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## Value Compensating Strategies

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### Introduction

The concept of user-centered design has arguably started one of the most fundamental changes in the field of design over the past few decades (Fulton Suri, 2003; Marcus, 2003; Melican, 2004). Design has since shifted focus from giving form to objects to enabling user experiences, and from physical and cognitive human factors to emotional, social, and cultural contexts in which products take place (Heskett, 2002; Margolin, 1997). This shift has also been supported by business strategies aiming sustainable competitive advantage. Today, there is a growing recognition that neither low cost nor quality alone provide a basis for a competitive edge (Cagan and Vogel, 2005; Kim and Mauborgne, 2005; Pine and Gilmore, 1999). Instead, providing better experiences that lead to superior value for users is pointed out as being instrumental for business success (e.g., Cagan and Vogel, 2002; Leonard and Rayport, 1997; Veryzer and Mozota, 2005). Kim and Mauborgne (2005), for example, argue that focusing on creating leaps in customer value can make competition irrelevant by opening up entirely new markets. In their investigation of what it takes to create breakthrough products, Cagan and Vogel (2002) conclude that one of the key attributes that distinguishes breakthrough products is the significant value they provide for users. After all, as Drucker (2001) pointed out, “customers pay only for what is of use to them and gives them value” (172).

Despite its centrality to design and business practices, what the notion of value actually entails from the perspective of users, what the role of design is in creation of value, and what methods and tools facilitate value creation are not well known. This paper aims to uncover some of the dynamics of user value. In doing so, it focuses on instances where products fail to deliver value for users. It provides insights on the causes of low value delivery, and users’ specific responses when products fail to deliver value.

### USER VALUE

#### Definitional Issues

As with many aspects of design there is not an established theory of value that can guide design. What further complicates the matter is that the field is plagued by terminological confusion regarding the use of the term *value*. Part of the confusion comes from the fact that *value* is a highly polysemous word. It oscillates



between concepts of economic return or moral standards. Confusion on the use of the term value is not unique to the field of design. It spans a number of disciplines including economics, sociology, anthropology, psychology and marketing.

Terms such as *consumer value* or *customer value*, commonly used in business literature, refer to the monetary sacrifice people are willing to make for a product (e.g., Butz & Goodstein, 1996; Gale, 1994). Such a view is problematic for design as it overlooks the situation of product use. The Marxist theory provides a useful distinction here. It conceives a dual nature of the value—*use value* and *exchange value* (Marx, 1992). Use value relates to the utility of the physical properties of the product, which is realized only upon its use. Although Marx does not further develop his theory on use value, he puts forward the idea that value is conditioned by the physical properties of products. This notion that value is somehow inherent in the objects is still a prevailing idea in the business literature (e.g., Gale, 1994). However, there is a range of goods such as gifts or spiritual objects which are not necessarily utilitarian nor do they circulate in the market, but they are considered to be of high value by the people who possess them.

Anthropological and sociological theories, on the other hand, emphasize the social and cultural aspects of value. This includes taking into account the symbolic meanings that can be attributed to goods. Csikszentmihalyi and Rochberg-Halton's (1981) study, for example, illustrates that the most valued domestic objects are valued primarily because of the symbolic meanings attached to them. People have an enormous capacity and tendency to invest objects with meanings that sometimes have nothing to do with their utility and the meanings intended by their producers. They often value objects not for what they do, or what they are made of, but for what they *signify* (Baudrillard, 1968, 1998; Veblen, 1899). An example of such consumption may be found among the Muria Gonds where "the richer fishermen were spending their excess earnings to purchase unusable television sets [having no access to electricity], to build 'garages' onto houses to which no automobiles had access, and to install rooftop cisterns into which water never flows" (Gell, 1986, pp. 114).

It is clear that in relating value to design it is difficult to adopt any of the definitions reviewed so far. As Graeber (2001) pointed out, each one has problems for lack of sufficient consideration of the other. Heskett (2002) also noted that it is often difficult to talk about utility/use or significance/meaning of an object separately because, in practice, they are closely interwoven. A potential for reconciling the different approaches is offered by the perspectives of *value in action* (Graeber, 2001; Munn, 1992), or *value in experience* (Holbrook, 1999). This perspective suggests that the value of goods arises from the consequences they provide or, at least, have the potential to provide. OXO Good Grips potato peeler, for instance, is valued for the easy and comfortable peeling experience it provides. So, the definition of value adopted here refers to the practical or symbolic result created through users' experiences with products.

Nothe that the notion of user experience involves the juxtaposition of (1) user context and characteristics, and (2) whatever features the product brings to the interaction. Users interact with products within the context of their goals, needs, cultural expectations, physical context, and emotions. And products with their tangible and intangible qualities, or what Gibson (1977) calls *affordances*, can influence how users



interact with them. What we call user value is thus created as a result of the harmonious interaction between what the product provides and what the users bring in terms of their goals, needs, and limitations etc.

Experiences are also *context-* and *situation-specific*; that is, changing from one set of immediate circumstances, time, and location to another. In a similar way, value changes.

### User Value Categories

Holbrook's (1999) classification of value, which is based on the definition of value as "an interactive relativistic preference experience" (5), emphasizes its multidimensional nature. He classifies user value in a 2x2x2 map, along three continuous dimensions, which include (1) intrinsic-extrinsic, (2) self-oriented-other-oriented, and (3) active-reactive. Each cell of this taxonomy represents a type of value including efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. A value classification (Boztepe, 2005a), which emerged from the data also used in this paper, displays an overall alignment with Holbrook's (1999) axiological taxonomy. The findings suggest existence of four major categories of *utility*, *social significance*, *emotional*, and *spiritual* values.

Utility value refers to the utilitarian consequences of the product such as enabling the accomplishment of a physical or cognitive task. It involves convenience, economy, and quality values as sub-categories. In practice, convenience is defined in various ways including accessibility, appropriateness, avoidance of unpleasantness, or compatibility to the local context rather than just saving time and effort (Boztepe, 2005b). For example, rather than economizing from time, Turkish women use refrigerator as a tool for reordering and managing time. Note that the notion of managing time is different than that of saving time. It involves relocating time as desired instead of reducing the time an activity takes to accomplish. Many of the Turkish participants related the refrigerator's convenience to the practice of storing elaborate homemade dishes in semi-prepared form or plenty of homemade pastries. This is not saving time per se but rather shifting cooking activity to a different time slot. Economy value is concerned with the economic benefits provided by products. These benefits include, but are not limited to, purchase economy such as low prices or flexible instalment plans. While these are important, the long-term effects of a product to the family budget or the economy-in-use are an even more important value for users. For instance, American participants primarily viewed refrigerator as a means to beat prices and save money through bulk buying and taking advantage of special offers such as buy-one-get-one-free or family value pack. Finally, value as quality can be broadly defined as an appreciation of a product for its inherent superiority.

Social significance value refers to the socially oriented benefits attained through ownership of and experience with a product. These include attainment of social prestige and construction and maintenance of one's identity. People use goods as markers of their relative position in the social nexus (Bourdieu, 1984; Veblen, 1899). Even ordinary goods like appliances may develop as symbols and people interact with them in several ways to obtain social prestige and to maintain their face (Goffman, 1967; 1974). Goffman views the self as a social construction, and the notion of face, "the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact" (5), is one way of viewing it as such. Mere possession of a trendy object is often seen as sufficient to communicate a certain image of self.



The value of appliances as a means of achieving distinction from others through projection of an image one wishes to create, or through what Goffman (1959) calls *impression management*, however, is not related to the static ownership of products only and their use as labels, but also to how they are being *utilized* and what ends are achieved through their *use*. As Goffman notes, members, to use his term, employ a series of well-choreographed techniques in an attempt to control the impressions they form on others, just as an actor presents a character to an audience. Note that earlier the value of refrigerator in the Turkish context was seen specifically in terms of its ability to enable time shifting through advance preparation and storage of home-made food. From the perspective of social significance value, then, the same phenomenon here generates a reality of a kind in the eyes of the participants' visitors such that the hosts are always well prepared for unexpected guests.

Emotional value refers to the affective benefits of the product for people who interact with it such as pleasure and fun. For example, in order to make their refrigerators more aesthetically appealing, Turkish participants utilized handmade covers, while American participants preferred magnets, family photos, children's art work, etc. Finally, spiritual value refers to the spiritual benefits such as good luck and sacredness enabled by the product.

## Method

An ethnographic study using observation, interviews and trace analysis as primary methods for data collection was chosen. Participants involved 21 urban families in Turkey with a diverse family structure, including newlyweds, empty nesters, and families with infants or teenagers. Following preliminary analyses and the initial emergence of the main patterns, a comparison was carried out with a second set of data collected in the United States.

The observation sessions usually lasted from two to five hours and were followed by interview. Observation sessions were videotaped whenever permitted. Otherwise, still photos were taken to document the inventory of products, the kitchen and the informant's activities. All interviews were conducted in the kitchen. The reason is that presence of the products studied would serve as conversation openers and remind participants about their daily practices. An interview schedule broadly organized around main categories of daily routines, eating and cooking habits, general meaning of the activities performed in the kitchen, and specific use of kitchen appliances was followed. All interview sessions were taped and later transcribed. In addition to audio taping the interviews, descriptive and analytic notes on the content of the interview, or any surrounding activities were taken.

Kim and Mauborgne's (1997) *value curve* was adapted as an analytical tool where they mapped out the product or service properties against the relative level of value delivered. Here their value curves were expanded in the following way: The relative level of value was tabulated by category, and included corresponding product properties and local elements (Figure 1 to 3). Three levels in the judgment of the relative value, namely *high-level*, *mid-level* and *low-level* were identified. Anything was mapped as having a high



value if participants indicated that a product delivers superior value. The mid-level was used for those value categories which are almost taken for granted, such as safety. Finally, low-level value assignments are based on the users' expressions of dissatisfaction as well as the observed lack of benefit in the use of product.

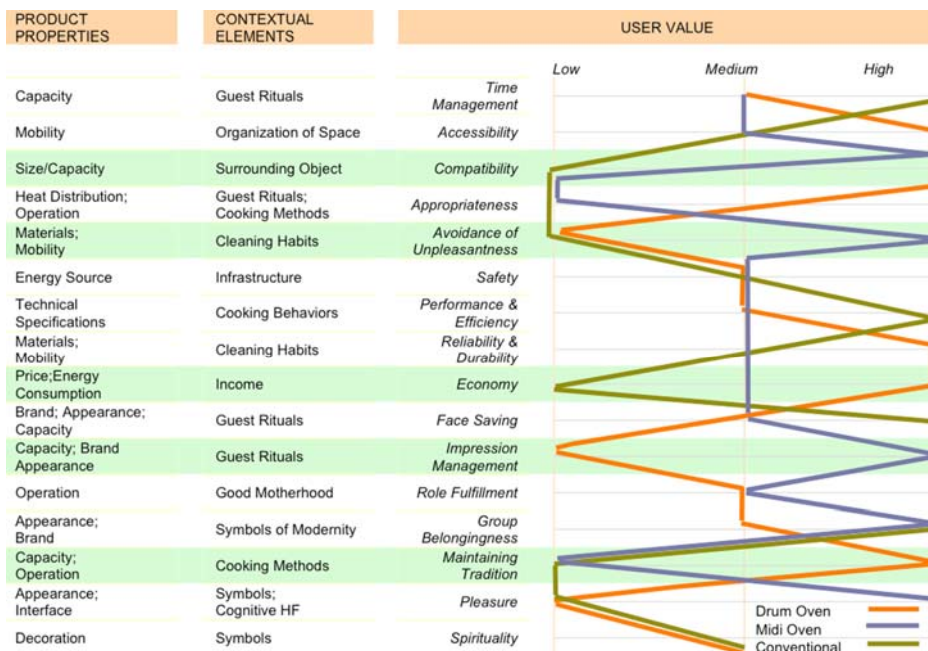


Figure 1. Value Curve for Ovens in the Turkish Kitchens

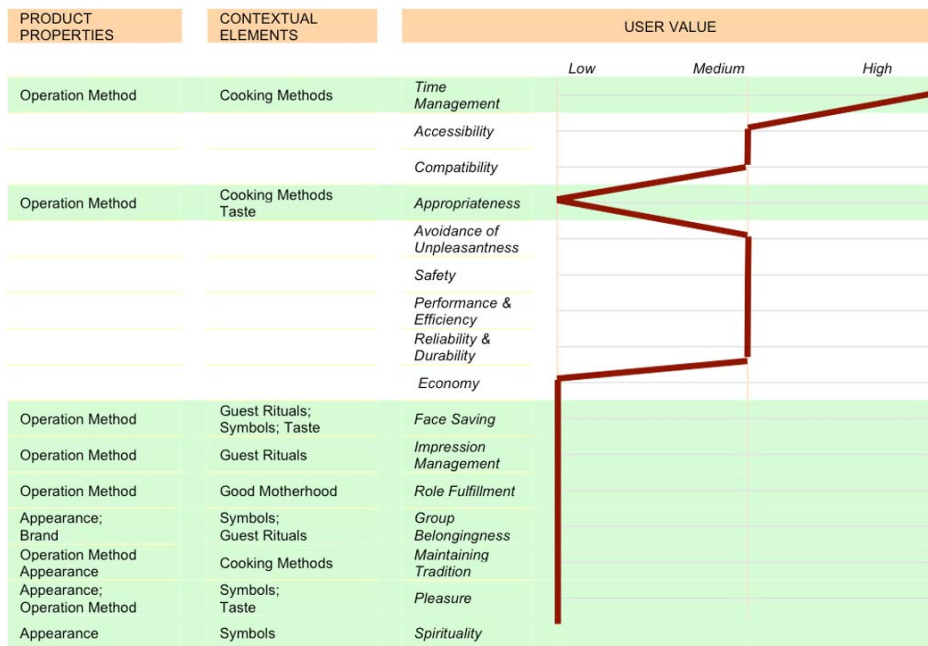


Figure 2. Value Curve for Electric Tea Maker in the Turkish Kitchens

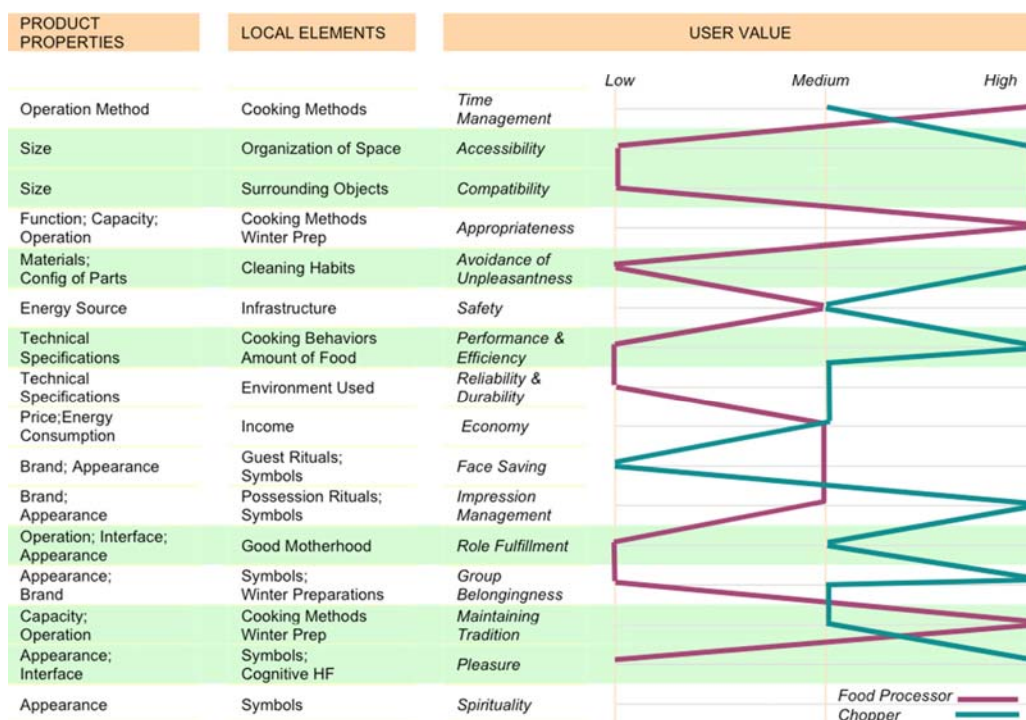


Figure3. Value Curve for Food Processors in the Turkish Kitchens

## VALUE-COMPENSATING STRATEGIES

Users tend to develop some way of making up for the low value delivered by the product. I call these ways of dealing with the problem of increasing the practical and social outcomes of interaction with kitchen appliances *value compensating strategies*. It should be noted that these strategies were observed with five categories of products: (1) unique local products, (2) products that are owned but not used, (3) products used in a unique way, (4) two or more products that serve the same function, and (5) products users might have owned but did not.

### Alternative Product Substitution

When one product fails to deliver value on some dimension users substitute another product to make up for the loss. If we look at the value curves for different type of ovens (i.e., wood stove, conventional oven, midi oven, and drum oven) in Turkish households, it is obvious that no one single type of oven manages to deliver high value on both social prestige and convenience value categories (Figure 1). It is perhaps for that reason that many of the Turkish kitchens contained two or more ovens. A typical combination includes a conventional oven and an additional drum oven, or midi oven, or a wood stove. The conventional oven is often present, as it is perceived as a standard, or necessity of any modern kitchen. Midi ovens, which are relatively new on the Turkish market, are also associated with a 'modern' kitchen look and almost serve decorative purposes only. They are used for very small-scale baking, such as fixing something quickly for unexpected guests.



So there is no one type of oven that accommodates the whole range of dishes. For example, both conventional oven and midi oven fail to accommodate certain traditional dishes such as börek<sup>1</sup> or baklava. These are usually baked in large round pans which often do not fit inside these ovens because of their size. Users baking these dishes in smaller pans that would fit conventional ovens were observed to frequently open and rotate the pan to avoid burning on the sides closer to the oven's interior. This problem seems to be mitigated with the newer models which allow equal heat distribution to all sides as a standard feature.

Drum oven (Figure 4), on the other hand, is highly robust in baking of these traditional dishes. Its cylindrical form is compatible with the size of pans and desired heat distribution and temperature. However, it is not very efficient for foods such as cakes or cookies. In addition, drum oven's appearance does not match the aspired image of a modern kitchen. Most informants who owned a drum oven kept it on top of their refrigerators, yet they hid it under decorative covers.



Figure4. Drum Oven

Another product substitution was observed with *coffee makers* in the American households. All American informants participated in the study had both an electric coffee maker and a French press. The electric coffee makers were typically used for the morning coffee. Some informants had models with timers and alarms, which could be set to brew coffee for the exact time it is needed in the morning, and alarm when the coffee is ready. Such product properties resonated well with the eating habits of the American informants: No time for breakfast preparation, and the coffee is consumed in a hurry. "It's a wake-up drug," as Dianne says. French press, on the other hand, is associated with the ritualistic aspects of coffee consumption. It is mostly used for relaxation purposes, or with valued guests only. In such contexts, neither getting involved in the preparation of the coffee nor the effort and time invested are perceived as inconvenient. On the contrary, it is considered as an investment in its own right into the creation of a pleasing personal experience.

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<sup>1</sup> Börek is a family of dishes prepared by rolled sheets of dough layered with cheese, meat or vegetables.



### Unique Local Products

Some product properties have evolved over the years to match local ways of doing things. For instance, it is impossible to think about a stove without a small tea and coffee burner in Turkey, or a microwave in the US without a popcorn setting. Other product properties, however, have fairly remained undifferentiated against the subtle differences in local elements. Acquisition and use of products that specifically fit local needs is often done because standard products fail in some respect as with the oven example above.

An oven I encountered in the house of a family of Bosnian origin is perhaps an extreme example. It is basically a box about twice as large as regular oven, but only about 25cm high. On the bottom, it has four rows of perforated pipes which serve as burner. Its energy source is a camping gas cylinder. It is bought from a small neighbourhood shop where it is produced. This almost primitive-looking appliance was highly appreciated by its owner, because it was well tuned with her baking practices. She explained that like other Turks of Bosnian origin, she bakes börek very frequently and in several varieties using very large pans. If she wanted to exercise this habit using a conventional oven, she would have to bake two or three pans at once, and spend too much electricity, which is much more expensive compared to the small propane she uses for this oven. Therefore, in spite of the fact that it has major safety issues, it is highly valued because of its superior appropriateness to the given set of cooking habits.

Another product designed specifically for the Turkish market is the *electric Turkish tea maker*. The process of brewing tea using conventional methods takes about half an hour, where a teapot consisted of two pots placed on the top of each other is used. First the water in the bottom pot is boiled, and then some of it is poured into the top pot, and finally, tea is simmered for at least 10-15 minutes. The electric tea maker reduces the whole process to a few minutes. Visually, it carries the formal connotations of the conventional tea maker, here too two pots are rested on top of each other. It also replicates the steps in the conventional brewing technique. Interestingly however, there are low points in its value curve (Figure 2). Mainly, because the boiling of the water happens very quickly and the teapot retains a high temperature, there is no time for the tea leaves on the top pot to soften, expand, and release their flavour. In other words, the electric tea makers have low value for some of its users in terms of its appropriateness to their tea making behaviours and tastes. Also, because tea drinking is part of relaxing and socializing where the taste of the tea is extremely important, it has failed to be accepted for use in home. Another product released in the Turkish market not long time ago is the Turkish coffee maker. It appears that it has found use in office spaces and cafes and restaurants, but it still remains to be seen whether this appliance will be accepted at home, as making coffee is also a very symbolic activity for Turks.

### Dispossession and Disuse

Sometimes the conscious act of not owning or not using a product has a value for the user too. For example, Cathy (43, teacher) once proudly told me that she always cooks at home, but does not possess and use many gadgets. "Making food for my family is a pleasure. Chopping vegetables is a pleasure, it is a dignifying act, not a chore," she comments. Here we see a clash between convenience and identity values. For Cathy, the convenience some small appliances provide takes away the sense of fulfilling the role of being a good mother



and caregiver. It is for the very same reason that informants who baked bread at home often kneaded the dough manually. Many Turkish participants also had their food processors on their countertop, but still continued to chop onions and other vegetables on a cutting board claiming that no chopper can give them the exact size or the uniformity they want (Figure 3). Moreover, the convenience the food processor provided also caused inconvenience by producing extra items that need to be hand washed.

Other participants who owned many small appliances, preferred not to display them. They perceived it as an overt sign of upward mobility aspiration, which belongs to members of lower social classes and they did not want to be associated with them.

### **Adaptation to Different Purpose**

The gap created due to a product's failure to provide value is sometimes filled by appropriating another product for purposes different from those originally intended. For example, food processors were widely utilized in the preparations of tarhana<sup>2</sup> and pepper paste in Turkish households. They are taken outside the house, and with the help of extension cables, they are used to crush more than 50 kilograms of boiled peppers, or dried dough. However, food processors are typically designed for indoor use, and intended to be used for only a few minutes at each session.

Another example includes the use of dishwasher for washing large quantities of pepper needed for making pepper paste. But perhaps, of all cases, the use of picnic stoves is the most versatile one. It is used as a backup when propane butane, commonly used for the conventional oven, runs out. It is also used for cooking in the balcony during the summer when the weather is too hot, and people try to avoid increasing the indoor temperature. It is also used with a simple attachment for fluffing pastries or roasting peppers which are stored for consumption during the winter or Ramadan.

### **Physical Modification**

The final value strategy identified in the data involves altering some of the product properties. The decorations done to refrigerator, the add-on containers or mats on the shelves can be considered as physical modifications. The magnets on the surface or hand made decorative covers on the top are additions that aim to make refrigerator part of the domestic landscape. Similar additions were also recorded in the stoves. Some Turkish participants covered their stove burner caps with foil. These parts are exposed to dirt, spills, and steam, and therefore, cleaned daily with highly abrasive detergents. As a result, they lose their initial shiny metallic look. Thus, foil covers are utilized as a means of preserving the like-new look for a prolonged period of time.

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<sup>2</sup> Tarhana is a traditional Turkish soup, which is prepared by mixing dough with sun-dried tomatoes, which is then fermented, sun-dried, and finally grounded.



## Conclusion

It is clear from the examples presented above that the mere ownership of a product, and even its use does not mean that it provides value for users. Examination of the low value levels is often coupled with a lack of suitability of product properties to local context in which products are being used. Especially the cases of appropriation of product to different purposes and modification of product properties clearly demonstrate that adapting certain product properties to correspond to the local context increases the value users obtain from their experiences with products. Context influences user-product interaction by imposing certain conditions, which may enhance or hinder people's experiences with products and their assignment of value. In the present study, several elements of the local context have been identified as playing a critical role on how users experience kitchen appliances. On a broad level, these can be grouped as (1) *user behaviors*, which include cooking, eating, and shopping behaviors, (2) *systems*, with which products interface, such as infrastructure, organization of space, and institutional and geographical factors, and (3) *socially and culturally shared meanings*, such as common symbols, rituals, and traditions. However, no a priori or linear correspondence exists between value categories and contextual factors.

Value is multidimensional, and different value categories can be closely interwoven and interdependent. On one hand, there seems to be an aspect of trade-off between different value categories; that is, one value can be favoured at the expense of another. On the other hand, as in the case of Turkish ovens, users aim for superiority on all different value categories. Note that users evaluate value relative to the available alternatives. Thus, as soon as a product providing greater value on all categories is available on the market, it is likely that users will adopt it. This necessitates designers to think holistically to the extent that they consider all categories of user value.

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