



By Matt Schroder

automotive research

Getting to the bottom of things

Laddering showed Infiniti how drivers viewed its Around View Monitor technology

Accolades for one of the latest automotive technologies from Infiniti include a 2008 Breakthrough Award from *Popular Mechanics* and a “Best of What’s New” distinction from *Popular Science*.

The road to that recognition was paved in large part by the results of extensive qualitative research.

Today, Infiniti EX35 drivers can experience an Infiniti-first technology: the Around View Monitor (AVM). Cameras placed on every side of the vehicle reflect objects or other vehicles around the car. The AVM shows the surrounding environment in a composite bird’s-eye perspective on a dashboard monitor. The AVM system was one of 25 advanced technology features Infiniti developers had on the table four years before its 2008 launch.

The decision to implement this feature came after literally hundreds of hours of employing a qualitative research technique called laddering. Laddering interviews are typically used to provide an in-depth understanding of how consumers relate to a brand by delving into hidden, preconscious factors that influence purchase. A desired outcome of the

technique is often information that supports brand identity development and provides emotionally-based direction to drive strategy.

In the AVM instance, laddering was implemented with a unique twist.

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snapshot

Infiniti used laddering to better understand how a host of new technologies met, or didn’t meet, car buyers’ unstated psychological motivations and how the technologies supported the Infiniti brand.

The Nissan advanced product development team, which already had qualitative research experience for a different application, engaged Qualitative Research Consultants Association (QRCA) member Michele Zwillinger, chief explorer at Los Angeles-based SnoopPro Research, to put together a laddering project to aid new-product development decisions. The purpose of the research was to determine which of 25 potential technology features supported the Infiniti brand most effectively.

Zwillinger and Rachel Nguyen, director of advanced planning and strategy for Nissan North America, presented the case study at the QRCA's Symposium on Excellence in Qualitative Research in Chicago earlier this year.

Series of probes

Usually conducted in a one-on-one

interview setting, laddering uses a series of probes (such as "Why is that important to you?") to generate means-end chains, or ladders, related to a product or service feature or attribute.

"What drew us to use laddering was that we wanted to understand if the values consumers associated with the advanced technology features were consistent with Infiniti brand values," Nguyen says. "We're very brand oriented, and this proved to be a very credible way for us to help keep a constant check on how the brand is resonating with our customers and similar prospects. And it offered us an effective way to prioritize our technology rollouts over the course of several years."

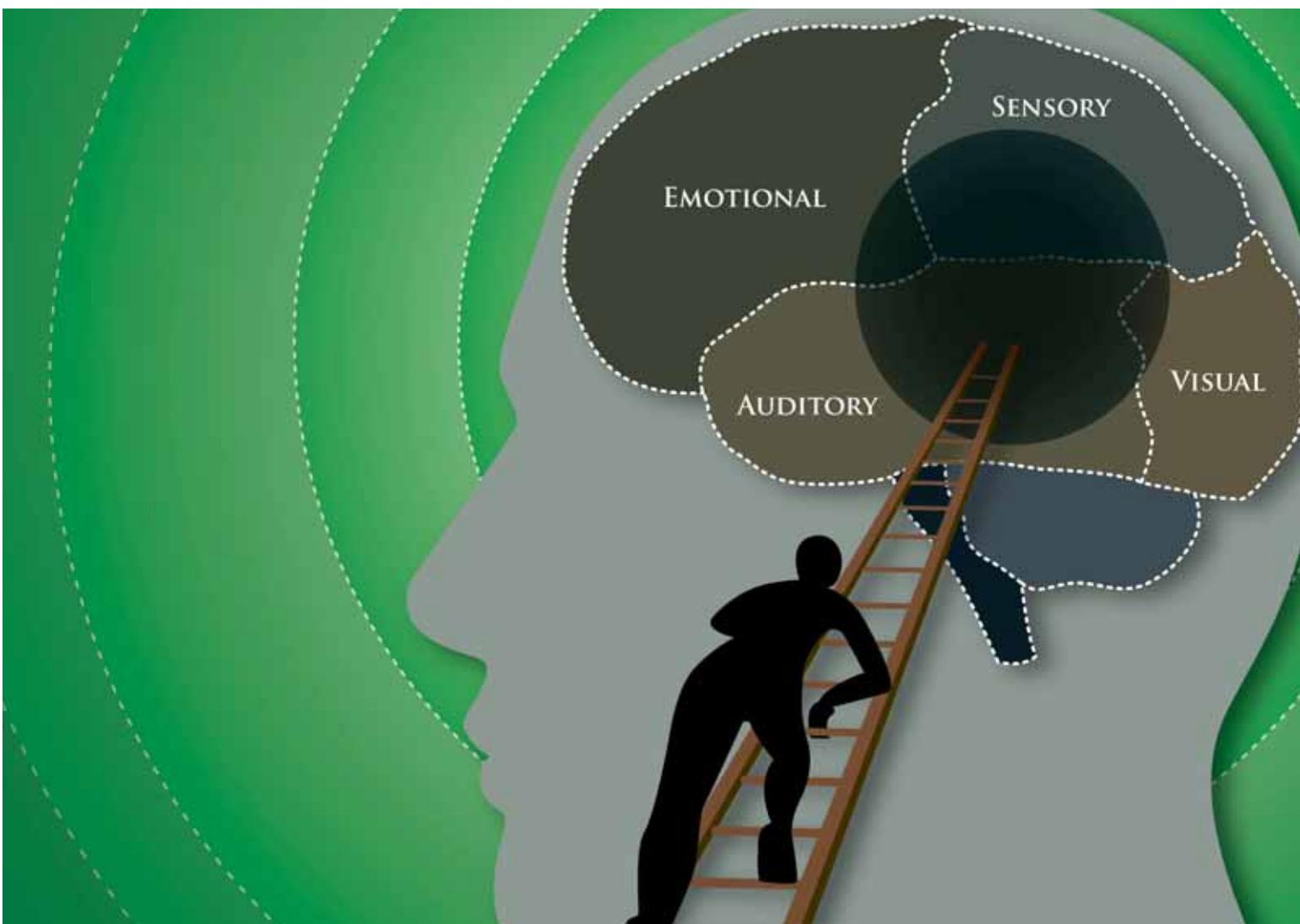
Zwillinger and her team recruited Infiniti and competitive brand owners using the following screening requirements:

- an even 50/50 split of male and female drivers;
- drivers of one-third of each car type (sedan, SUV/crossover and coupe/convertible/sports model);
- age range 25 to 70;
- mix of married and single - no quotas;
- total household income of \$100,000 and over;
- criteria consistent with Infiniti-owner profile developed from prior qualitative research.

How they aligned

In this project, the goal was to identify the core value of individual features to see how they aligned with the already-known core values of the Infiniti brand.

Researchers initiated the production of stimuli that would present the 25 advanced automotive features both visually (graphic) and verbally





Beyond the obvious utility of the Around View Monitor, laddering helped Infiniti uncover respondents' more deeply-held feelings surrounding the technology, such as the peace of mind it brings and the stress that accompanies damage to one's car.

(written statements) to best communicate features that were not yet in the marketplace and which would require participants to stretch their imagination to comprehend.

The screening, development of verbal and graphic concepts and a warm-up process became critical to the validity of the overall process. Zwilling's script explained the laddering process so respondents could quickly understand the objectives and flow of the interview, and so they would not be surprised by the repetitive questions it requires. "I found that I had to set that stage for them, get them comfortable with the laddering technique," Zwilling says. "That warm-up put the respondents much more at ease and increased the success of the interview."

Each person reviewed 10 to 20 features, and eventually laddered between seven and 10 features which they both understood and were interested in seeing on a car they would purchase in the future.

Before laddering took place, the respondent was read and shown a description of each feature, then was asked to describe it to make sure everyone was talking about the same thing. "We asked them to indicate in their own words - not reading back the concept statement - the benefit each feature provided and using their words, then had them ladder the importance of each benefit," Zwilling says. "From the laddering we were able to determine the core value embodied by or most closely associated with each feature."

Primary core value

Each of the 25 features was laddered, from direct physical benefits to emotional consequences/benefits and ultimately to the primary core value for the feature, by repeatedly asking the respondent "Why is that important to you?" The laddering process was repeated for several benefits if more than one was expressed, and if there was time.

The following example of the outcome from Zwilling's ladder-

ing process for the Around View Monitor shows actual responses collected from one of the hour-long interviews:

- Level 1 benefit:** Video cameras make blind spots more visible
- Level 2:** Won't back into something
- Level 3:** Won't destroy something
- Level 4:** Damage to car is stressful
- Level 5 core value:** Peace of mind

Researchers ended up with thousands of pages of data that were transferred into 25 spreadsheets, one for each of the 25 features tested. Each sheet included automotive ownership, demographic, psychographic and laddering data (including the core value) for each person seeing a specific feature.

To make it easier for the client to understand and use the laddering outcome, Zwilling created a template that summarized all the data for each feature in terms of perceived benefits, physical conse-

quences, emotional consequences and core value. For example, continuing with the AVM example, the abbreviated analysis included:

Perceived benefits: Camera more accurate than sensor

Physical consequences: Avoid hitting or bumping into something; easier to park

Emotional consequences:

Concern about repair costs

Core value: Peace of mind

Analysis of the laddering exercise led Zwillinger to develop a list of seven core values similar to Maslow's hierarchy of needs. The list included an unusual value that reflected the unique values of the Infiniti-defined target. That value, hedonistic compassion, combines the altruism and outer-directedness of Maslow's love/belonging with a tinge of narcissism, but differed from similar language associated with the values Zwillinger labeled emotional security and self-esteem.

"We found many of the participants in this study cared about others, mainly as a reflection of self," Zwillinger says. "They take

care of themselves so they can take care of others. They desire luxury for sensual reasons, not to impress others."

Zwillinger was able to summarize what the customers were saying, with an eye toward what Infiniti wanted to do with the information, Nguyen says. Ultimately, the research allowed for placing each individual automotive feature into the appropriate Infiniti brand pillar (peace of mind, driving pleasure and hospitality) based on the core values of that feature. "The depth and understanding of what we were trying to accomplish from an advanced product planning perspective, that's what Zwillinger produced in spades," Nguyen says.

Weighted evaluation

After a thorough review of each feature summary ladder from the research, Nguyen and her team at Infiniti created a weighted evaluation for each of the advanced automotive technology features according to four criteria:

- breadth of support of core cus-

tomers values;

- breadth of emotional consequences;
- clarity of feature's benefit to the customer;
- appeal to respondent (like or dislike).

Integrating all the data, the Infiniti advanced product team placed the features into three tiers - essentially a customer-driven prioritization of the features which supported the Infiniti brand identity. The individual features that scored the highest in the four-category evaluation emerged as the team's recommendations for feature rollout.

Competitor assessment, feasibility and investment costs were also considered in the final decision, but qualitative research results carried an undeniable weight. "What the qualitative research is doing, and laddering in this case, is soliciting intangible values from tangible ones," Nguyen says. "And that's a powerful tool when you can have someone tell you what's at the core of why something is important to them." | Q