



DESIGN MANAGEMENT INSTITUTE

ARTICLE REPRINT

**Design
Management
Journal**

Design as brokering of languages: Innovation strategies in Italian firms

Roberto Verganti, *Professor of Management of Innovation and Creativity, Politecnico di Milano*

Reprint #03143VER34

This article was first published in *Design Management Journal* Vol. 13 No. 3
The New Profile of Design Management Consulting

Copyright © Summer 2003 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

Design as brokering of languages: Innovation strategies in Italian firms

by Roberto Verganti



Italian design has long been known for its “edginess” and creativity. Roberto Verganti attributes these qualities to a process he calls “radical design-driven innovation,” in which—beyond technology and user needs—new product development emphasizes product language. With their global and multi-industry perspective, consultants play a major role in this strategy, so Verganti includes his criteria for assembling the most effective internal-external teams.

In an era of globalization, Italy has a major advantage: its design, unclonable and inimitable. Design is invisible, a heritage that cannot be shared; it assumes arts and crafts resources that may be developed only over generations. Design will be a strength for the Italian system if you keep on translating it... into world-class industrial production.

—John Kenneth Galbraith, 1997¹

In no other country [but Italy] is there such an intense and fruitful interaction between manufacturers and designers.

—Vico Magistretti, 2003²

As design is increasingly recognized as a strategic resource, corporations are



Roberto Verganti, Professor of Management of Innovation and Co-Director of the Master in Strategic Design, Politecnico di Milano

exploring new ways to involve design consultants in their innovation processes. Designers are moving from their traditional roles in the development process, in which they chiefly address issues of styling and ergonomics, to a more creative contribution in generating new product concepts. Their input ranges from product and process engineering to field support in understanding customer needs; from brand design to strategic consulting. Corporations have evolved a significant array of options for interacting with design consultants.

1. From an interview with Ennio Caretto in *Corriere della Sera*, April 9, 1997.

2. From an interview with Andrea Casazza, in *Il Secolo XIX* (newspaper), January 30, 2003.

What role should a corporation envision for designers? What type of design consulting should it aim to benefit from? As usual, there is neither a single answer nor a “one best way.” Instead, as design services become more relevant and options unfold, the capability to build one’s own system of relationships with design consultants is increasingly becoming a source of differentiation and competitive advantage.

This paper illustrates the unique approach with which successful Italian manufacturers are involving designers in their innovation processes. It shows how leading Italian companies, such as Alessi, Artemide, and Kartell, have built their competitive advantage on this strategy, which is based on the radical innovation of a product language, and how designers play a crucial role as brokers of these languages. Through capturing, recombining, and integrating knowledge about socio-cultural models and product semantics in several different social and industry settings, designers help in creating breakthrough product meanings.

Exploring future roles for design consultants by discussing the Italian design system is interesting for two reasons. The first is the system’s success. Several Italian manufacturers lead the competition in such design-intensive industries as furniture, kitchenware, lighting, and small appliances, notwithstanding their small size and limited resources. The other reason involves the central role of design consultants in that system. At its very foundation, there is a healthy and self-reinforcing interaction between manufacturers and designers that is considered to be one of the secrets of Italian design.

This paper is based on the results of a research study of management practices in Italian design, funded from the Italian Ministry of University and Research as part of a larger research project that was, incidentally, awarded the Compasso d’Oro, Italy’s most prestigious design award, in 2001. The project, coordinated by the Faculty of Design of Politecnico di Milano, involved 17 research teams, mostly from design schools, and delivered more than 90 case studies of successful product innovations and management practices in several industries.

We postulate that the role designers play in Italian firms as brokers of design languages is an interesting option for overseas corporations that want to pursue a successful innovation strategy

based on the radical innovation of product meanings and values.

Our first task is to introduce a framework for interpreting the innovation strategy of leading Italian manufacturers. Following that, we’ll discuss how this innovation strategy is supported by a unique relationship with design consultants.

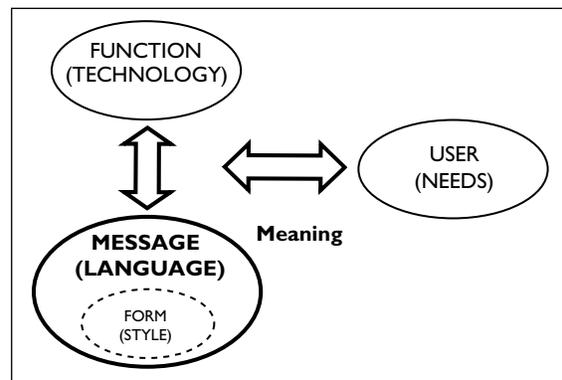
Design-driven innovation

The choice of approach to involving design consultants depends on a company’s particular innovation strategy, and this is as true in Italy as in any other country. For this reason, we focus here on the role of designers within a peculiar strategy we call *radical design-driven innovation*. This strategy, based on the radical innovation of a product language and meaning, has allowed several Italian manufacturers to take the lead in design-intensive industries.

What is design-driven innovation, and how does it lead to competitive advantage? Though it is not our purpose here to enter into a debate about the definition of design, we can assume, as a start, an interpretation of design as the integrated innovation of function and form. This is, however, a definition that needs to be further adapted to better highlight the particular approach of Italian manufacturers (see figure 1).

Design-driven innovation is based on the idea that each product has a particular language and meaning. As a scheme, it expands and elaborates on the concept of form, in order to better capture the communicative and semantic dimension of a product. Indeed, the classic dialectic of function versus form sometimes leads less-expert observers to restrict the latter to the aesthetic appearance of products. Many times, indeed, the debate of function versus form has been focused on the contrast between

Figure 1. The dimensions of innovation.



functionalism-rationalism on the one hand, and styling on the other. This intellectual seduction (and simplification) is more tempting when investigating such industries as furniture and lighting, in which aesthetic content is deemed to drive competition. And many executives still consider design to be purely a matter of styling.

However, as most designers know, the appearance of a product is just one of several ways in which it expresses a message to the user. Apart from styling, what matters to the user (in addition to the product's actual functionality) is the product's emotional and symbolic value—its *meaning*. If functionality aims at satisfying the operative needs of the customer, the product's meaning tickles her or his affective and socio-cultural needs. It proposes to the user a system of values, a personality and identity that may easily go beyond style. Several scholars have recently recognized and underlined the semantic dimension of design,³ and some even postulate that in essence design is aimed at “making sense of things.”⁴ This is even more evident to design managers who deal with brand identity and communication.

To support this perspective, let's consider the example of the Artemide company's Metamorfoosi lamp (figure 2). This lamp is the result of a radical innovation of meanings. It premises that light is responsible for emotional conditions, thoughts, and memories and is therefore intimately connected with the user's well-being. Hence, the Metamorfoosi purports to generate a “human light” through its properties of color and light control. A user is likely to buy this lamp not for its style but for its emotional

Figure 2. An example of radical design-driven innovation: Metamorfoosi by Artemide. Design by Carlotta De Bevilacqua, 2000.



promise of light.

As an innovation of meaning (buying light instead of lamps), this is self-evident. The designers underline this innovation through their choice of language: To some extent, they “hide” the lamp as a physical object by minimizing its form and by using translucent materials, giving more value to the product's message. What a breakthrough for an industry in which the style and appearance of an object is generally deemed to be the most salient factor!

This example also shows that a particular meaning is achieved by using a specific *design language*: a set of signs, symbols, and icons (of which style is just an instance) that designers can adopt to deliver the message. The translucency and minimalism of the Metamorfoosi lamp is the language its designers have chosen to express the sense of “light for human well-being.”

Radical design-driven innovation and Italian design

Given this framework, we may define *design-driven innovation* as an innovation in which the novelty of a message and of a design language prevails over the novelty of functionality and technology. As has been stated earlier, successful Italian manufacturers in design-intensive industries have demonstrated a unique capability to benefit from this method. In particular, their innovation strategy is punctuated by endeavors to take a competitive lead through breakthrough product meanings, or what we might call *radical design-driven innovations* (figure 3).

Metamorfoosi is only one example of radical design-driven innovation. Another is Alessi's well-known product line, Family Follows Fiction, which is a set of colored-plastic kitchenware products that exude irony but also a sense of childhood. A third might be Kartell's famous Bookworm bookshelf, a sinuous, customizable

3. See, for example, Victor Margolin and Richard Buchanan (eds.), *The Idea of Design: A Design Issues Reader* (Cambridge, MA: MIT Press, 1995), or Mihalyi Csikszentmihalyi and Eugenie Rochberg-Halton, *The Meaning of Things: Domestic Symbols and the Self* (Cambridge, UK: Cambridge University Press, 1981).

4. Klaus Krippendorff, “On the Essential Contexts of Artifacts or on the Proposition that ‘Design Is Making Sense (of Things),’” in *Design Issues*, vol. 5, no. 2 (Spring 1989), 9-38.

thermoplastic ribbon with built-in “bookends” that owners use more as an *objet d’art* than as a bookshelf (figure 4). Ettore Sottsass’s Memphis design collective, which revolutionized the world of design in the 1980s by proposing furniture with a breakthrough design language (based on bold patterns, daring colors, and plastic laminate surfaces), was ahead of its time in its use of radical design-driven innovations.

Sources of knowledge in radical design-driven innovation

Innovation may be seen as the result of a process of generation and integration of knowledge. Where does this knowledge come from in the case of radical design-driven innovation? What type of knowledge may design consultants fruitfully bring to the process when supporting this innovation strategy?

Three types of knowledge are essential for an innovation process: knowledge about user needs, knowledge about technological opportunities, and knowledge about product languages. This last describes knowledge of signs and symbols that will deliver a particular message, as well as the semantic context (the socio-cultural models) through which the user will give meaning to those signs. (Consider, for example, what symbols, indexes, and icons a designer might choose in order to deliver the message of “human light.”)

Figure 5 illustrates the role of these three types of knowledge in radical design-driven innovation and contrasts this strategy with two other typical situations: technology-push innovation (in which innovation emerges from the availability of new-technology principles and devices) and market-pull innovation (in which innovation tries to answer explicit and immediate customer needs).⁵

In all three situations, knowledge about a product language is present. In fact, as said earlier and as depicted in figure 3, innovation of function and message occurs in any novel project. However, what is remarkably different across the three situations is the *role played* by this type of knowledge. The major drivers of innovation in market-pull and technology-push endeavors are knowledge about user needs and knowledge about technology, respectively. In either case, knowledge about product language is ancillary; it usually enters the innovation process along the way.

Figure 3. A framework for innovation. The x-axis indicates increasing levels of language innovation (from adaptations to current socio-cultural models to the generation of breakthrough meanings); the y-axis indicates increasing levels of technological innovation (from incremental to radical changes and brand-new functionality). The triangle below the diagonal of the square, at bottom right, is the area of *design-driven innovation*. The shaded circle, which focuses on breakthrough changes, represents *radical design-driven innovation*, the strategy of leading Italian manufacturers.

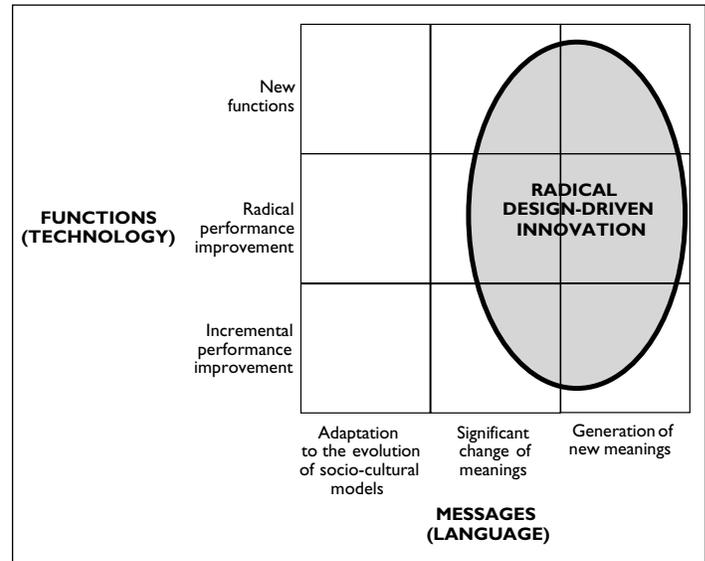
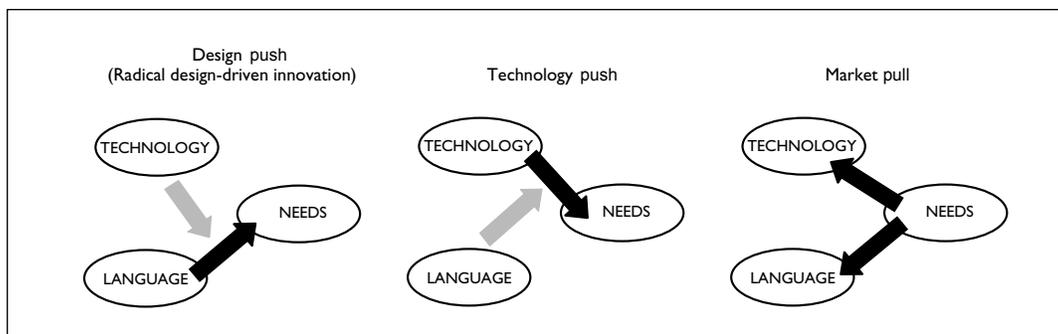


Figure 4. Kartell “bookworm” bookshelf.



Radical design-driven innovation—that is, an innovation that proposes breakthrough messages—balances the three types of knowledge in a different way than do market-pull and technology-push. Here the driver of innovation, the starting point, is not technology (though technology is crucial, as a means to create meanings); neither is it a particular customer requirement. No one would seriously imagine

5. The debate on market-pull versus technology-push innovation is even older than the debate on the definition of design (for a theory and critique, see Giovanni Dosi, “Technological Paradigms and Technological Trajectories,” in *Research Policy*, 11 [1982], 147-162). These simplified categories are used here to stimulate reflection on the peculiarities of radical design-driven innovation.

Figure 5. Knowledge drivers in different modes of innovation.

that a user would ever explicitly ask for a “human light,” or for a flexible spiraliform bookshelf, or for a spaceship-like squeezer (the famous Alessi’s Juicy Salif lemon squeezer by Philippe Starck). And indeed, Italian manufacturers rarely rely on classic market analysis based on surveys or focus groups, or invest intensively in those ethnographic research techniques that recently have achieved so much attention in the business arena. Simply, they know they would never get a radical innovation of meanings out of these methods, since a *radical* innovation of meaning is not pulled by the market. Rather, it is the result of a vision of a possible future. As Ernesto Gismondi, CEO of Artemide, says: “We make *proposals* to people.” Or this from Alberto Alessi, CEO of Alessi: “Working within the metaproject *transcends the creation of an object purely to satisfy a function and necessity*. Each object represents a tendency, a *proposal* and an indication of progress that has a more *cultural* resonance.” To some extent, behind these words lies a willingness to be a driver of change in a society, or at least to increase, through the company offering, the probability that the world will change in a direction that is closer to the system of values and beliefs of the entrepreneur.

Ultimately, we can claim that radical design-driven innovation is a design-push activity—that it is the result of a vision, almost an ideology, that resembles the typical driver that moves a designer (we will come back later to this similarity between the attitude of top Italian executives and the attitude of designers). Take it as a provocation: Radical design-driven innovation (a design-led process) is closer to technology-push (an engineering-led process) than it is to market-pull innovation.

At the same time, these “proposals” are not dreams without a foundation. We are talking of

great market successes and of leading firms in the global arena. In one way or another, these design-push proposals eventually satisfy unmet (latent) user needs. But how do these companies manage to make radically innovative proposals that are profitable? How do they discover messages that ultimately emerge as messages long desired by at least some users?

These manufacturers have developed a superior capability to *understand*, *anticipate*, and *influence* the emergence of new product meanings. They search for radically new design languages by looking at socio-cultural phenomena that are not so visible now but that will be trends tomorrow and reality in the future. They do not look at the phenomenon of the “bandwagon.” Instead, they *detect* the whispers of the current socio-cultural models, *identify* those feeble voices that are likely to get louder in the future, *select* from among them those whispers that best meet their own values, and *help* those voices to become understandable and meaningful in a new product offering. And here is where the knowledge of product languages plays a crucial role, and where design consultants make a central contribution.

Designers as brokers of knowledge about product languages

The meaning a user gives to a product depends on her or his cognitive model, which in turn is significantly affected by that person’s socio-cultural context. Proposing new product meanings therefore implies an understanding of the inner dynamics of socio-cultural models; it goes beyond what is currently visible. Such knowledge of the subtle and unexpressed dynamics of socio-cultural models is not found in books or in sociological scenarios of the future—which usually describe *dominant* trends and are

extrapolations of current phenomena, while radical design-driven innovation plans a *modification* of a future scenario. This knowledge is not codified. It is tacit and implicit; it must be researched and developed through a continuous process. Further, this knowledge is *distributed*; there is not a single repository from which it can be retrieved. The shaping of socio-cultural models and their impact on the interpretation of product languages depends on millions of unpredictable interactions among users, firms, designers, products, communication media, cultural centers, schools, and so on. In other words, this knowledge is diffused within our environment as part of a *design discourse*: a continuous dialogue on socio-cultural models (foreseen and desired) and their implications for patterns of consumption, meanings, and product languages, occurring through several explicit and tacit interactions among several actors in global, as well as local, settings.

A firm that wants to deploy an innovation strategy based on radical design-driven innovation needs to access knowledge of product languages and the dynamics of socio-cultural models. It may have several channels within which it may access this tacit and distributed knowledge, developing interactions with users, suppliers, other firms, training institutes, and so on. Indeed, Italian manufacturers develop all these types of relationships. However, above all, they recognize that design consultants may act as focal points in this network of interactions. They are a crucial gate that may give access to the design discourse and to discussions that will shape future product meanings. In other words, they act as gatekeepers in the evolving flow of socio-cultural models. They broker knowledge of design languages.

The idea of designers as brokers of knowledge is not a new one. A recent study on IDEO, for instance, showed how this design firm acts as a *technology* broker by virtue of its access to as many as 40 industries and its use of its network position to move solutions across industries.⁶

What is peculiar to radical design-driven innovation is that designers act as knowledge brokers of language rather than technology. Of course, their technological competence is still crucial (as a means with which to speak new languages). But their value comes from their capability to understand the subtle dynamics of

values and meanings in society, and from their impact on product languages. To put it another way, they facilitate access, for their manufacturing clients, to the ongoing discussion of these dynamics and languages. They bring bits of knowledge, help their clients interpret the design discourse, and position themselves within the discourse.

Note that we are talking of knowledge of languages rather than knowledge of socio-cultural models. This is to specify that designers do not act as sociologists. They may talk about hidden and emerging phenomena in society, but more often they talk about new, unexpressed, emotional needs of users. Remember they are designers, and we are considering their involvement in *radical* design-driven innovation. Not only do they observe the socio-cultural models, but they also make proposals to affect the emerging dynamics in socio-cultural models. To some extent, their attitude is more like that of architects (and indeed most designers that Italian manufacturers involve in their innovation strategy have an architecture degree). Architects design buildings—products that usually survive their clients. Architects are used to looking beyond immediate needs, to envisioning an unexpressed future, to proposing signs and symbols that inevitably modify our context.

Another difference between sociologists and designers is that the involvement of designers is pragmatic. Their knowledge is *applied* to products. Hence they talk about product meanings and languages rather than socio-cultural models; they are interested in product signs and symbols that are moving and spreading across different contexts.

6. See Andrew Hargadon and Robert I. Sutton, "Technology Brokering and Innovation in a Product Development Firm," in *Administrative Science Quarterly*, vol. 42, issue 4 (Dec. 1997), 716-749. An interesting study of designers as knowledge brokers is also provided in Paola Bertola and J. C. Teixeira, "Design as a Knowledge Agent: How Design as a Knowledge Process is Embedded into Organizations to Foster Innovation," in *Design Studies*, 24 (2003) 181-194. This study investigates the role of designers by comparing 15 case studies of large corporations from the Design Management Institute collection with 15 case studies of small Italian enterprises from the Sistema Design Italia research mentioned in this paper.

Product languages are not industry-specific; they move across industries even more fluently than technology does. Look, for example, at the diffusion of colored translucent materials from home furniture to computers (a linguistic exercise that let the Apple I-Mac speak the language of “home” rather than “office”).

Second, design languages move across different socio-cultural worlds (across different countries, for example). This is indeed a more complex process than fertilization of signs across industries. Meanings are significantly culturally embedded. Yet for this very reason, a global corporation willing to propose a radical innovation of meanings needs to access knowledge on design languages beyond the borders of its socio-cultural context.

Hence designers exploit their network position to move languages (and the meaning and values attached by people) across industries and socio-cultural worlds. With this action, they support the creation of radically new meanings that simultaneously have a socio-cultural foundation. Indeed, Italian manufacturers involve many foreign designers in their innovation process, combining and integrating the brokering of knowledge in both local and global settings.

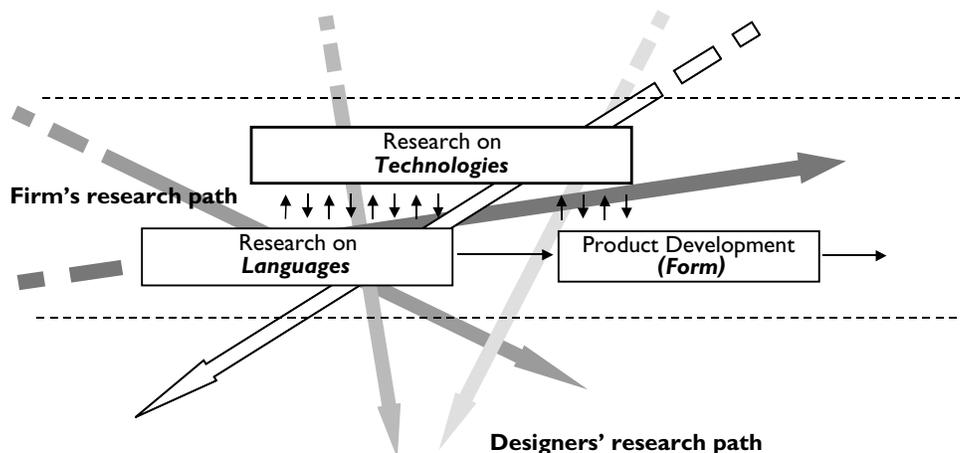
Involving designers as brokers of languages

We have seen that design consultants may act as brokers of languages, especially when dealing with radical design-driven innovation. Our final question, therefore, is: How might a corporation effectively involve designers in its own innovation process and thus profit from their brokering capabilities? The *Metamorfosi* example

described in the sidebar at right offers some insights into this question and will help us to identify some general guidelines:

- *Involve design consultants early in the innovation process.* A peculiarity of Artemide’s approach is the intense involvement of designers in the first macro-phase: research on new languages (figure 6). During this research process, the seeds of radical design-driven innovation are sprouted. It is also the point at which understanding meanings and languages provides the maximum strategic impact. And here is where the role of designers as brokers of languages has maximum value.
- *Have brokers of languages talk with top managers.* If radical design-driven innovation is to work as a strategy for building long-term competitive advantage, it will require the direct involvement of top executives. As Vico Magistretti noted in the epigraph that began this paper, successful companies feature an “intense and fruitful” interaction between entrepreneurs and designers. Because designers affect the strategic resources of a corporation (its system of values, the messages it brings to users), they in essence function as strategic consultants. However, unlike traditional strategic analysis, the process of research in languages is based on talks and discussions—not squeezed into a report or a study. This implies a significant investment of executives’ time. By the way—radical design-driven innovation does not occur by chance or by pure intuition. It is the result of a research process, and therefore

Figure 6. The process of radical design-driven innovation and its alignment with the research path of the designers.



An example of radical design-driven innovation: Metamorfoosi, by Artemide⁷

Artemide, founded by Ernesto Gismondi and Sergio Mazza in 1959, is a leading high-end manufacturer in the lighting industry. It actively participates in industrial-design history on an international level, with several products in prominent museums.

In 1998, Artemide launched its first release of the Metamorfoosi system. Metamorfoosi is based on the concept of a “human light”—a light that may answer some human biological, psychological, and cultural needs. It’s not marketed as a “lamp” in the traditional way; rather, it is a system intended to produce light and, in particular, colored light, which can be customized according to the specific emotional needs of the user. Technically, the system consists of a patented technology, based on a small electronic control system that, through a remote control, allows the user to create and store several color “atmospheres” (combinations of monochromatic lights and haloes) that are generated by three parabolic reflectors equipped with dichroic filters. To develop the Metamorfoosi system, Artemide followed a threefold process:

1. *Research on new languages.* This took place beginning in 1995 and was actually the driver of the whole endeavor. Artemide was exploring radically new systems of values with which to enforce its leadership position, which was threatened by new global competitors. Several approaches were used to access knowledge of new systems of values and product languages. A core part of this process was a workshop that involved founder and CEO Ernesto Gismondi and his wife Carlotta De Bevilacqua (managing director for brand strategy and development direction), as well as five well-known designers (including, for example, Michele De Lucchi) and a professor of design. The workshop, the aim of which was to explore new meanings of light pertaining to biological, psychological, and cultural needs, was coordinated by

Paolo Inghilleri, doctor and psychologist. The result was the creation of the vision of “human light.”

2. *Research on new technologies.* Through this activity, directed by Artemide’s R&D department, the firm searched for technologies to express the new meanings of human light. This led to the development of a basic “technology kit,” including the dichroic filters and the computer for controlling the lamps and customizing/storing different light scenarios (the technology kit was eventually also sold as a standalone product).
3. *Product development.* At this point, the new languages and technologies were integrated into products. Artemide provided different designers with the basic message (human light) and the technology kit, and asked them to develop lamps based on the Metamorfoosi concept. Some of these designers had already participated in the research phase (including Ernesto Gismondi and Carlotta De Bevilacqua); others were newly involved. In this phase, the focus of languages moved from meanings and messages to the form of the object.

Eventually, the “human light” vision became the strategic driver of the overall mission of the company.

The Metamorfoosi kit, with electronic controller and lights.



7. The complete case is illustrated in Francesco Zurlo, Raffaella Cagliano, Giuliano Simonelli, and Roberto Verganti, *Innovare con il Design. Il caso del settore dell’illuminazione in Italia*. Il Sole 24 Ore, Milano, 2002 (in Italian).

it calls for strategic investment. This is one of the reasons why the results of this innovation strategy are difficult to imitate.

- *Involve design consultants according to their capabilities as knowledge brokers, not just on the basis of their methods and analysis tools.* We have discussed how knowledge of languages is neither codified nor developed through a specific method; it is diffused throughout a complex network of actors. Designers should be selected according to their capability to give access to this network, to connect local and global languages and to broker signs across a wide range of industries. You should value your consultants’ *knowledge* (the knowledge of languages

they can access and recombine) more than their creativity and tools.

- *Select design consultants according to shared values.* Radical design-driven innovation implies action to propose new meanings. A firm projects its own values in an attempt to have an effect on the environment. Design consultants, on the other hand, have their own paths of research into the dynamics of socio-cultural models, and their own systems of values. We have already highlighted the similarity between the attitude of top Italian executives and the attitude of designers: both groups are design-pushed and driven by visions and ideology. When these research paths (the firm and the design consultant)

cross, they need not be in counter-phase (see figure 6, in which dark-gray arrows denote the research path of the consultants whose direction is most compatible with the innovation strategy of their client). Ideas may contrast, but basic values need to be somewhat aligned. Similarly, opinions may be changed, but basic values cannot be adapted to suit a particular client or designer.

- *Nurture your long-term relationships with the design consultants you involve in radical design-driven innovation.* Given that radical design-driven innovation asks for some kind of alignment between the research path of firms and designers, it asks for trust. And this requires time and long-term cooperation.
- *Talk beyond contracts.* The exchange of tacit and diffused knowledge, the access to the design discourse, the sharing of values, the development of trust—none of these activities should be restricted within the rigid walls of contracts between the client and the design consultant. Research on languages is a continuous process. It occurs outside space and time frames, and only occasionally takes the explicit form described in the Artemide case study. It requires an intimate relationship that goes beyond contracts. Indeed, most top executives of leading Italian manufacturers merge professional and personal relations with their design consultants.
- *Widen your discourse beyond your design consultants.* Design consultants are only one of several channels through which to access knowledge of languages. Artemide, for example, works with design schools, promotes cultural events, develops studies on socio-cultural trends, and makes a point of discussing these issues with managers, experts, and other designers—and, of course, they value direct dialogue with customers.
- *Develop your own research path.* Design consultants should be considered to be gatekeepers. They provide easier access to knowledge that otherwise would be difficult to grasp. However, they are no substitute for the internal research process by which a firm develops its own vision. A firm may outsource product development—not the development of values and meanings. A firm that doesn't have the inner capability to develop knowledge about design and product

languages will hardly be capable of understanding and making use of contributions from brokers of languages.

Conclusion

The choice of the proper approach through which to involve design consultants depends on the specific innovation strategy of a corporation. This paper has illustrated the central role of designers for those corporations whose innovation strategy is centered around radical design-driven innovation. We have shown how corporations pursuing this strategy may benefit from the contribution of design consultants. Designers act as brokers of languages. They are gatekeepers in the movement of product languages and symbols across industries and contexts. By giving access to knowledge of the unexpressed dynamics of socio-cultural models, designers help to understand, anticipate, and influence the emergence of new product meanings.

The brokering of design languages is not a consulting service that can be easily bought in the consulting market. Ultimately, the way in which a company involves its designers is itself a source of competitive advantage. The approach needs to be built over time by combining three unique ingredients: a personal network of long-term relationships with brokers of languages, an entire array of alternative channels that complement and enrich the access to this knowledge, and an internal process through which all these contributions can be integrated. Only the unique, firm-specific combination of these factors can lead to sustainable (that is, not imitable) competitive advantage. ■

Reprint # 03143VER34

Find related articles on www.dmi.org with these keywords: *consulting, design, innovation, product semantics, strategy*

Acknowledgments

I gratefully acknowledge the precious stimuli and insights from Ezio Manzini, Carlotta De Bevilacqua, Ernesto Gismondi, Francesco Zurlo, Giuliano Simonelli, Tommaso Buganza, Alessio Marchesi, Raffaella Cagliano, Jim Utterback, Susan Sanderson, Bengt-Arne Vedin, Sten Ekman, and Bruce Tether.