

Ethnographic Capabilities & Expertise

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What is Ethnography?

Ethnography is a research methodology aimed at gaining a deeper understanding of humans as they interact in their social environments. This holistic research method has also been used to study the interactions of people with technology. Ethnographers observe people within their homes, work places and communities to gain an understanding of the socio-cultural context in which they act. Ethnography can involve qualitative and quantitative methods and data sources, maintaining culture as the lens for all interpretation.

Capabilities

One of Benchmark's strengths is in our ability to blend technology, psychology and anthropology. We combine our knowledge of socio-cultural systems and human capabilities and limitations so we can offer solutions that are more acceptable, less costly and require less training and support. Our philosophy is to learn about the target audience to anticipate how new technology will be adopted, whether in the home, office, or field, and to carefully design the technology to create a safe and ideal user experience.

Our core skills include knowledge of user testing methods, cognitive psychology and human factors design principles; research techniques such as user modeling, design ethnography, interviewing, and participant-observation; and technical skills such as workstation design, prototyping and graphical user interface (GUI) development.

Experiences

Dr. Josh McDaniel is an ethnographer who specializes in technology development and adoption, as well as natural resource management and hazard mitigation. He has over 13 years of field experience in social science research using an array of qualitative and quantitative methods, including:

- Ethnography
- Participant observation
- Structured and semi-structured interviewing

- Surveys/questionnaires
- Oral histories
- Stakeholder analysis

Recently, Dr. McDaniel has been examining the use of technology and science in wildland firefighting. The Wildland Fire Decision Support System is a new state-of-the-art wildfire behavior projection and modeling system developed by scientists from the Missoula Fire Laboratory to support firefighters and managers with projections of wildfire intensity and spread across landscapes. Dr. McDaniel has been using ethnography to observe how the system is used in the field – identifying challenges in the user interface, obstacles to effective interpretation of maps and outputs, and barriers to communication between project scientists and field personnel.

Dr. McDaniel has worked on a variety of projects related to natural resource management and hazard mitigation, including working with Gulf of Mexico fishermen to develop aquaculture programs, using network analysis to research labor organization and recruitment of guest workers in the southern forestry industry. He has also interviewed and surveyed residents in urban, suburban, and rural watersheds regarding environmental knowledge, and then related that information to land use practices and opinions on policy questions. The results of that research are being used by the US Forest Service to develop professional development curriculum for natural resource management agencies across the South.

As a hazard mitigation officer and community planner with the Federal Emergency Management Agency, Dr. McDaniel worked with state emergency management officials and community stakeholder groups to develop state and city hazard mitigation plans. This work required finding common ground between federal officials, State agencies, local politicians, and citizen/interest groups.

Included in Dr. McDaniel's field research experience is two and half years of research in South America on natural resource management issues in fisheries and forest management among Native American tribes. His work has been used to develop a fisheries management plan for lake fisheries in the Peruvian Amazon and a management plan for a National Park in Peru that included the subsistence rights for local tribes that hunted and fished within the park boundaries.

Dr. McDaniel is fluent in Spanish and is available for projects involving Spanish-speaking participants. He holds a Ph.D. in anthropology from the University of Florida.

About Benchmark Research & Safety, Inc.

Benchmark Research & Safety, Inc. is a human factors and ergonomics consulting firm that specializes in usability, user-centered design, product safety, warnings, expert witnessing, research (design, ethnographic, perceptual) and training. Incorporated in 2000, Benchmark Research & Safety, Inc. is one of the few multi-capability firms in the Northwest - headquartered in Moscow, Idaho with branch offices in Boise and Rigby, Idaho; Portland, Oregon; Spokane, Washington; and Grand Junction, Colorado.

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Whether you are planning your next project or looking for assistance with an existing project, we can help. Benchmark's unique combination of perspectives contributes to a solution that you can apply with confidence. Contact us at 877-641-4468 or info@benchmarkrs.com.