Special Section: Ethnography in NPD Research How "applied ethnography" can improve your NPD research process

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As more and more companies use "applied ethnography," questions have multiplied about the best way to apply this research technique in NPD. Liz Sanders gives us an overview of the fundamentals of "applied ethnography," as well as some examples of corporations that have used this technique successfully in their new product development process.

Elizabeth Sanders

Applied ethnography is gaining widespread acceptance as a research technique. But many companies are still puzzled by it, or do not know how to use it effectively - especially in the new product development process. This article will explain the fundamentals of this technique, and give some examples of how it has been used effectively in the NPD process by companies in recent years - and perhaps help you decide if applied ethnography is right for your latest project.

Basic definition
Fundamentally, the term "ethnography" involves the description and study of human cultures. Social scientists use it to understand other ways of life from the native's point of view. Ethnography originates from anthropology where anthropologists spend significant periods of time with local people making detailed observations of their practices. Traditionally, ethnographers such as Margaret Mead focused on the study of cultures thought to be primitive. But today ethnographers study more familiar groups and cultures such as do-it-yourselfers, teenagers, retail shoppers, mobile phone users, etc. Ethnography is recognized today as a new form of consumer research that is useful in uncovering and identifying emerging and unmet customer needs. Although it is not really a new scientific technique, the application of ethnography to the new product development (NPD) process is relatively recent.

Because it draws from a range of research methods, ethnography is more of an approach than a defined research method. The overall term and technique includes observations, interviews and the documentation of "traces" that people leave as they go about their everyday lives. An example of traces from our own culture would be Post-It notes. Ethnography comprises a very in-depth form of qualitative research, which is also referred to as ethnographic field work.

Ethnographic field work includes elements of other types of research such as contextual inquiry, observational research and participant observation. Contextual inquiry is a form of ethnography that is specifically focused on asking questions. It is contextual, in that the asking of questions takes place in the natural environment of use. Observational research entails simply watching users in their environments, without asking questions about why or how things are being done. Participant observation is a more intensive form of observational research that focuses on the researchers joining the culture being studied in order to better understand that culture.

Defining applied ethnography
Applied ethnography may be defined as ethnographic field work done to bring the consumer's or customer's point of view to the design and development of a new product. Applied ethnography can also be used to improve existing products.

Both traditional and applied ethnography can be described by a number of characteristics. For instance, this type of research:

- Takes place in natural surroundings;
- Is open to change and refinement throughout the process as new learning shapes future observations;
- Combines a range of research methods, including observation and open-ended forms of inquiry;
- Has a goal which is more likely to be exploratory rather than evaluative; and
- Aims at discovering the local person or "native's" point of view, wherein the native may be a consumer or an end-user.

Traditional ethnographies are often done by an individual and may take several months to years to complete. Margaret Mead, for instance, spent much of her adult life in such locations as New Guinea, Samoa, Bali, and many other places, conducting ethnographic research on people as they grew from children into adults. In the NPD process, especially in today's economic climate, most researchers do not have this type of time period available. They may, however, be able to use applied ethnographic techniques. These research techniques are generally done within a much shorter period of time ranging from a few days to months.

From the viewpoint of NPD practitioners, some advantages of applied ethnography over traditional ethnography include the fact that it is quicker, it is less expensive, and it can be less intrusive into the lives of those being studied.

Even so, applied ethnography can be expensive and time consuming when compared to other qualitative research methods

such as focus groups. However, it can achieve a deeper level of insight about customers' emerging and unmet needs than other techniques.

Where ethnography fits in
Applied ethnography can be useful throughout the new product development process. But it is probably most useful in the earliest stages of the NPD process, especially the Fuzzy Front End. It can be used to explore emerging and unmet needs for a particular target group. It can also be used to understand how people live with existing products or services that a company currently provides. The use of this in-depth and open-ended approach can help researchers see what is really important to people. This understanding can help alleviate the risk involved when going after a new market or bringing to market a totally new product. Applied ethnography can also be used iteratively throughout the development process.

Comparison to other research techniques
Applied ethnography is not better than all other types of research at all points in the development process. But it is superior to many techniques such as focus groups for the Fuzzy Front End of the NPD process.

Traditional focus groups rely primarily on "What people say." But this data is limiting. There are many reasons why people say what they say, and why they don't say other things. And there are many thoughts and feelings people are not able to put into words. These thoughts include tacit or inexpressible information which does not have a chance of being expressed when using research methods that rely solely on what people say. Even the new computeraided, language context analysis tools such as the use of CALCAT, described in the October 2001 issue of Visions, are limited to what people are able to put into words.

Applied ethnography, on the other hand, draws simultaneously from a number of different research methods. It listens to what people say, while at the same time watching what people do and what they use. Applied ethnography is the best way to discover the difference between what people say they do and what they really do in their daily lives. Since it allows the use of multiple converging perspectives - what people say, do, and use, it will always reveal more and provide greater insight than will the single perspective of "What people say." This deeper level of understanding is what is needed in order to drive real innovation from the customer's point of view during the Fuzzy Front End of the NPD process.

The Xerox Palo Alto Research Center
Xerox was one of the first companies to use applied ethnography. The company hired Lucy Suchman, an anthropologist, at the Xerox Palo Alto Research Center (PARC) in 1979. Suchman conducted ethnographic field work in the workplace and summarized her findings in a film showing office workers struggling to do a copying job on a Xerox machine. After viewing the film, Xerox engineers began to think about designing Xerox machines differently. Suchman's work led to the large green button we see on most copiers today that lets us walk up to the machine and easily make a copy.

In the early 1980s several of the larger industrial design firms hired anthropologists or psychologists to bring the human-centered perspective into their NPD process. Today there are a number of social science-based research consultancies and many individuals who offer a psychological and/or anthropological perspective to product development teams.

Today many large consumer-based organizations such as Microsoft, Motorola and Intel have anthropologists on staff within their organizations. These social scientists either conduct the field work or oversee the work of other field workers. For instance, Intel has applied social scientists who conduct ethnographic field work on a continuing basis. Those researchers were very helpful in expanding Intel's involvement in the healthcare field. In a large ethnographic study of health care providers conducted by these in-house researchers, it was discovered that many doctors have time constraints which prevent them from accessing the people, information, and/or resources needed to provide patients with quality health care. The result was the development of Allscripts Healthcare Solutions - wireless Intel devices that automate physician tasks such as prescribing medication and capturing billing information.

At Motorola, ethnographers found that Chinese businessmen working in rural areas with no telephone service had developed an elaborate system of using pagers to send coded messages. That discovery led Motorola to develop a twoway pager for the Chinese market.

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