

Uncovering your customer's hidden needs

Companies must go beyond traditional market research techniques if they are to anticipate their customers' requirements

By Keith Goffin and Fred Lemke

Capturing the 'voice of the customer' is an essential stage of any new product development. However, the way companies 'listen' to their customers is changing as managers realise end users are often unable to articulate their needs and focus groups seldom lead to breakthrough product ideas. The SONY Walkman is a clear example of a new product that resulted from insights into customers' hidden needs rather than from market research. It is not that market research is bad *per se*, rather that it is in need of a complete overhaul in many organisations.

A vanguard of product developers has addressed the issue of hidden needs – needs which customers themselves do not always recognise – and some companies are using novel ways to capture them. We have assembled a collection of tools and techniques that go deeper than traditional market research. We have called this approach Hidden Needs Analysis (HNA) and its tools include repertory grid analysis, empathic design (including observation and contextual interviews) and lead user groups. Each of these techniques, we believe, has advantages compared with traditional market research tools.

Common Problems

The first tool in the traditional market researcher's armoury – the questionnaire – has several drawbacks. Customers and users cannot always adequately express their needs and direct questions do not help with this problem. We regularly come across questionnaires that are so poorly designed the companies which produce them will not obtain reliable responses. However, the most important issue with questionnaires is the response rate: how many questionnaires do *you* fill in and return? Not that many, probably. Yet many companies have yet to realise that this approach is fast becoming obsolete.

The traditional fallback after questionnaires is the focus group, or visits to specific customers or users. Both can generate good ideas but the majority of marketing managers say that they are not exciting and complain that too many of the new products that emerge from them are purely incremental innovations (which cannot be differentiated from the competition). The main limitation of the focus group is that discussions take place outside the normal business environment where there is a host of clues that product designers should be focusing on.

HNA Philosophy

The philosophy behind hidden needs analysis is simple: direct questions are ineffective and different approaches are needed. These new approaches are drawn largely from anthropology and psychology, sciences which aim to uncover people's views and beliefs. For example, repertory grid analysis (RGA) was initially developed

by psychologists to understand how individuals think and to uncover their cognitive ‘maps’, a technique that is ideal for developing new product ideas. RGA uses indirect questions to allow users to compare their experiences of existing products and services and reveal tacit knowledge. Companies that have used RGA in their market research include Biersdorf (the Hamburg-based manufacturer of global brands such as Nivea) and Hewlett-Packard, both of whom were successful at uncovering hidden needs (see also box case: *Repertory Grids in Industrial Practice – Equant*).

Observation is another very effective HNA technique. In recent years several of the leading market research companies have hired anthropologists who observe customers on many levels simultaneously and do not limit themselves to collecting information and ideas through questions. They are able to pick up clues on customers’ hidden needs through observing body language, spatial signals and other subtle gestures, all of which are easily missed by amateurs. Technology such as micro video cameras is making observation easier. For example, we are currently working in Germany with one of Robert Bosch’s business units which designs and manufactures production line equipment. Through close observation of operators working in their customers’ factories, Bosch has gained much deeper insights into product requirements than from interviews with production managers.

Another technique is the contextual interview, which focuses discussions with customers or users on the physical aspects of their environment. Anthropologists have the skills to put themselves into the customer’s shoes but it is also important that product developers such as engineers understand and empathise with their customers. In developing the Ford Focus, which has the ‘silver segment (elderly people) as one of its target segments, engineers wore ‘Michelin Man’ suits to simulate the difficulty elderly people experience when they get into and out of cars. This helped motivate the engineers to come up with better solutions for the car’s doors. Such techniques can also be used in the service sector. Singapore Airlines, for example, makes trainee cabin staff spend time in homes for the aged to understand the problems faced by older travellers.

Lead user groups provide another way to obtain insights directly from the market. Customers who face more extreme conditions are observed or interviewed, to determine how they use products. In technical situations, the user may modify the standard product and gauge how effective this is. It is particularly important to identify how the lessons from lead users can be applied to the broader market: workshops and prototyping are often used in this respect. Both 3M and Texas Instruments are employing the lead user approach.

Repertory Grids in Industrial Practice - Equant

One company that has used this technique effectively is Equant, the world’s largest data network provider, offering network design, integration, maintenance and support services in over 180 countries. The company has always placed a high emphasis on being ‘customer-focused’ and regularly reviews the results of customer satisfaction surveys, comparing their performance to that of competitors. Although such surveys have provided useful ‘benchmarks’, Equant recognised that it did not measure performance against criteria that were most important to customers. Consequently, a project was launched to determine the aspects of service quality that were important to customers but not covered by the surveys. Liam Mifsud, Business Support Manager at Equant, designed and conducted repertory grid

interviews with IT Directors and Managers which elicited a range of new service quality criteria (far wider than those covered by the customer satisfaction surveys).

The results showed that customers' perceptions of service quality were not solely based on technical measures (such as coverage or network performance) and Equant was able to identify 10 new customer requirements on which to focus their service products. "Repertory grid provided us with a valuable means of understanding the changing needs of customers," says Mifsud.

Benefits

The drawback of classic market research is that it merely reflects common knowledge. In discussions with companies we use the analogy of an iceberg: make sure your market research is taking you below the waterline as a mass of ideas for product designs is typically hidden. The challenges of hidden needs analysis are not so much learning to execute one or other of the research techniques. First, they lie in effectively choosing from and blending the portfolio of techniques available. Tailor-made approaches are needed for each situation. Second, observation and other techniques produce masses of qualitative data, which many companies struggle to analyse correctly. For companies that can address these challenges, the rewards are significant. It can help to break out of the 'innovation trap', the cycle of incremental product innovations that managers often complain about.

The Terminology of Hidden Needs Analysis

Hidden needs: requirements that customers or users have but which they have not yet directly recognised. As these requirements rest on a sub-conscious level, users are unable to articulate them.

Empathic design: the basis of this method is to see the world from a user perspective and so to understand problems and tacit requirements. Includes observation, contextual interviews and having product developers "live the life of the customer".

Observation: identifying problem areas and anticipated user requirements by observing a routine situation, using techniques from anthropology. Skilled observers look for a range of clues including emotions, linguistics (what we say), extra-linguistic signals (how we say it), and body language. Extensive use of observation is sometimes called going on an *anthropological expedition*.

Contextual interviews: a conversation following a semi-structured interview script in the familiar user environment that concentrates on key steps of product usage. Physical artefacts in the environment in which the product (or service) is used are often taken as prompts for additional questions.

Ethnographic market research: another name for the use of techniques from anthropology.

Lead user groups: Capturing and integrating the views of users that have more extreme product requirements than the average user. For example, in developing new products to reduce post-surgical infection, 3M studied the challenges facing surgeons in developing countries where hygiene levels are lower.

Repertory grid analysis: a creative interviewing technique from psychology that is able to identify hidden needs of customers by focusing on experiences of different products and services.

Keith Goffin and Fred Lemke are professors at Stuttgart Institute of Management and Technology (SIMT) in Germany. Their research and consultancy is focused on innovative product design. Keith is also a visiting professor at Cranfield School of Management in the UK, where he regularly teaches innovation management. Email: [new](#) email address to follow

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Goffin, Keith

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