

ARTICLE REPRINT

Design
Management
Journal

Why Good Design Doesn't Always Guarantee Success

Daniel F. Cuffaro, *Design Manager, Altitude Inc.*

Brian Vogel, *President, Altitude Inc.*

Brian Matt, *Founder and CEO, Altitude Inc.*

Reprint #02131CUF49

This article was first published in *Design Management Journal* Vol. 13, No. 1
Why Good Design Doesn't Always Guarantee Success

Copyright © Winter 2002 by the Design Management Institute. All rights reserved. No part of this publication may be reproduced in any form without written permission. To place an order or receive photocopy permission, contact DMI via phone at (617) 338-6380, Fax (617) 338-6570, or E-mail: dmistaff@dmf.org. The Design Management Institute, DMI, and the design mark are service marks of the Design Management Institute.

www.dmi.org

Why good design doesn't always guarantee success

by Daniel F. Cuffaro, with Brian Vogel and Brian Matt

Stories abound of great designs that go nowhere. Daniel F. Cuffaro, along with colleagues Brian Vogel and Brian Matt, examine why things go awry, and to counter such outcomes, propose a model of design that emphasizes the orchestration of the total consumer experience, from awareness and engagement through ownership and use. Their “do”s and “don’t”s are a checklist of good practices for executives and design managers alike.

You've heard good things about a new restaurant in town and decide to check it out for yourself. You drive to the published location and you think you see the place—it's just that it's not marked well. In any case, you start looking for somewhere to park. The streets are crowded and there is no parking lot, so you have to circle the block for 15 minutes before you find a spot. However, once you reach what you thought was your destination, you discover that it is, in fact, not the restaurant you were looking for. Luckily, the management is helpful and tells you that you're only a block away from the right place. Thank goodness you left home early: You make it to the restaurant just in time for your reservation. Unfortunately, you still end up waiting 20 minutes for a table, and because there's no place to wait, you find yourself outside on the street again.



Daniel F. Cuffaro, Design Manager, Altitude Inc.



Brian Vogel, President, Altitude Inc.



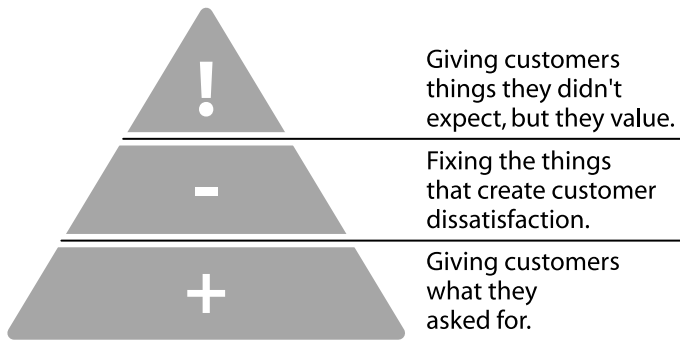
Brian Matt, Founder and CEO, Altitude Inc.

But eventually you are seated, you order, the food comes—and it *is* outstanding, truly one of the best meals you have ever had. You compliment the waiter, the chef, and the bus boys on the outstanding meal and service. To top it off, the restaurant owner, who is well known in the area, makes the rounds and greets all the patrons. You're feeling pretty indulgent when you get the check and discover that it is incorrect—though when it takes 15 minutes to sort out the math, you feel somewhat less so. After that situation is finally resolved, you head back to your car and find a nasty note and a bent antenna.

What point are we trying to make here?

The restaurant's product is the meal. It turned out to be excellent. However, the total restaurant experience may not make it worth another visit, and you may not want to recommend it to

Figure 1.



The Value Pyramid. Ability to simply enter the market is the foundation; removing the negatives builds the experience; and adding the “wow” caps it off. This chart is based on the model described in Joseph Pine and James Gilmore’s book, *The Experience Economy*.

others. Did the restaurant’s management handle all the things that were in their control sufficiently so that the meal was part of a quality experience? Will they be blamed for things *out of their control* because things *in their control* were not considered? If a customer’s total experience surrounding a product is bad, it can supersede everything else about the product, even its outstanding design.

The customer’s experience, comprised of many factors, begins when he or she becomes aware of the product (through advertising or testimonials), and ends when the product’s useful life ends.

Building the total customer experience

Good design is, of course, a primary building block of the total customer experience. The way in which a product is designed directly affects the customer’s use of it, and so it is one of the most obvious factors in his or her enjoyment of the product. Design is important to the company’s success, as well. It builds brand awareness, increases the perceived value of that brand’s products, and draws customer loyalty. Good design can be cost-effective in that it helps avoid continuous redesign and retooling. When design is used intentionally, it can help to make a manufacturing process more ecologically responsible; it can also make a product accessible to a wider variety of people, as in “universal design.”

All design has three primary components: aesthetics, function, and manufacturing. The aesthetic component relates to beauty, appropriateness, and first/lasting impressions. Function

covers ergonomics, usability, and features, and the manufacturing component involves manufacturing costs and perceived quality. When a product is visually appealing or exciting, has good functionality, and is made well, it has a higher perceived value and the customer is far more likely to consider purchasing it. The well-designed product that is reliable, lasts a long time, and is a reflection of one’s personality will endear itself to the user.

Good design in itself does not guarantee a positive customer experience. Other factors include building customer awareness, making the product easily available, pricing it properly, packaging it well, and offering support after the purchase. When these factors are achieved in support of an excellent product, they make three things possible—three things that make up a sort of “value pyramid” (figure 1).

The value pyramid

Having the capability to bring a product to market is only the price of entry—the base of the pyramid. You could call it the “satisfaction” layer, in that your first duty is to give customers what they are asking for. The next layer of the pyramid is more difficult. It could be characterized by “subtraction,” in that it involves removing all “negatives” from the customer experience. The negatives are any attributes that are likely to disappoint the customer: automobile cupholders located in a position that prevents them from being useful, or flashlight batteries that always seem to be dead just when you need them. The third layer, the top of the pyramid, involves “surprise.” Successful products offer the customer pleasant surprises—benefits they may not have expected, but soon find they value. These “surprise” factors include things like the bud vase in the new VW Beetle, Volvo’s work gloves located in the same compartment as your spare tire, or the illuminated Apple logo on the back of a PowerBook. They are unpredictable but delightful traits that make each experience of the product endearing and distinguish it from the competition. They are the traits that make customers say “wow.” As you move up the pyramid, you increase the value to the customer.

Controllable factors

Back to the restaurant we visited at the opening of this article. Some of the factors that led to the

less-than-satisfactory customer experience were within the restaurant's control; some were not. The restaurant could have been marked better. The reservation should have been honored. The incorrect check, while presumably an honest mistake, should have been resolved immediately. The parking problem may not be something the restaurant can improve upon. In the end, however, the key to achieving a better customer experience—at a restaurant, as well as with a widget—is to optimize, wherever possible, all the factors that can truly be controlled.

Because there will always be factors that are out of its control (less than knowledgeable salespeople, lack of availability, a poor retail experience), the product manufacturer must maximize the quality of each factor that is within its control. The better optimized these controllable factors, the greater the likelihood that the customer won't base his or her product opinion on factors the manufacturer has no control over. Take as an example the Ford Explorer. Although accidents involving the Explorer were attributed to failures of Firestone tires, sales of that car initially suffered due to the perception that the vehicle itself was unsafe. However, the US Department of Transportation typically rates the Explorer at or near the top of its class in safety. Because it is an inherently good product, it is far more likely to recover from the effects of factors out of its control.

Manufacturers that consider all the success factors touched on earlier can develop strategies that take into account the strengths and weaknesses of each factor. For example, if the advertising budget is small, building customer awareness must be achieved in other ways. If a company must rely on word of mouth to build awareness, the product concept must be simple and obvious. The design should be recognizable and bold, and the packaging must be designed to educate and reinforce the buyer's decision. This is when design becomes part of a strategy that considers the total customer experience.

There are many contemporary examples of product successes that at first seem to be the result simply of good product design but, upon further examination, turn out to owe their success to the beneficial management of many other factors. Volkswagen is an excellent example. The underlying design characteristics of its entire line of cars are simplicity, function, and

personality. However, this commitment to design has always been part of Volkswagen. The company's recent success has merely tied this design philosophy to a complete strategy. In building awareness of its products, Volkswagen employed an extremely effective advertising campaign that plays off the design and suggests how seamlessly integrated into life the cars become. Once potential customers begin to consider the product, they realize that it is well appointed and reasonably priced. VW salespeople tend to be extremely knowledgeable, and the process of getting financing is quite easy. The cars have long warranties and offer roadside assistance and free oil changes for two years.

If a customer's total experience surrounding a product is bad, it can supersede everything else about the product, even its outstanding design

Warming up the customer

Malden Mills Inc. of Lawrence, Massachusetts, engaged Altitude to develop the control and power hardware for its new Polartec Heat Blanket. The blanket's innovative new fabric contains very small heating elements woven directly into Polartec fleece. This provides an electric blanket with an undetectable heating element, a more uniform quality of heat, and the softness of the fleece. Because the fabric's properties significantly enhance the user experience, Malden Mills realized that it could revolutionize a commodity product. They enlisted Altitude's help to ensure that the product's hardware provided a consistent and satisfying user experience. The end product is extremely user-friendly, safe, and highly effective. Altitude also worked with Malden Mills to ensure maximum quality of total customer experience. By doing so, the company could develop packaging, marketing, distribution, and product support solutions that are consistent with an inherently user-focused product.

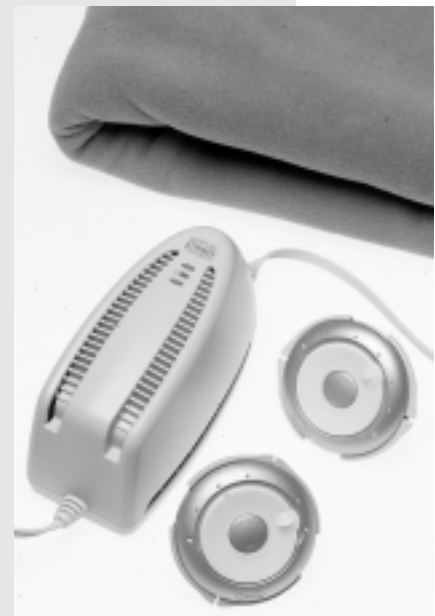


Figure 2.



Upon opening the iMac carton, the consumer finds that the message of simplicity is immediately reinforced. Rather than a box full of complex components, an elegant tray that holds the keyboard, mouse, and one-page setup guide greets the user.

Even the tiniest detail—the loan statement, for instance—is considered. A customer filling out the remit envelope will go to write his or her address in the usual space, only to find that the envelope has been preprinted in that space with the VW Credit address. This means that if the postage is incorrect, the bill is returned to VW, not the customer. The advertising, the ownership process, and the product's design all send a consistent message of simplicity, function, and personality. The product has built such strong loyalty that VW owners tend to nod to each other in silent acknowledgement of an excellent customer experience and the feeling of having made a wise choice.

Another example is Apple Computer. The iMac is usually credited with resurrecting that company. Although that product's design is critical to its success, it is clear that design was used as just one component of an effective overall strategy. The emphasis of the strategy was simplicity. The message was not that the product was simplistic—it was rather that it would enable the user to do high-tech things in a simple way, without the feeling of the computer “getting in the way.” The iMac itself is an all-in-one monitor/CPU that requires little wiring or

setup (figure 2). The base model needs little upgrading, software comes preloaded, and the process of selecting a model has more to do with picking a color than understanding processor speed. Awareness is primarily built through a TV advertising campaign that includes a bright white set that strips away all the clutter and focuses on the simplicity of the product. The messages are sophisticated, clearly stated, and meant to communicate how simple it is to do a task with an iMac. The purchasing experience is designed to allow the customer to literally compare Apples to Apples, rather than Apples to Compaqs (reducing a level of complexity relative to platform). The box is easy to handle; the hierarchy and presentation of the package contents is logical and reinforces the purchase. The instructions are minimal and mostly pictorial. There is also comprehensive customer support and an excellent warranty. For this, Mac users pay a premium, and nearly all of them are dedicated to the brand.

The iMac helped Apple retain its historically loyal customer base, which always saw the company as user-friendly and bold. However, the iMac also enticed many first-time computer buyers, including the elderly. It is easy to understand the connection between sending out a consistent message of simplicity, and attracting new customers who are late adopters frightened by technology. These new computer users could feel enabled by Apple technology, because it was packaged in a way that anyone could understand. Apple's products geared toward professionals also retain the simplicity message; but, in the case of the G4 Tower, for instance, that message is aimed instead at the ease of upgrade. The company's “i” software, as well (iMovie, iTunes, and iDVD), has been designed to make it simple to edit video or make a music or video CD.

Apple builds customer awareness and makes it easy for consumers to get the computers. They reinforce the message with packaging and graphics and provide a product that is easy to set up and embodies good design. Finally, Apple backs that product with superior customer support. Incidentally, the opening of the new Apple retail stores is meant to further enhance the customer experience by taking more control of the retail experience (addressing location, staff quality, pricing, service, and availability issues).

OXO's Good Grips line is another excellent

example of considering the total customer experience. The original concept was rooted in creating a universal design (kitchen tools that a person with arthritis could use), but the idea of a large, comfortable, nonslip handle is appealing to a much wider audience. The products look good, feel good, and are reasonably priced (considering their high perceived value). To build awareness, OXO didn't rely on a high-profile advertising campaign. Instead, they packaged the products so that the customer could feel the difference. The product line is widely available and very extensive. Also, OXO products are displayed as a group rather than as individual products among other products (that is, OXO peelers are never displayed side by side with Rubbermaid peelers). Visually, this sends a more appealing message and increases the likelihood that the customer will make his or her purchase decision based on comfort rather than price (or perhaps purchase multiple items). Finally, OXO offers a 30-year warranty for its products. By addressing the total user experience, OXO took simple household tools and created a strong, distinctive brand that has experienced extraordinary market success.

Failure factors

Why have so few IDEA winners achieved market success? When a product is acknowledged for having achieved good design, there is an expectation that it will become a market success. However, when a product fails in the marketplace, designers are quick to blame other factors. While it is likely that some failures can be attributed to the design itself, many are truly due to factors beyond the scope of product development. Although a company may have enabled a good industrial design and engineering process, it may have failed to consider the total customer experience.

Similarly, a poorly designed product may experience some success fueled by aggressive marketing, but the results are usually short-lived. When a company fails to build customer awareness for a well-designed product, it loses an opportunity, as well as a large investment. Poor packaging may cheapen beautiful design. Availability might be limited by production capacity or reliance on a component that is difficult to source. What do all these factors have in common? They are all controllable.

So are the following:

- A product spec that was off the mark (management didn't do enough homework or research; the product doesn't suit the target customer)
- Lack of responsiveness to a competitive landscape or current technology that changes
- A management team that fails to make decisions
- A management team that is stingy and shortchanges the process or product
- A price point that is wrong for the features or quality of the product

Setup for success

Companies that decide to consider the total customer experience need to recognize that a good process is required to achieve good results. They must enable and enforce a good process by doing the following.

- *Gain an understanding of the target customers*—not only in terms of income and education level, but also in terms of the things that “move” them. Understand product or experiential attributes that strike a chord with the customer. Although customers may not be aware of the depth of their response to design, they do respond to form, detail, color, balance, and so on. This response to design relates to all visual and tactile factors of the experience. An understanding of the common responses of the target customer allows design-focused factors to be tuned appropriately.
- *Map the total experience from the point of view of the end user* (figure 3). This includes a strategy for building awareness, selecting distribution channels, and creating appropriate packaging, reinforce the brand and the purchase decision, and create an initial positive product experience.

Although a company may have enabled a good industrial design and engineering process, it may have failed to consider the total customer experience

Figure 3.

MAPPING THE TOTAL CUSTOMER EXPERIENCE

How will the customer become aware of the product?	<ul style="list-style-type: none"> • store • catalog • print advertising • TV advertising • product promotion • product placement • from friend or family • receive as gift
How will the customer take ownership of the product?	<ul style="list-style-type: none"> • order from catalog • order online • purchase in store • receive as gift
What will the experience with handling the package communicate?	<ul style="list-style-type: none"> • size/weight • transportation • opening the box • initial understanding • understanding features and functions
What will the initial use communicate?	<ul style="list-style-type: none"> • first impression • set-up
What will the ongoing use communicate?	<ul style="list-style-type: none"> • regular use • ongoing take-down and set-up • repair or replacement • end of life

Altitude Inc. uses an “experience map” to identify areas in which design can affect the total user experience. The goal is to ensure a consistent message.

- *Commit to a well-designed product for the target customer.* When the design team members understand what moves the customer, they can embody the product with a language that speaks to customer perceptions of usefulness, quality, value, and performance. The design team should be able to pursue a process that allows them to gain customer knowledge, conceptualize broadly, test solutions, and refine and capture the design intent. Good design does not begin and end with defining aesthetics. It must include proper feature and functionality definition, as well as outstanding execution in the engineering and manufacturing processes.
- *Ensure that a consistent brand message is communicated throughout advertising, packaging, and product design.* In addition, a company can use brand strategy to tie many product lines together to further support the brand.
- *Support the product after it is purchased.* Supporting the product includes assisting with initial use or set-up, providing warranty support, providing replacement parts or repair resources, and possibly reclaiming a “spent” product.
- *Choose partners in this process* that have a methodology for understanding the target customer and can bring a high level of expertise to each factor of the total customer experience. These partners might include the company’s own internal resources, as well as consultants, vendors, and outside manufacturers. When selecting the outside resources,

decisions should be based on achieving a consistent level of quality. For example, ad agencies, product design firms, and packaging design firms should have the ability to produce good design (advertising and packaging follow the same rules as product design when it comes to producing good design). These resources should be given the same marching orders to ensure that each factor fits into the overall strategy.

The end result

Three brands/companies—Volkswagen, Apple Computer, and OXO—have recently received a lot of attention and realized success because of their ability to address the total customer experience. All three companies are founded on good products. But on this foundation, they have built customer awareness and packaged, distributed, and supported their products with a consistent high level of quality. Many products that embody excellent design are market failures because they fail to consider the total customer experience. Customers may not be aware that the product even exists, or they may have received conflicting messages about the product. Customers may be aware of the product but can't find it, or they may purchase it and be disappointed that it wasn't what they thought it was. It may be difficult to set up and have poor instructions. Or customers may use the product, experience one problem, and return it because of a lack of product support.

Conclusion

Design is critical to the success of a product. However, good design alone is not sufficient to guarantee market success. Other factors to success involve building customer awareness, making the product available, addressing the customer's visual and tactile experience, developing a good product, and offering customer support. When the commitment is made to enable and enforce a comprehensive process, and to address all the factors relating to the total customer experience, the likelihood of success increases dramatically. ^m

Reprint # 02131CUF49

Find related articles on www.dmi.org with these keywords: *consumer perceptions, design as strategic resource, design process, design strategy, industrial design, product design*

Suggested Readings

Bauer, Sherie, and Mead, Pamela. "After You Open the Box." *Design Management Journal*, vol. 6, no. 4 (Fall, 1995).

Covey, Stephen. *Principle-Centered Leadership*. New York: Fireside, 1992.

Margolin, Victor, and Buchanan, Richard (eds.). *The Idea of Design*. Boston: MIT Press, 1996.

Pine, B. Joseph, and Gilmore, James H. *The Experience Economy*. Boston: Harvard Business School Press, 1999.

Urban, Glen, and Hauser, John R. *Design and Marketing of New Products*. New York: Prentice Hall, 1993.