

QUARTERLY OF THE INDUSTRIAL DESIGNERS SOCIETY OF AMERICA **SPRING 2010**

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## Design Research

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CONSUMER ELECTRONICS





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**SPRING 2010**

# INNOVATION®



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See page 54 for more consumer electronics showcase submissions.

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By Chris Rockwell, IDSA and Spencer Murrell, IDSA

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## Seeing the Future Through Insight Translation

# TURNING DATA INTO INSIGHT

**D**esign research has grown as a discipline over the years—integrating the fields of design, psychology, anthropology, human factors, market research and consumer behavior along the way—in order to understand human experiences and desires. The goal of design research has always been to inform and inspire design thinking and decision making. Unfortunately, engineers, marketers and sometimes even designers can have a difficult time knowing how to act on research findings. Design research should help us understand how desires, features and benefits can be triggered through design. It should clearly define *both* the design problem or opportunity *and* how to focus creativity into effective design outcomes.

The insight translation research process uses discovery, analysis and synthesis to turn data into insight. While useful, this insight alone doesn't help us see the future. Insight translation spans the gap between research and design—using creative expression to demonstrate how research findings can impact future design efforts.



Left: Multisensory stimuli provide measurable data.

Below: Stimuli can be translated into design attributes.

### Problem Seeking and Problem Solving

While insight translators are designers, they do not provide design solutions. Rather, they use creative skills and design knowledge to illustrate the problem to be solved. By aligning on the right problem, teams can communicate more effectively and innovate more freely. Teams can also use the translation framework to evaluate how well concepts deliver on the desired customer experience. This approach improves time to market and results in better customer experiences.



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### Profile: Joe

Sells security software out of Washington D.C. office  
He has 30 accounts  
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Uses Calendar, Aux Display, VOIP, and DVD  
Taking a flight from Washington D.C. to El Paso  
He is going to meet a new customer with big potential for the company



Storyboards describe an ideal experience.

Describing the future experience and how it can be achieved through design can take many forms. Translation can be as simple as a well-crafted problem statement or as involved as an ideal product model that describes, in detail, the key attributes that deliver a desired experience. But, in each case, it must adhere to four key principles to ensure its quality and effectiveness—insight translation must be *meaningful*, *aspirational*, *actionable* and *inspirational*.

**Meaningful.** To deliver a true translation of research insights, there must be a clear connection to the data. Multisensory participatory techniques, because of the rich stimulus set, allow a more direct translation of consumer meaning to product form. Not only do these multisensory techniques enable consumers to express themselves efficiently about design issues, they also give the translation team visual examples of design attributes. The images on page 29 show how a multisensory stimulus set can provide measurable data that translates directly to design attributes.

**Aspirational.** Each translation effort should tell a story of the future. This is, in essence, the customers' ideal experience and the qualities of the designed systems that deliver it. These can be crafted as narratives, storyboards and illustrations that include a future product. In each case the product, interaction or technology is expressed in terms of its benefits and how it enhances the future experience of the user. The example above illustrates a future concept for a communication tool that seamlessly integrates smart phone and laptop functionalities into a single product. The product illustration and storyboard treat the product as generic but manage to translate the customers' expectations for features, benefits and design attributes.

**Actionable.** Insight translation should provide concrete descriptions of the sensory attributes that trigger emotions and the desired experience. Visual descriptions can be effective, but often tactile qualities, smell, sound and taste are used to provide the most complete metaphors





A future story integrates emotions, benefits, features and design attributes into actionable criteria.



Metaphors used to describe brand personality.

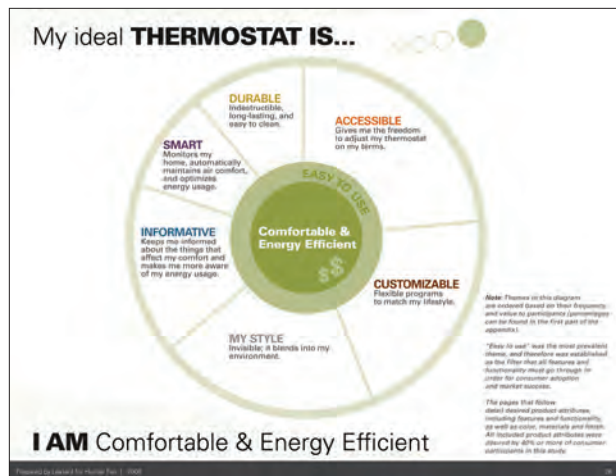
to describe a future experience. The illustration above shows a translation for a shampoo product. It illustrates the consumers' expectations for smell, texture, packaging and interaction behaviors that deliver on the ideal experience.

**Inspirational.** It is important that translation communicate to design teams in a way that provides creative freedom and focuses them on the needs and expectations of the consumer. Translation must be *descriptive* (describes the experience) rather than *prescriptive* (defines the design). The images on the right show translations of a program to understand consumer perceptions of cell phone carriers. Specifically, we communicated the personality of the brand (top, right) and the potential design cues for the products that would meet consumer expectations (bottom, right). As you can see, the translations of our findings, while descriptive, are still broad enough to allow a wide range of design exploration.



Design attributes of cell phones that match brand personality.





Left: An ideal product model diagrams the key benefit areas.  
Below: Benefit areas are built out with detailed descriptions of features and design attributes.

## Translation Workshops

Insight translation should be an explicit step in the research and design process. The process works best when collaborating with the design team. It allows them to apply their knowledge of their business and capabilities and helps them to focus and prioritize future design efforts. Translation workshops are becoming our preferred way of ensuring that we match our clients' capabilities with our knowledge of the customers' expectations. These activities require a significant commitment of resources and time but can be incredibly valuable—sometimes transforming from next year's design initiative into a strategic planning session. The three key ingredients for a translation workshop are the right stimulus or tool set, the right mix of people and a shared passion to deliver customers their ideal experience.

The illustrations on this page show examples of rich stimuli for a translation workshop. The top diagram represents an ideal product model. It describes the key product attributes that deliver the consumers' ideal experience. The segments of the model (key attributes) are described in detail at the right—that are actionable, meaningful, aspirational and inspirational. The model can be deconstructed by segment and used for breakout sessions where subteams explore ways to deliver different parts of the ideal.

Team formation for workshops should represent various stakeholder groups in the organization in addition to outside partners crucial to implementation. This helps cre-



ate alignment within the team as to the problem to be solved and the criteria for success and allows each contributor to focus and deliver a consistent, cohesive customer experience.

Insight translation is the obvious next step in the evolution of design research. It fills the gap between research and design by creating memorable (sticky) presentations of research insights that go on to become institutional knowledge. Done correctly, it will provide organizational alignment around the correct problem to be solved and a framework for focusing creative resources to determine how to deliver the ideal experience. ■

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