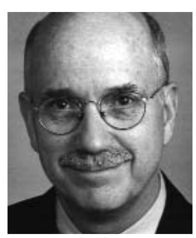
Integrating Design into Strategic Management Processes

by Ron Sanchez

Analyzing the interface between design and business strategy, Ron Sanchez identifies the many activities and decision-making points where design expertise has value. He stresses that design managers must expand their understanding of business priorities and processes, and he proposes that by doing so they can positively affect the strategic direction of a business unit and build more productive relationships with their clients' senior managers.

Most designers today occupy positions in their client's value-creation processes that are fairly far downstream from their clients' strategic decision-making processes. In typical engagements, designers are asked to create a good form or a packaging design for a product whose functions and target market have already been decided, or to find good ways to communicate a corporate image or message that has already been defined by senior managers. Growing numbers of design firms today, however, are realizing the significant potential value that could be created for both them and their clients by expanding the role of design-related activities in upstream strategic decision processes of client firms.



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To be considered useful participants in strategic management processes, however, designers must meet three challenges. They must understand clearly the issues that managers consider in deciding a strategy; they must identify the ways in which they could most usefully contribute to managers' strategic decision processes; and they must learn how to communicate their potential contributions using language and concepts that strategic managers understand. The goal of this article is to suggest some important ways in which design professionals can meet these challenges.

Design and business unit strategy

To explain how designers might connect with and contribute to strategic management processes at the business unit level,[1] we must first answer the basic question: What is a strategy?

To answer this question, it might be useful to explain that the field of strategic management is populated by people from different backgrounds and with different perspectives on what strategy is all about. For example, managers, consultants, and professors involved in strategic management may come from fields as diverse as finance, marketing, organization behavior, operations management, law, and so on. Moreover, given this diversity of participants, the field also has a tendency to generate new terms and concepts at a high rate, often leading not only to debates about key concepts within the field, but also to vocabulary proliferation and terminological confusion. Nevertheless, there is generally a high level of agreement among managers and other strategy professionals as to the essential elements of a business unit strategy, even though individuals may use different terms in referring to these essential elements and may even attach different levels of importance to the various elements in a strategy.

The essential elements of a business unit strategy are shown in Figure 1, under the "strategic logic" of a business unit, the term for a business unit strategy that my colleague Aime Heene and I use in our book on strategic management.[2] The term *strategic logic* suggests there are fundamental logical relationships among elements that must be defined and maintained in designing an effective business unit strategy, and we further characterize the role of business unit strategic managers as "designers of organizations as systems for sustainable value creation and distribution." To assist business unit managers in designing effective strategic logics, we also identify a number of *system design principles* that strategic managers should follow when designing business unit strategies.

Our discussion of the ways in which designers can contribute to strategic management processes at the business unit level focuses on two key activities:

1. Helping managers define the essential elements of a strategic logic
2. Helping managers achieve and maintain conformance to the system design principles that apply to the various elements in a business unit's strategic logic

We organize our discussion of these activities around the three main components of a strategic logic: the business concept, the organization concept, and core processes.

1. There are two other levels of strategic management above the business unit level. *Corporate strategy* concerns a corporate parent's "search for synergy" across multiple business units. *Global strategy* considers the additional challenges and opportunities of the search for synergy in an international context. Space limitations do not allow discussion of these strategy levels here, but see Ron Sanchez and Aime Heene, *The New Strategic Management: Organization, Competition, and Competence* (New York: John Wiley & Sons, 2004) for explanations of these strategy processes.

2. See Sanchez and Heene, op. cit.

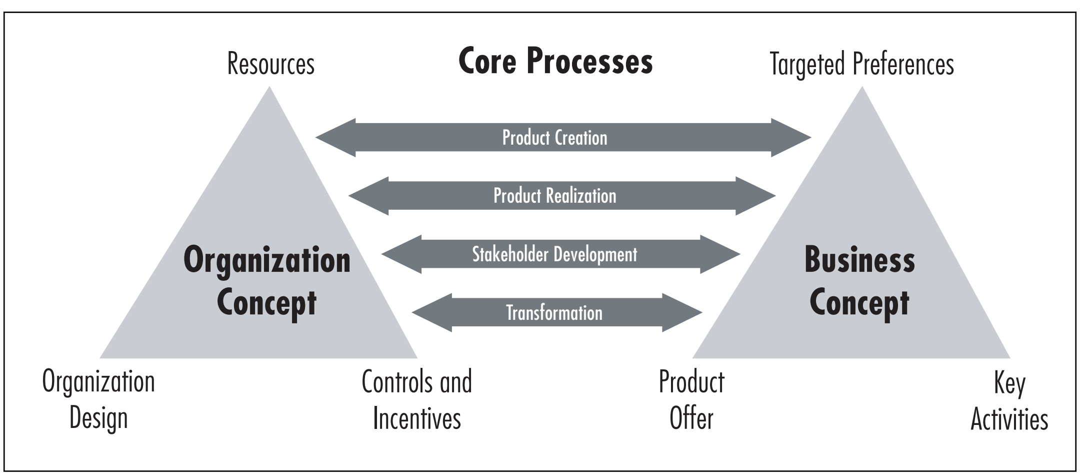

Figure 1. The "Strategic Logic": Essential Elements of Business Unit Strategy.
(Source: Ron Sanchez and Aime Heene, *The New Strategic Management* (John Wiley & Sons, 2004)

The business concept

In a strategic logic, the business concept represents the *market-facing* side of a business unit's strategy—what we might refer to as management's theory of value creation. The business concept defines the basic who, what, and how questions for a firm: the targeted preferences (kinds of customers) a firm will try to serve, the product offer the firm will create for its targeted customers, and the key activities to be given priority in presenting and delivering its product offer to its targeted customers.

Targeted preferences. Perhaps the most fundamental decision made by the strategic manager is where the firm will compete. At the strategic level, this decision focuses on the choice of *market segments* the firm will attempt to serve and compete in. As suggested by the term *targeted preferences*, market segments are not defined by demographics like age, income, education, or place of residence, but rather by the *prioritized sensitivities* of potential consumers or users of a firm's products with respect to price, performance, speed, reliability, quality, and other aspects of a product offer. Market segments consist of groupings of potential customers who have similar sensitivities with regard to a product category and who prioritize those sensitivities in similar ways.

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The first step in the strategy process for business unit managers is trying to figure out what kinds of market preferences and segments currently exist and are in the process of forming within a given product market. Traditional marketing research has developed a suite of techniques (focus groups, expert panels, in-depth customer surveys, and the like) for trying to discover the kinds of preferences that exist or are emerging in a product market. Yet these techniques are clearly not adequate to develop all the possible insights strategic managers need to have today into how customer (and potential customer) preferences are evolving. Indeed, in many firms, market segmentation studies typically focus on quantitative measures of segment size, growth rates, purchase frequencies, and so forth in an effort to provide a basis for assessing the potential profitability of various identified segments. In-depth qualitative insights into the hearts and minds of potential and actual customers are always in short supply, but are critical in strategic decision-making.

Designers have skills and methods that can help strategic managers improve their understanding of the preferences of current and potential customers. For example, designers often employ ethnographic and other research methods based on close observations of and interactions with potential customers in actual product-use contexts, but the critical insights into customer behaviors that can be developed through such methods are rarely included in market analyses that strategic managers receive from marketing research.

Moreover, marketing research is often narrowly focused on investigating how customers perceive the functions, features, and performance levels that currently define a product concept, and as a result may be blind to important evolutions in the ways customers perceive and use different kinds of products. For example, while most producers of home refrigerators focused on researching incremental extensions to existing functions and features in refrigerators, Samsung Corporation asked its designers to take a close look at how American families actually use refrigerators. After installing time-lapse video cameras in the kitchens of a number of American homes, Samsung designers observed that refrigerators also function as communication centers in American homes, typically holding message boards for family members, shopping and "to do" lists, phone numbers, and other family information. On the basis of these close observations of refrigerator users, Samsung decided to introduce flat-panel displays in the doors of some refrigerator models to support the important communication function refrigerators have come to play in American homes.

Helping strategic managers understand better how various kinds of customers actually perceive and use their firm's products—and competitors' products—is one of the most important ways in which designers can assist strategic managers in selecting the market segments to serve in their business unit strategies.

Product offer. Once strategic managers have decided the kinds of customer preferences (market segments) they will try to serve, they must then decide the product offer that the firm will create to serve its targeted customers. The product offer (also sometimes referred to as product offering, or value proposition) defines much more than the product a firm will create. It defines and interrelates the ways in which a firm will attempt to create value for its customers, and the ways in which it will undertake to manage the costs of ownership and use its targeted customers will incur.

One of the most useful ways of representing the sources of perceived value and cost in a firm's product offer is the net delivered customer value framework developed by Philip Kotler of the Kellogg School of Management at Northwestern University.[3] This framework (see Figure 2) identifies four sources of perceived value (product use, services, image, and personal interaction) and four sources of perceived cost (financial, time, energy, and psychic) that must be managed in designing a product offer to appeal to the specific preferences of a targeted market segment. Designers can provide a number of valuable inputs to help strategic managers define all eight value and cost dimensions of successful product offers.

Designers have traditionally been involved in developing pleasing designs for products whose *functions*, *features*, and *performance levels* have already been decided as part of a firm's strategy. However, as our discussion of market segmentation above suggests, designers could become much more active in defining the four value dimensions of a product offer farther upstream in a firm's strategy process. There is excellent potential for designers to become more involved in researching the functions, features, and performance levels a new product could provide to its users, and in helping strategic managers to understand how different kinds of customers are likely to perceive value (or not) in various functions, features, and performance levels.

As more and more firms become capable of offering competitive products today, competitive strategies increasingly emphasize the *services* a firm provides to its customers as important potential sources of differentiation. Services include all the activities a firm performs to help its customers learn about, evaluate, decide to purchase, purchase, take delivery of, set up, use, maintain, repair, upgrade, retire, and recycle a product. Escalating competition, not just in products, but also in the services that come with products, means it is increasingly important for the services component of a firm's product offer to be designed to deliver services to customers in a growing number of ways and at higher and higher levels of reliability and performance. In today's experience economy, designers who improve the design of a firm's service activities in ways that increase customer perceptions of the value of a firm's services in support of its products can become important partners in helping strategic managers effectively differentiate their firm's product offers in the marketplace.

The *image value* component of net delivered customer value refers to the value a user of a

Net Delivered Customer Value =

Four Sources of Perceived Value:	*minus*	Four Sources of Perceived Cost:
1. The Product		1. Financial Cost
2. Services Provided		2. Time Cost
3. Image		3. Energy Cost
4. Personal Interaction		4. Psychic Cost

Figure 2. "Net Delivered Customer Value" Framework For Representing a Firm's Product Offer

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3. See Philip Kotler, *Marketing Management*, 10th edition (New York: Prentice Hall, 2000).

product will derive from the way other people perceive them when they are observed using a firm's product. Luxury goods, for example, are products that have high image value to people who buy and display them to signal their membership in (or aspirations for) a high economic strata of society. However, image value may come from many kinds of aspirations or affinities that use of a product might signal. Through direct observations of and interactions with product users, designers may be able to help strategic managers sharpen their understanding of the image value users of a firm's products may derive as they use the product to signal that they belong or aspire to some kind of social status.

The four cost dimensions of net delivered customer value must also be designed to minimize targeted customers' perceptions of the costs involved in taking advantage of a firm's product offer.

The *personal interaction* component of net delivered customer value is the value that customers derive from the human interactions they have in the processes of becoming and remaining a customer for a firm's products. Personal interactions include not only face-to-face interactions, but also a firm's written communications, telephone responses, and websites that a customer may interact with. All forms of a firm's interactions with potential and actual customers today can be seen as critical in attracting and retaining satisfied, loyal customers—and therefore should be explicitly designed to create personal interaction value. Designers who can design service processes (and supporting training programs) that elevate the personal interactions a firm's customers experience into strong sources of perceived value are likely to be seen by strategic managers as important partners in imagining new ways of creating value in a firm's strategies.

The four cost dimensions of net delivered customer value must also be designed to minimize targeted customers' perceptions of the costs involved in taking advantage of a firm's product offer. Note that the concept of cost here includes not just the financial costs of ownership and use of a product (on which designers may have limited influence), but also the time, energy, and psychic costs (on which designers may have major impacts) that targeted customers will perceive as they evaluate what is involved in taking advantage of a firm's product offer.

Potential customers for a product are likely to have different sensitivities to the overall costs of a product and also to the timing of various costs. For example, a *life-cycle costing* perspective suggests that customers will consider not only purchase costs for a product, but also costs of use, maintenance, repairs, replacement, and retirement. However, some kinds of customers will be more sensitive to total costs than others, and different kinds of customers will have different "discount rates" that make them more or less sensitive to future costs of ownership and use of a product. By developing insights into how various kinds of customers perceive and weigh these costs, designers can help managers to design the cost streams associated with ownership and use in ways that can be perceived as minimizing perceived costs by targeted market segments.

Time costs represent the time that potential customers imagine they will have to spend in evaluating, purchasing, setting up, using, maintaining, repairing, and retiring a firm's product. Similarly, *energy costs* represent the energy that potential customers imagine they will personally have to expend in order to take advantage of a firm's product offer. While strategic managers commonly concern themselves with financial pricing issues, fewer managers have means to imagine how targeted customers will perceive the time and energy costs involved in using a firm's products. In this regard, designers who can interact more closely with targeted customers to develop insights into the relative value those customers place on their time and energy in a given product context can provide strategic inputs to the design of a firm's overall product offer.

The fourth form of perceived cost to be managed in designing a product offer is *psychic cost*—the extent to which targeted customers will worry about doing business with a firm. Potential sources of worry commonly include concerns about product reliability, durability, and performance, and the level of services and support customers will actually receive from a firm. Psychic costs tend to be important (maybe even more important than financial costs) when a product plays an important role in a customer's lifestyle or business. Designers may be able to help strategic managers to improve their understanding of the range of concerns that potential customers have about buying and using a firm's products, and of the potential magnitudes of the various kinds of concerns and associated psychic costs targeted customers may perceive.

Key activities. Managing strategically means setting priorities, and strategic managers must decide which of the many activities a firm performs should receive top priority in allocating a firm's resources (including management attention). From a strategic perspective, the basis for identifying which activities should be considered key—and thus should receive top priority in allocating resources—is straightforward: Those activities that have the greatest impact on targeted customers' perceptions of the net delivered customer value of a firm's product offers should receive top priority in a firm's resource allocations.[4] Designers who are able to research and understand which specific aspects of the eight dimensions of net delivered customer value really matter most to the kinds of customers a firm is targeting, can provide critical inputs to the strategic decision-making processes that determine which activities a firm prioritizes and how a firm invests its resources in those activities as it tries to create customer value.

System design principles for the business concept. Designers may provide an important service to strategic managers by helping them to assure that a firm always honors the two system design principles for a business concept.

The first system design principle is that the three elements of a firm's business concept must always be *logically consistent*—that is, the market preferences a firm is targeting, the product offer it has created, and the key activities it is emphasizing should be tightly, logically aligned and make sense together. Achieving and maintaining logical consistency within the elements of a business concept is a constant challenge to firms, because the three elements of a firm's business concept are likely to be influenced by different groups within a firm, each of which may have its own worldview, priorities, and agendas. For example, a firm's marketing staff may take the lead in identifying and selecting market segments, while its R&D staff have responsibility for defining and designing product offers, and operations managers decide how to carry out a firm's activities. Designers who can act as devil's advocates and discover logical inconsistencies in a firm's business concept—for example, key activities that are driven by a goal of cost reduction when the targeted market segment is more performance- or speed-sensitive—can help strategic managers to correct design errors in the market-facing side of their strategies.

The second system design principle is that the business concept must always have a *clear*, *credible rationale for superior value creation*. In effect, it is possible to have a business concept whose elements are internally logically consistent, but which will never manage to generate profits. The key concerns in this regard are that a business concept not be susceptible to imitation by many other competitors because competition would then compete away all economic profits, and that if a firm's product offer is one that can be imitated by other firms, it should have a lower cost basis than its imitators so that it can operate profitably at market prices. The key role for designers in this regard is again that of a devil's advocate who can offer objective second opinions about the distinctiveness of a firm's product offer relative to competitors' offers and its relative attractiveness to the kinds of customers the firm is targeting.

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The organization concept

The organization concept is the *inward-facing* side of a firm's strategy; it includes the essential elements of management's theory of how to

4. The underlying logic for this view is that if a firm does not succeed in attracting customers because it lacks adequate net delivered customer value in its product offers, then it will not have to be concerned about other activities because it will not have customers or a business.

organize to carry out a business concept effectively. Strategic managers must decide the resources a firm will use to carry out its business concept, the organization design it will use to coordinate its resources, and the controls and incentives it will use to monitor and motivate its resources.

The main area in which designers can assist strategic managers in the organizational domain is likely to be in the design of the organization itself. Although strategic managers are responsible for the design of their organizations, very few strategic managers have any training in design in general or in organization design in particular. The lack of adequate attention to and skill in creating organization designs is evident in the many firms whose organization designs really do not work very well, given the strategy the firm is trying to execute. As a broad characterization, organizations often lack adequate communication channels and processes for coordinating the work of different groups in a firm. An important area in which designers can be seen as valuable partners in strategic decisions is helping managers to identify and remedy the missing links in a firm's organizational designs and processes. Accomplishing this means, for example, that designers should be able to help managers to create communications that are not just attractive in appearance, but that also convey the right message to the right people at the right time.

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Core processes

Although firms engage in many activities and processes, at a fundamental level there are four core processes that all organizations must carry out—*product creation*, *product realization*, *stakeholder development*, and *transformations*. There are some important ways in which designers can help strategic managers improve their firm's performance in all four core processes.

Product creation. Helping firms to create new products has always been the key area of designer involvement with firms. However, as suggested in our discussion of the ways designers can become more strategically involved in defining a firm's business concept, there are many opportunities for designers to become more active participants in researching and selecting markets segments and defining product offers that are upstream from traditional design functions. Moreover, many firms today are interested in improving their own design and development processes, so that design firms with effective approaches to creating new products may be able to offer consulting services to firms willing to rethink how they approach product creation.

Product realization. Product realization is the current management term for all the activities a firm performs in producing, shipping, delivering, and supporting its products. Today many firms are trying to implement platform strategies[5] that will give them the flexibility to configure and deliver new product variations quickly as markets change. Platform strategies require co-development of a firm's products and its processes for realizing its products. Managers who are interested in platform strategies are looking for help from designers versed in modular design methodologies who can help them to define the various process capabilities needed to support high rates of product configuration and change.

Stakeholder development and transformative processes. Stakeholder development is the process of developing the skills and capabilities of the people and firms who provide resources to a firm's value creation process. Transformative processes are periodic transformations that change the way people in a firm think and act—for example, the implementation of total quality management or the adoption of significant social responsibility goals. Both of these core processes require well-designed communications. Stakeholder development can occur only when a firm's stakeholders are adequately

5. See Ron Sanchez, "Creating modular platforms for strategic flexibility," *Design Management Review*, vol. 15, no. 1 (2004), pp. 58-67.

informed about improvement opportunities and sufficiently motivated to take advantage of them. To be successful, transformative processes must be communicated internally and externally in ways that make a firm's commitment to a fundamental change in the way it works credible and convincing. In both these processes, designers who can help managers improve their communications to their stakeholders may be seen as valuable partners in helping to design and lead strategic development and change processes in their organizations.

Conclusion

This discussion has tried to suggest some important areas in which designers might expand their professional activities in interacting with strategic managers of business units. Some final comments on how managers behave in making strategic decisions may suggest how designers might initiate these activities.

It is important to remember that the field of strategic management really has no orthodoxy of concepts and terminology, and therefore all strategic managers do not use the same vocabulary in talking about strategic issues. However, all strategic managers trying to do their jobs well will have to address the essential questions identified above, and most firms will go through a corporate "languaging" process of creating a vocabulary for discussing its strategic issues. An essential first step for designers in interacting with strategic managers is to learn the vocabulary and concepts the managers use to define and discuss their strategic issues. The essential elements of strategy discussed here can alert designers to the kinds of concerns their clients will be thinking about, and to the concepts and terms they are likely to be using to talk about those concerns.

A second important thing to remember is that all humans—including strategic managers—have heuristics and biases in the way they think. Frankly, given the complexity of strategic decision-making in even moderate-sized firms today, the job of strategic managers is intellectually overwhelming. In such circumstances, those managers do what we all do in our own lives and situations—focus on the few variables we think we understand and can exert some control over. An important way for designers to get the attention of top managers is to let them know they can help to assess some of the softer, more elusive, qualitative elements in designing a strategy, especially those related to what potential customers are really looking for and value most in a product category.

Finally, it is essential to understand that most senior managers are not used to the language designers use. Moreover, because most senior managers inhabit a world in which quantitative and financial analyses of tangible factors ultimately rule the day, many feel uncomfortable with the value system founded on esthetics that many designers share and with the traditional message from designers about the importance of "good design." Designers who want to connect with strategic managers must not only learn the vocabulary of strategic management, but must also express clearly what they can do to help their clients in the terms that matter to their clients—that is, communicating specific ways in which they can help strategic managers define and implement more successful strategies in their businesses. ■

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