Circle) design prize. The Audi A5 received the Design Prize of the Federal Republic of Germany in 2010.

#### THE INTERVIEWER

The interview was conducted by Jan Landwehr in January 2015 in Munich.

# Design and Iconic Brands

*MIR Interview with Dr. Walter de Silva, Head of Design  
at the Volkswagen Group*

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The VW Beetle, Apple, Porsche ... many iconic brands have reached their status with groundbreaking designs. But what makes these designs so special?

And is it really the design factor that accounts for the overall success of a brand? Dr. Walter de Silva shares with us his thoughts on iconic designs, the design process and the role of design in branding. Open your heart and mind to his extensive experience in developing designs for Volkswagen, Audi and other brands of the Volkswagen Group.

**MIR:** Dr. de Silva, you are not only a distinguished designer but you are also responsible for coordinating and integrating the design work for one of the largest and most successful car manufacturers in the world. Can you give any concrete advice on what makes great product design?

**WALTER DE SILVA:** It is almost impossible to talk about design using words. Design is a very emotional aspect of products. It cannot be understood with the rational mind but rather builds on our gut feelings. If I see great design, I can feel it. If I draw a sketch, I can feel whether it can become a great design idea or will land in the trash basket. Even if all design elements, such as proportions and shapes, follow established design laws, the design can feel wrong. It is hard to say why, but it simply feels wrong – and this feeling is quite clear.

**MIR:** Do you think consumers perceive design in a similar way as you do? Can they also trust their feelings towards a product's design, or do they need an explanation by educated designers to appreciate it?

**WALTER DE SILVA:** Good design does not need any explanation! It speaks for itself. Consumers can trust their feelings, at least in everyday situations. Amazingly, this is not the case when it comes to car clinics for future cars.

**MIR:** Did you learn that design evaluations from car clinics are not accurate? Why is that?

**WALTER DE SILVA:** If you are not a design expert, it is difficult to evaluate designs for five years from now. All perceivers –

no matter whether consumer or designer – evaluate design against a given standard. For consumers the current market and the usual cars on the streets establish the standard for judgment. So, if consumers react reluctantly in a car clinic to a particular element that is innovatively designed, I consider this a positive signal for its potential future success. If consumers react very positively, chances are that this design is good for the moment but will be perceived as outdated or boring in five years' time.

**MIR:** So, for future-oriented, less-common designs, you need to be a designer to see their potential?

**WALTER DE SILVA:** Yes, designers are used to thinking in a visionary and out-of-the-box manner. That's their daily business when they exchange ideas about new designs. They need to be able to think ahead and to anticipate future emotional responses to designs. In contrast, consumers are usually unable to predict their future reactions to designs because they will be embedded in a very different context.

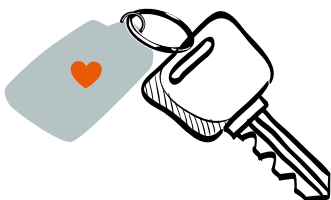
**MIR:** Do you have an example of a design feature that was negatively evaluated in a clinic but became successful?

**WALTER DE SILVA:** Audi's singleframe grille! When I introduced the singleframe grille, the clinic's results showed that consumers liked everything about the car but the grille. Nevertheless, the singleframe grille has become one of the most important design features of the Audi brand, and our customers love it now. Audi has received a distinctive face that everybody recognizes and remembers – something very important for a premium brand.

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Design is the key to reaching  
the heart of your customer.

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**MIR:** You just mentioned the important connection between design and branding. Besides giving the brand a face, how else does good design contribute to the brand?

**WALTER DE SILVA:** Design is the key to reaching the heart of your customer. As an example, think of Audi 30 years ago. Audi has always produced very good cars, which was reflected in the claim "Vorsprung durch Technik." The cars were based on great engineering skills, but they were too rational: made only for the head but not for the heart. It was Audi's new focus on design that added an emotional component to the brand. The combination of strong rational aspects, such as technology, mechanics, ergonomics and functionality, with the emotional power of design makes the brand so successful now.

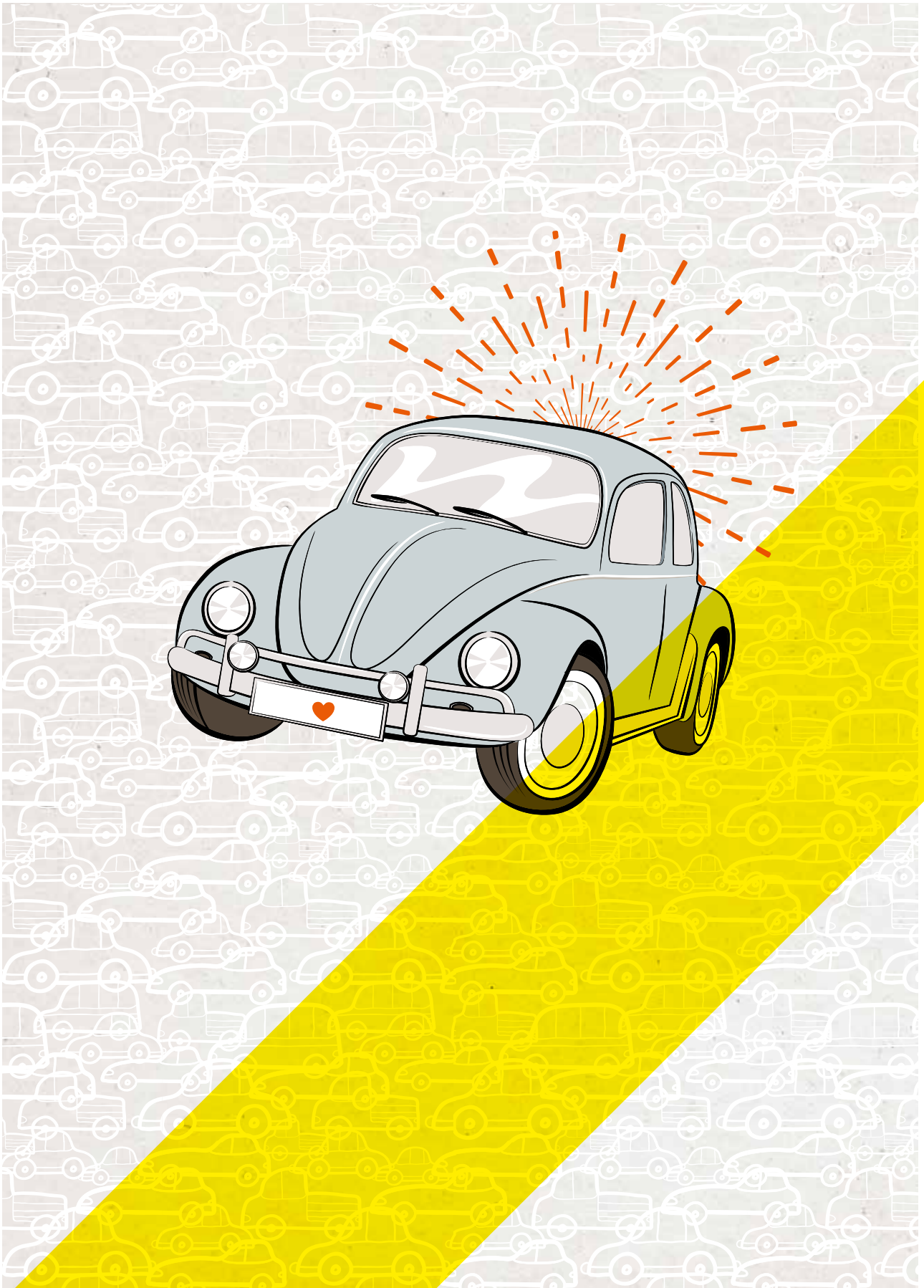
**MIR:** Combining different elements of a product for overall success reminds me of the basic Gestalt principle, which states that a whole thing is more than just the sum of its parts. Would you agree that this idea holds true in the context of cars?

**WALTER DE SILVA:** Yes, definitely. All elements need to work hand in hand to create the best products. And from my experience, the final product is always better than the preliminary sketches along the road. Consumers buy the complete product with all its elements: functionality, quality, design, brand identity, etc. If one part is dissatisfying, a product's success is at risk.

**MIR:** If the success of a product depends to a large extent on the right combination of brand identity and design, these two elements need to be coordinated very well. How can marketing and design work together successfully?

**WALTER DE SILVA:** I often experience some tension between marketing and design. I think in order to resolve this tension, interconnected processes should be well defined. You need clear-cut job descriptions, and each side should know its own territory exactly and refrain from entering the other side's territory. Also, appreciation for each other's work is necessary. I have a lot of respect for the work done by our marketing people. In return, I expect the same amount of respect for my design work.





**MIR:** You mean marketing should not interfere with the designs?

**WALTER DE SILVA:** When it comes to design, compromise is a bad thing. Compromise leads to weak and unpersuasive designs. We need input from marketing, but the actual design should be done by designers only. Design should perform with confidence, have the necessary creative freedom and not be placed in a defensive position. I collaborate a lot with our marketing people, and in my experience communication is key. If marketing and design stay close and respect the jobs done by the other side, they can grow together and achieve the best possible results.

**MIR:** What kind of input do you need from marketing to create great design? Could you please elaborate a bit on the market insights you use for your work?

**WALTER DE SILVA:** We usually sit down with the marketing people to discuss the key elements of the brand identity and its further development. Brand identity and design need to be closely aligned to form an overall convincing product. General trends in consumer preferences are of course an issue as well. We need to know how consumers' lives will change. On a more abstract level, we are very interested in cultural developments. We have observed a trend towards multicultural societies, and that has exciting implications for design.

**MIR:** Although we just discussed how many different aspects need to be aligned to form a successful product, it would be interesting to hear your rough guess on the role of design. What percentage of a product's success can be traced back to its appearance or design alone?

**WALTER DE SILVA:** I would guess that it is about 50 %: at least 50 %, probably more. But again, it is hard to tell because design only works when the other aspects of the product are also performing well.

**MIR:** Does design get enough attention and resources within most companies?

**WALTER DE SILVA:** Well, more would always be better 😊 ... Seriously, it strongly depends on a company's culture and of course on its Board. I am very happy and grateful to work for a company that is led by Martin Winterkorn. He is the main reason why Volkswagen and Audi have become design-driven companies. He gives us a lot of freedom and the trust necessary to create great designs.

**MIR:** Can you think of any other companies that have reached their next level through a focus on design?

**WALTER DE SILVA:** A fascinating example from the past is Braun and the work of Dieter Rams. Rams totally transformed Braun into a design company. Braun without Rams would be nothing. A more recent example is, of course, Apple. Jonathan Ive totally changed the business model of Apple with the creativity of its designs. Apple products create pure desire. This desire is responsible for the tremendous success of Apple. For those companies design is everything. If you stop pushing design, you kill the brand.

**MIR:** What gives designers the ability to transform brands and companies? What is so special about designs?

**WALTER DE SILVA:** Design is able to make the product experiential. Everybody can talk about design, but if you hand a pen to a designer, he or she can draw something that becomes real. And design is a very important part of everybody's life. The first thing you see in the morning is probably designed: your alarm clock, your bedside lamp, or more recently your smartphone. The world is full of design. Sometimes, however, even in a world full of design particular designs stand out. They are so special and so strong that their products become brands of their own. Think of the Beetle or the Golf. These products are so iconic that they have – thanks to their design – become their own brands within the brand Volkswagen. This kind of success has the capability to transform a company into a design-driven company.

**MIR:** You just mentioned examples that are regarded as timeless masterpieces of design. Why do some designs become such classics?

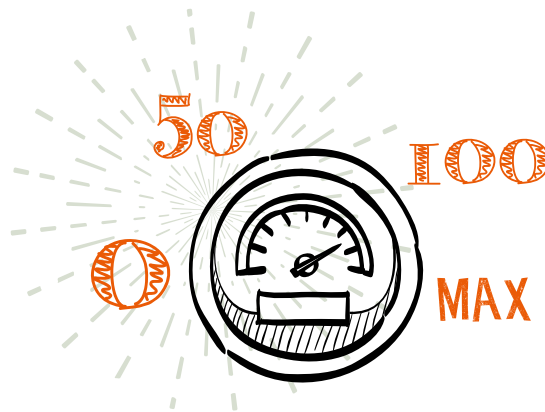
**WALTER DE SILVA:** What are known as "design evergreens" need a perfect mix of vision and brand culture and a design that possesses the capability to express this brand heritage exactly. If there is a fit, you will immediately recognize that the design feels right. Once established, you can build on it. As a principle, its evolution should be steady and continuous rather than disruptive. If you change too fast, the design heritage and its power get lost. The Porsche 911 is a prime example of a strong mixture of design and brand heritage that has been cultivated over all those years without losing its original appeal.

**MIR:** Especially strong, expressive designs are often consumed to display one's own personality. How difficult is it for a designer to design for a target segment that is totally different from his or her own personality?

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Like in a soccer game, we designers would also like to win: no second place – we want to create the very best design on the market.

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**WALTER DE SILVA:** In general, the difficulty of designing for consumers who are similar to versus different from the designer is the same. It is part of the job to extend one's own scope and to adopt different perspectives. This process feeds the designer's creativity.

**MIR:** You mean a talented designer can design just about anything?

**WALTER DE SILVA:** No, you need the right people on the right projects. This is why design coordination is so important. There are highly talented specialists for every design aspect. As Head of Design, it is very crucial to recognize these talents and to assign the jobs accordingly.

**MIR:** How long does it take to come up with good design sketches?

**WALTER DE SILVA:** You need to set time limits to canalize the creative energy. It is like in a soccer game: Although you could in principle play forever, the game would not become more interesting. You only have 90 minutes to win. This limit helps to focus the energy and to perform. The same holds true for design. Limits help to bring the best creative performance to

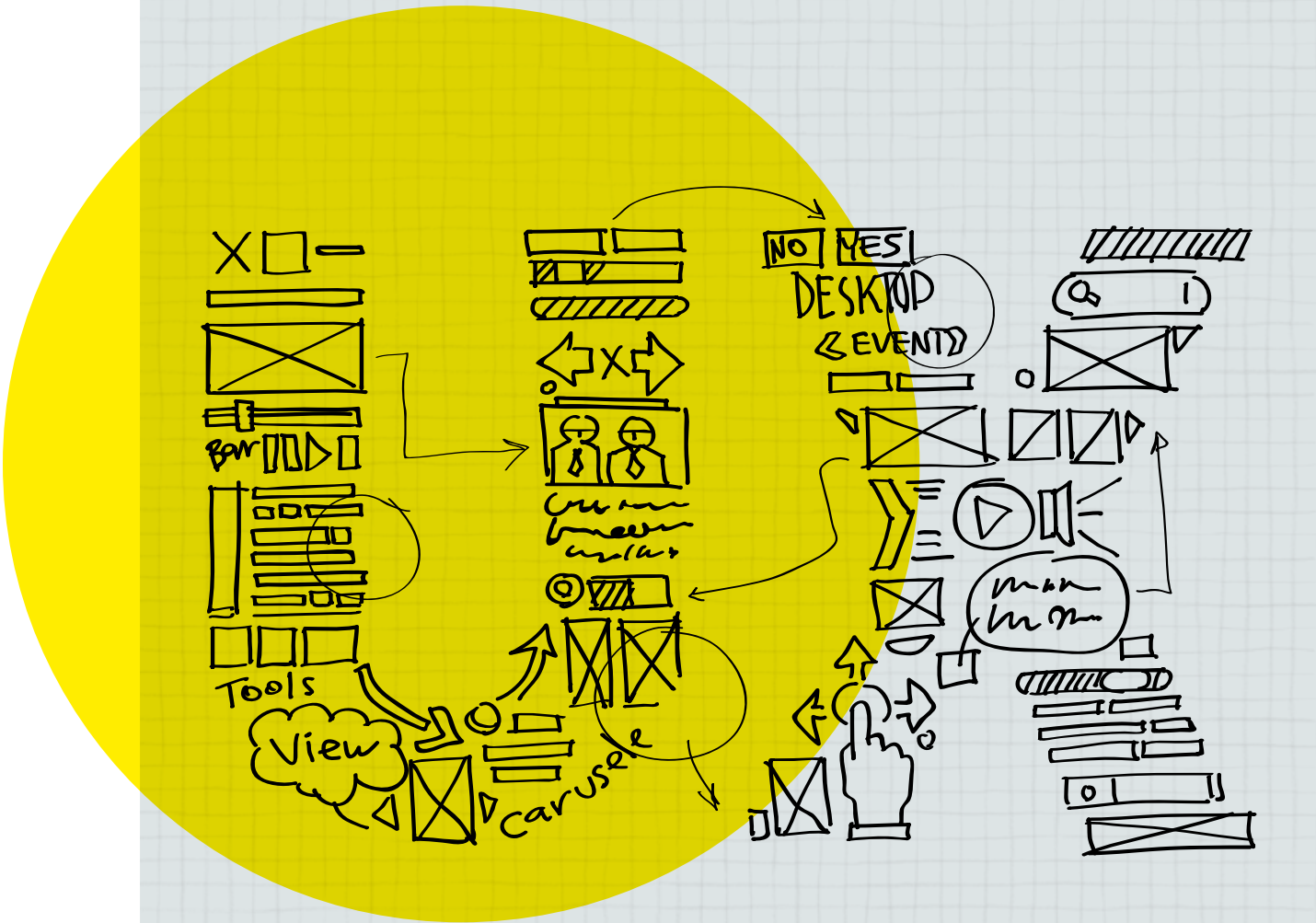
light. And like in a soccer game, we designers would also like to win: no second place – we want to create the very best design on the market.

**MIR:** In soccer games, goals are a clear-cut measure of success. Is it possible to measure good design in an objective way?

**WALTER DE SILVA:** I am not really into numbers. Numbers are for my colleagues in the sales department. The only measure I consider relevant is time. Time will tell whether a design has been successful or not. While retrospective understanding is possible, predictions based on numbers are very difficult and currently neither very trustworthy nor informative.

**MIR:** Dr. de Silva, time has certainly proven the power of your designs. We marketing people have high respect for your work and look forward to delivering valuable insights on what inspires your design work. And, believe me, we will also keep working on methods to make design success more predictable. Thanks for sharing your interesting thoughts and insights with us!

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# How Good is Your User Experience? Measuring and Designing Interactions

*Raimund Wildner, Christine Kittinger-Rosanelli and Tim Bosenick*

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KEYWORDS

*User Experience, UX,  
Service Design, Interaction*

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**Digitalism and the new focus on interaction and experience** ///

Form and function are important dimensions of consumer choice, but there is more in our increasingly digital world. It is not only products per se that need to be designed but the whole interaction between consumers and brands. The whole UX or user experience is more important than ever before. Digitalism nowadays is everywhere, and even mundane products are becoming more digital (e.g. ovens), while others evolve that are purely digital (e.g. PayPal). The question is: How can we effectively measure and design interactions in this highly digital and complex environment? For quite a long time “usability” was the one and only measure on the agenda. But consumer experience goes far beyond ease of use or high functional quality. UX is a complex construct with several dimensions, as demonstrated in the following example:

**UX goes beyond usability** ///

In June 2010, Samsung released its new Galaxy S Smartphone, which was appreciated by the press for its great usability. It was sold around 10 million times within seven months. Within this time the price of the Galaxy S dropped from its initial €649 to €420. One month later the iPhone 4 was launched. It was sold around 30 million times from July to December 2010. More importantly, the price of the iPhone 4 in January 2011 was still around €629. In some countries the iPhone 4 could only be bought at certain providers, forcing customers to change their mobile provider if they wanted to use an iPhone4. Hence, despite the constantly higher price, the obstacle of a necessary provider change and a similar usability, the iPhone 4 sold three times more than the Galaxy S. Apparently, usability alone cannot explain the huge difference in sales between the two smartphones. And, while brand identification might have played an important role

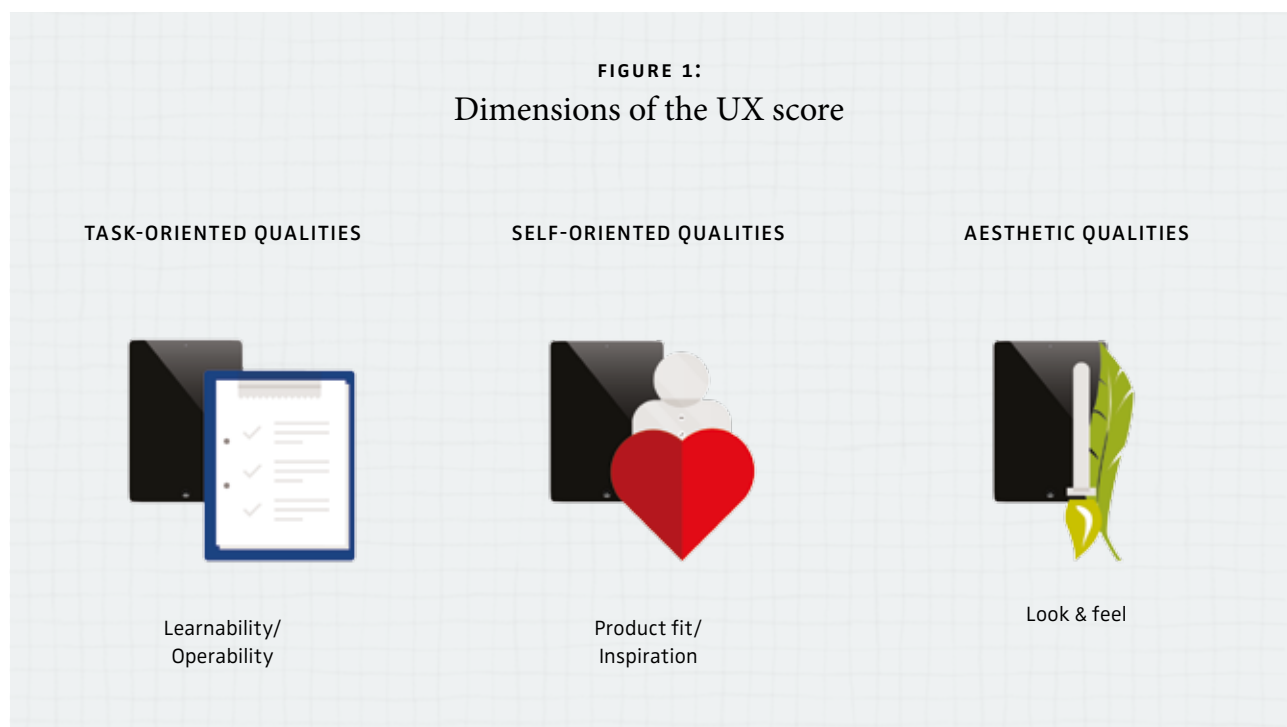
here, it alone cannot account for this difference as well. The same applies for other aspects such as design or features of the smartphones. No single factor alone can help to explain this sales difference. It is the whole experience that makes the difference.

**Measuring the user experience** /// Definitions of UX vary in scope and detail. Common ground is that user experience is formed by several qualities and dimensions that are independent of each other. Based on previous conceptualizations and an expert workshop, GfK developed the following model (figure 1) as the basis for a proprietary tool to measure the subjective perception of user experience, the UX score.

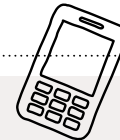
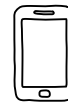
The UX score was internationally validated and uses the following three dimensions that are measured on five sub-dimensions with a 12-item scale:

- > Task oriented qualities reflect the instrumental subdimensions of learnability and operability. They can be summarized under the term “usability.”
- > Self-oriented qualities reflect more general human needs. This dimension is made up of the subdimensions product fit and inspiration.
- > Finally aesthetic qualities reflect the subdimensions of product look and feel.

The UX Score captures all relevant facets of UX, generating results that are directly practicable and provide a comprehensive understanding of how users interact with these products. To demonstrate how this construct can deliver managerial-relevant insight and how to design products and experiences in a manner that is more user oriented, we present two cases (box 1 and 2).



{Box 1}

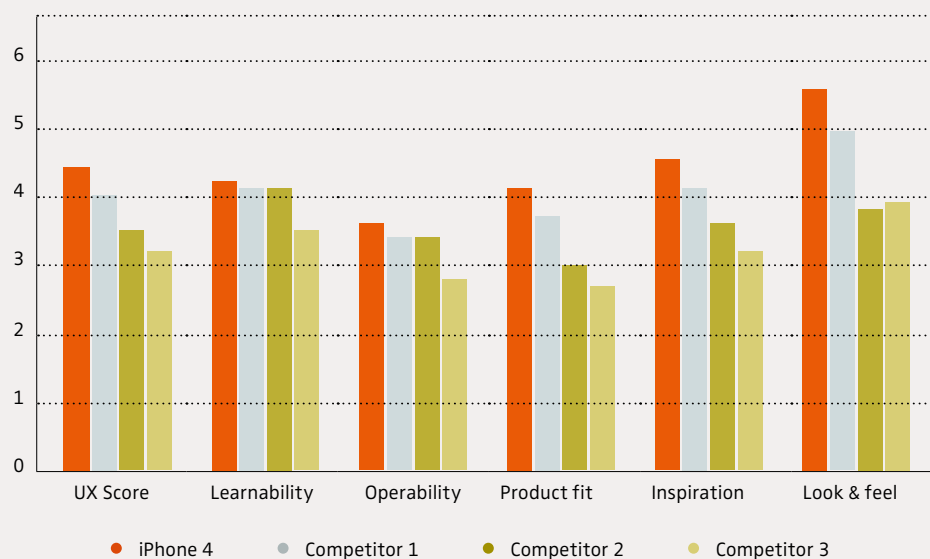


## MEASURING THE UX OF SMARTPHONES

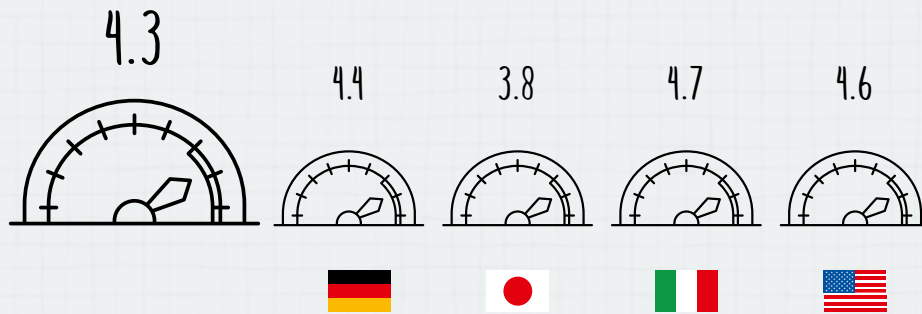
Our first case deals with smartphones and was conducted in Germany. Can the UX score differentiate between different products? And can the results of the dimensions/subdimensions deliver valuable insight on how the product design should be changed in order to improve the user experience?

To answer these questions, four smartphones were tested in a sample of 396 respondents. The result was very clear. Figure 2 shows that the iPhone 4 is clearly rated superior to its competitors. It further shows that this superiority to competitor 1 and competitor 2 is not so much due to the usability dimensions learnability and operability but more to product fit, inspiration and – especially for competitor 2 – to look and feel. So if competitors 1 and 2 would like to close the UX score gap to the iPhone 4, they first should work on the last three subdimensions, less on the first two.

**FIGURE 2:**  
UX Scores and scores for UX subdimensions  
of four smartphones (higher is better)

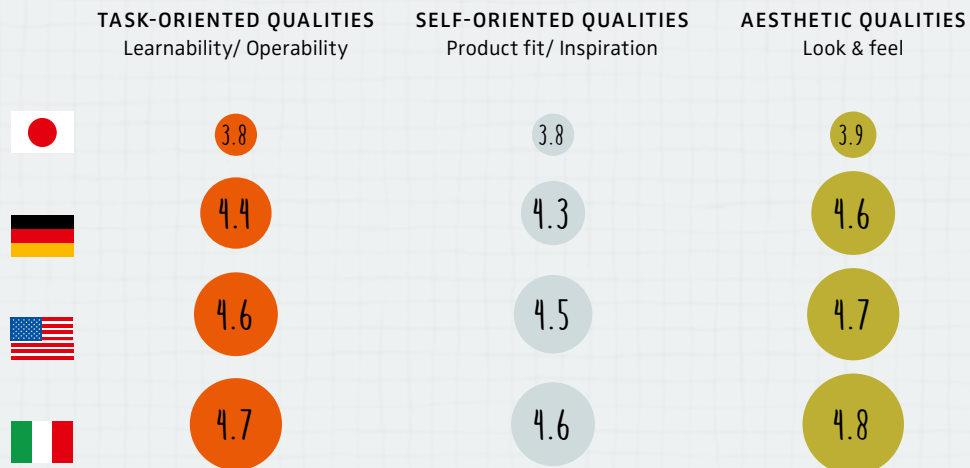


**FIGURE 3:**  
UX Score infotainment systems in different countries



Basis: total n=3,776; GER n=1,146; ITA n=403; JPN n=1,238; USA n=988

**FIGURE 4:**  
Results of UX dimensions in different countries



Basis: total n=3,776; GER n=1,146; ITA n=403; JPN n=1,238; USA n=988



{ Box 2 }

## APPLYING THE UX SCORE ON CAR-INFOTAINMENT SYSTEMS

In a recent GfK study, we surveyed around 3,700 drivers in the US, Japan, Germany and Italy on their user experiences with the human-machine interfaces of car-infotainment systems of 15 different brands. Drivers in the US were most likely to give high scores to infotainment systems generally; out of six, the average UX Score in the US was 4.6, compared to 4.3 globally (figure 3). In the US, Nissan took the lead, followed closely by Honda, while the German brands scored highest in Europe (Germany and Italy).

- > **Benchmarking across competitors** The UX score can be applied internationally and deliver valuable insights on the perceived user experience of different competing brands and different regions. As demonstrated in the mobile phone example, the UX score indicates the relative position of a brand compared to competitors and shows in which areas the brand should improve. Our second example of car-infotainment systems shows how UX is perceived in different segments and countries.
- > **Focusing on the right dimensions** Results of the UX score can be matched with other data, and the user experience can be improved in the areas that have the highest impact. For car infotainment, e.g., understanding the icons and system commands were the functions that impacted the UX score the most and negatively. This is a very clear mandate for improvement and helps illuminate drivers' needs. The UX score helps understand "what" cause difficulties and "why." It helps to test different designs and solutions and their regional/market applicability.

### How to design better products with UX score results ///

The UX Score builds a bridge between a scientific approach and the practical world. It is easy to understand and more comprehensive than other available tools that attempt to describe the user experience. In particular in the following areas it provides valuable insights for products and brands and enables marketing managers to design products that enhance customer satisfaction.

- > **Get the complete picture** In contrast to traditional usability and user experience measures, the UX Score appears to be the only tool so far to comprehensively capture user experience. Despite its task-oriented factor that parallels the usual usability facets of other measures, it offers explanations for the more emotional aspects of use. Product usage for example should not only be enjoyable but also inspiring and exciting. Consequently, the "inspiration" subdimension of the self-oriented factor provides a more intensive "joy of use" which can explain these aspects. Additionally, other UX measurement systems contain "usefulness" as an important factor. In contrast, the "product fit" subdimension of the UX Score is more emotional, as products do not only need to be useful, but the users have to ideally identify with the product. Our aesthetic qualities include design aspects that other measures capture as well, but it goes far beyond.

## FURTHER READING

**Bosenick, Tim; Wildner, Raimund (2014):**

How to Measure User Experience ...  
and to Calculate its ROI,  
Esomar, Amsterdam.



# Executive Summaries

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## Marketing and Product Design: A Rocky Love Affair

*Jan R. Landwehr and Andreas Herrmann*

The success stories of design-oriented companies like Apple, Audi or Nike have put design on the agenda in many marketing departments. Consumers cannot elude the effect of aesthetics and therefore design is a major factor for business success. Typically consumers choose the product with the best design, all other aspects being equal.

Only when the interplay of product characteristics, brand and design is carefully coordinated can successful products be created. This requires an integrated approach to design, one which is applied right at the beginning of the value chain. Product development, marketing and design need to work in close cooperation, communicate well and frequently, and collect feedback from the market. Superior aesthetics are always important but should be a top priority in cases where efficiency-oriented Asian competitors are able to offer functionally similar products at much lower prices.

## Design for Affect: A Core Competency for the 21<sup>st</sup> Century

*Ravindra Chitturi*

Consumers purchase products with the objective of reducing pain, increasing pleasure or both. Product aesthetics primarily contribute to enhancing consumer pleasure, and utilitarian attributes, such as product functionality, primarily help reduce consumer pain. So the question is how consumers choose between the goals of reducing pain and enhancing pleasure.

In the case of functional dominance, consumers attach greater importance to fulfilling their minimum utilitarian needs over their minimum hedonic ones.

By contrast, if consumers have to choose between two products, and one product meets their minimum functional requirement but exceeds their minimum aesthetic expectations, while the other meets their minimum aesthetic expectations but exceeds their minimum functional requirement, they select the product with superior aesthetics. A balanced design with an optimal combination of attributes and emotional experiences will reach a greater price on the market and insure higher profits.

## Choosing Beauty and Feeling Good: How Attractive Product Design Increases Self-Affirmation

*Claudia Townsend*

Consumers construct and maintain self-concepts through the use of branded consumer products. Yet product choice not only reflects an actual or desired image of the self but can also directly influence a person's sense of self and even boost self-esteem. The aesthetics of a product is an attribute that has the power to transform how consumers perceive themselves. The mere act of choosing a beautiful product over a less good-looking one affirms people's sense of self – who they are and what their values are. It goes beyond personal image building and self-presentation; its impact is also turned inwards. Choice of high design works as a unique form of affirmation. It works unconsciously, and high design may even be a particularly powerful form of affirmation precisely because its relationship to the self and one's values is not obvious. And design is more powerful than other features in this respect. Comfort and ease of use, taste and brand do not have the same self-affirming quality as design. It is not simply that "treating" oneself or going for the pleasurable option has an affirming effect; it is specific to the choice of aesthetics.

## Strategically Integrated Marketing – Helping Brands to Keep Their Promises

*Michael Krohn*

Many companies incorporate design into their processes much too late and work sequentially instead of in an integrated manner. If, however, the important conceptual, technical or market-relevant decisions have already been made and the product or service is almost ready for launch, then design "cosmetics" will not help much. Design creates images that stick in your mind, and if these images are thought out at the last minute, there's a risk that they will not optimally promote the overall brand image.

Integrated design not only gives form to innovations but makes them more user oriented and suitable for marketing efforts. In this case, design is – among other aspects – the actual driving force that adds magical attraction to a brand and its many touchpoints. Design follows the desire to incorporate an emotional value that consumers expect and that helps connect with the brand and offers orientation. Designers must therefore understand the target group and their sensory needs, and translate these into shape, color, material, surface and other aspects.

## Predicting Preferences for Innovative Design: The “Repeated Evaluation Technique” (RET)

*Claus-Christian Carbon*

How do you realistically assess the success potential of innovative products? This task is quite challenging because the Average Joe generally has an aversion to innovation. Therefore it is not really possible to get valid innovation evaluations from typical consumers. Only when we feel secure and have time to become familiar with a new thing can innovation become exciting and attractive.

The “Repeated Evaluation Technique” (RET) was developed especially for the purpose of systematic familiarization with products to be evaluated. Subjects in an RET, for example, typical consumers, are encouraged to think explicitly and intensively about a product and its competitors. By forcing the subjects to engage with the material, known as the “elaboration,” the procedure helps consumers understand the product better and distinguish differences. The ascertained judgments come closer and closer to real everyday assessments that one would usually only gain after weeks and months of dealing with products.

## Beyond Aesthetics: Seeing Form and Believing in Function

*JoAndrea Hoegg*

Research on the effect of design has tended to emphasize the aesthetic dimension of product form and its global, spontaneous, and even unconscious influence on overall product evaluation. But apart from the aesthetic aspect of design, product form has additional effects on consumer perception. When a product’s design suggests a particular level of functional performance, it can alter consumer judgment, even in the presence of ostensibly more objective written information.

This finding does not only apply to a product’s overall impression, but also to how consumers evaluate individual product features. For a target feature, the presence of pictures altered the relative functional performance ratings in favor of the presented designs, but for non-target features the presence of the picture had no effect. Hence, product form can communicate functional performance independently of global attractiveness. These insights have important implications for design creation and communication as well as for consumers. They highlight yet again the importance of close cooperation between product development, marketing and design.

## Next Issue Preview



Corporate Social Responsibility:  
Doing Well by Doing Good

*C.B. Bhattacharya*

Challenging Competition with CSR: Going Beyond  
the Marketing Mix to Make a Difference

*Shuili Du and Sankar Sen*

From Corporate Philanthropy to Shared Value: Big Pharma's  
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*Craig Smith*

CSR and the Frontline Context: How Social  
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*Daniel Korschun, C.B. Bhattacharya and Scott D. Swain*

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*Thomas Osburg*

Undesired Side-Effects of Going Green

*George E. Newman, Margarita Gorlin and Ravi Dhar*

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