Evaluating Globally: How to Conduct International or Intercultural Usability Research

Laurie Roshak (Organizer)
Sun Microsystems
Broomfield, CO 80021 USA
+1 303 223 6124
laurie.roshak@sun.com

Jared Spool (Moderator)
User Interface Engineering
Bradford, MA 01835 USA
+ 1 978 374 8300

jspool@uie.com

Panelists
Vanessa Evers, University of Amsterdam, +31 20 5256795, evers@swi.psy.uva.nl
Rolf Molich, DialogDesign, +45 4717 1731, molich@dialogdesign.dk
Colleen Page, Microsoft, +1 425 706 4020, colleenp@microsoft.com
Ann-Byrd Platt, Swisscom, +41 79 277 56 89, ann-byrd.platt@swisscom.com

ABSTRACT
This panel will educate the audience on the methods and tools available for conducting international or intercultural usability research. The panel will also address the challenges of conducting international or intercultural usability research and provide tips on how to overcome these challenges.

Keywords
Cross-cultural usability, lobal usability, ntercultural usability, international usability, remote usability, usability methods, usability research

INTRODUCTION
We live in a global marketplace. No longer can companies ignore cultural differences and assume that all users will be like the local users; decisions based on input from a single culture could prove disastrous for a worldwide audience. As a result, we need to ensure that we are meeting the needs of our global customers as we design and evaluate products. Unfortunately, most products are designed and evaluated without international or intercultural usability research due to aggressive development schedules, limited budget, and lack of knowledge on how to conduct international or intercultural usability research.

Some companies are conducting international or intercultural usability research by: establishing geographic usability research groups, traveling to conduct research, hiring consultants, or conducting moderated and unmoderated remote research

Regardless of the approach a company takes, there are many challenges to overcome including:

- Limited budgets for new staff, new equipment, travel, or to hire consultants

- Limited personnel with usability research knowledge

- Identifying the target languages, locations, and cultures for evaluation

- Recruiting participants

- Scheduling participants in multiple time zones

- Additional costs and time to translate evaluation materials for multi-location evaluations

- Additional costs and time to translate evaluation moderators' and participants' conversations

- Limited remote collaboration tools

- Technical problems for remote evaluations due to participants' firewalls and LANs

- Technical limitations for global implementation such as language limitations in the browsers

- Some methods do not work for some cultures

The goal of this panel is to inform, educate, and entertain the audience participants on international or intercultural usability research; a topic that is often ignored but much needed for the global marketplace. Panelists will discuss and debate the methods, tools, and challenges associated with this type of research. Advice for current and future researchers will also be provided.

PANEL FORMAT
The panel will consist of three 30-minutes phases. In the first phase, the panel moderator will briefly describe the intent of the panel and introduce the panelists. Next each panelist will describe her/his method for conducting global usability evaluations and the challenges faced. In the second phase, the panel moderator will pose prepared questions for the panel members to answer. In the third and final phase, audience members will pose questions for the panelists to answer.

POSITION STATEMENTS

Vanessa Evers

As we travel from country to country we realize that people are very different. These cultural differences lead us to question whether usability-testing methods as used to date, are appropriate for international user experience research. A well-developed body of knowledge about qualitative research in the fields of cross-cultural communication and cross-cultural research in general could offer direction but unfortunately, does not seem to impact the development of usability testing methods.

The view above raises issues about the appropriateness of user centered design processes, user evaluation methods, and user data analysis. I would like to defend the notion that the majority of North-American development companies are extremely unsuccessful in evaluating the local user experience of their internationally marketed products. This is not only because of the cultural inappropriateness of the methods used but also because of the mediocre quality of usability 'research' performed by industry.

As the only academic contributor to the panel, I would like to question the validity and reliability of the methods used by my co-panelists who all work in industry. I would also like to introduce the idea of 'local user centered development processes' where there is not one universal optimal process but optimal solutions for each target locale.

Colleen Page

A product or service developed in one region can be adopted and used in unexpected ways in different cultural contexts. Some of our services have been adopted and used more in Europe and Asia than in the US where our development team is located. We are planning targeted global research to evaluate our localized products and gain a better understanding of the user experience in these markets. Management is concerned with the need for team members to have direct experience with the cultures in which our services are most popular. Due to this need for cultural immersion we have elected to travel to conduct research. However, we need local support to carry out a successful research project in another language and unfamiliar environment, so we will also hire local consultants. In this project we will triangulate market research, travel to conduct research, direct experience for key team members, plus research assistance provided by a local consultant.

Ann-Byrd Platt

People don't just use technology differently around the world. They also imagine and create it in surprisingly dissimilar ways. Differences range from such lofty intangibles as trust, "creative solutions," and What Users Really Want, to the mundane realities of schedules, office politics, quarterly earnings, and what users really.

Global evaluation needs to encompass much more than just better localization and usability testing techniques. How technology is created in other parts of the world (not the U.S. nor Asia), how it is perceived by its local designers and end-users, how it is sold, and how and why it is used all matter more than most of us realize.

Laurie Roshak

Conducting international usability evaluations remotely, especially unmoderated, may not be ideal for some user research. The biggest disadvantage of these remote evaluations is some results may be irrelevant. These evaluations do, however, allows us to evaluate our products and obtain user feedback when challenging development schedules and limited funding precludes other methods of user research. The biggest advantage of these remote evaluations is the elimination of travel costs and travel time; I can conduct usability evaluations in several countries in a single day without leaving my office. At Sun, we combine remote usability evaluation with other user research methods to enhance the advantages and reduce the disadvantages. With this panel, I will discuss the advantages and disadvantages of remote international usability evaluations. I will also discuss how remote international usability evaluations are best combined with other user research methods.

Rolf Molich

Rolf will be the devil's advocate in this panel. His devilish advice about international usability research includes:

1. Don't waste time on international usability work. The rest of the world can live with it.

2. Have no measurable criteria for the quality of your work. If you have no measurable criteria, anything, including nothing, will do. This helps keeping your cost down.

3. Save by sending your own people abroad. Make sure they don't know the local language. Always test in your own language so you can understand what's going on. For example, US facilitators should always use English when testing in France.

4. If you have local people in the foreign country, let them do the work for you. Sales people are usually best.

5. If you must work together with a local partner, select that partner exclusively based on price and photos of their lab.

6. Whenever possible, use unattended testing. Call it "remote usability testing." It sounds good and helps you save.

7. Don't waste your time familiarizing yourself with the country where you want to do usability work. US facilitators, for example, should bring their hairdryers when they go to Europe.

8. Always keep Jerry Weinberg's wise words in mind: "If you don't care about quality, you can meet any other requirement."

Panel Proposal

Evaluating Globally: How to Conduct International or Intercultural Usability Research

Laurie Roshak
Sun Microsystems
500 Eldorado Boulevard
Broomfield, CO 80021 USA
+1 303 223 6124
laurie.roshak@sun.com

ISSUES

We live in a global marketplace. No longer can companies ignore cultural differences and assume that all users will be like the local users; decisions based on input from a single culture could prove disastrous for a worldwide audience. As a result, we need to ensure that we are meeting the needs of our global customers as we design and evaluate products. Unfortunately, most products are designed and evaluated without international or intercultural usability research due to aggressive development schedules, limited budget, and lack of knowledge on how to conduct international or intercultural usability research.

Some companies are conducting international or intercultural usability research by:

- Establishing geographic usability research groups

- Traveling to conduct research

- Hiring consultants

- Conducting moderated and unmoderated remote research

Regardless of the approach a company takes, there are many challenges to overcome including:

- Limited budgets for new staff, new equipment, travel, or to hire consultants

- Limited personnel with usability research knowledge

- Identifying the target languages, locations, and cultures for evaluation

- Recruiting participants

- Scheduling participants in multiple time zones

- Additional costs and time to translate evaluation materials for multi-location evaluations

- Additional costs and time to translate evaluation moderators' and participants' conversations

- Limited remote collaboration tools

- Technical problems for remote evaluations due to participants' firewalls and LANs

- Technical limitations for global implementation such as language limitations in the browsers

- Some methods do not work for some cultures

CONTROVERSIAL / RELEVANCE

This panel is relevant for CHI 2003 because we need to conduct international or intercultural usability research to better meet the needs of the consumers of interactive digital media designed for mass communication and e-learning. In addition, this panel will discuss ways to communicate and interact around the world within and between companies.

INTENDED AUDIENCE

- Usability practitioners who need to evaluate products with a global audience

- Product designers and developers who need to design and develop products for a global audience

- Researchers who need to conduct research worldwide

- Development managers who need to reduce product development costs
- Business managers who need to better understand the needs of the global user

PANEL FORMAT

This panel will inform, educate, and entertain the audience participants on the methods, tools, and challenges associated with international or intercultural usability research. The panel will consist of three 30-minutes phases. The panel moderator will ensure that panelists do not exceed their time limit.

In the first phase, the panel moderator will have five minutes to briefly describe the intent of the panel and to introduce the panelists. Next each panelist will have 5 minutes to describe her/his method for conducting global usability evaluations. The descriptions are to include: purpose of the evaluation, method employed, rationale for choosing the method, tools employed, advantages of chosen method, disadvantages of chosen method, and lessons learned.

In the second phase, the panel moderator will pose prepared questions for the panel members to answer. The questions will be developed by the panelists and will be based on the challenges identified in the Vision Statement and in the panelists' Position Statements. This is an opportunity for panelists with opposing viewpoints to challenge each other's view. Each panelist will have a maximum of two minutes to answer each question.

In the third and final phase, audience members will pose questions for the panelists to answer. Audience members can elect to have all panelists answer the posed question or can request a specific panelist(s) answer the question. Again, panelists will have a maximum of two minutes to answer the question.

INNOVATIONS

This panel addresses international or intercultural usability research; a topic that is often ignored but much needed for the global marketplace. Panelists will discuss and debate the methods, tools, and challenges associated with international or intercultural usability research. Advice for current and future researchers will also be provided.

CONFIRMED PANELISTS

Name	Affiliation	Location	Phone Number	Email Address	Position
Vanessa Evers	University of Amsterdam	Roeterstraat 15 1018 WB Amsterdam the Netherlands	+31 20 5256795	evers@swi.psy.uva.nl	Panelist
Rolf Molich	DialogDesign	Skovkrogen 3 DK-3660 Stenlose Denmark	+45 4717 1731	molich@dialogdesign.dk	Panelist
Colleen Page	Microsoft	One Microsoft Way Redmond, WA 98052 USA	+1 425 706 4020	colleenp@microsoft.com	Panelist
Ann-Byrd Platt	Swisscom	Ostermundigenstrasse 93 CH3050 Berne Schweiz	+41 79 277 56 89	ann-byrd.platt@swisscom.com	Panelist
Laurie Roshak	Sun Microsystems	500 Eldorado Boulevard Broomfield, CO 80021 USA	+1 303 223 6124	laurie.roshak@sun.com	Panel Organizer / Panelist
Jared Spool	User Interface Engineering	242 Neck Road Bradford, MA 01835 USA	+1 978 374 8300	jspool@uie.com	Panel Moderator

SPECIAL NEEDS FOR TECHNOLOGY

Default panel arrangement is sufficient for this panel.

POSITION STATEMENTS

Vanessa Evers (Panelist)

An interesting aspect of the panel topic is the inherent 'North-American' nature of usability testing. Historically, usability testing started in order to ensure product quality for a highly individualistic, achievement oriented customer group who are happy to openly express emotion and are uncomfortable with ambiguous information (i.e. North American users).

As we travel from country to country we realize that people are very different. These cultural differences lead us to question whether usability-testing methods as used to date, are appropriate for international user experience research. A well-developed body of knowledge about qualitative research in the fields of cross-cultural communication and cross-cultural research in general could offer direction but unfortunately, does not seem to impact the development of usability testing methods.

The view above raises issues about the appropriateness of user centered design processes, user evaluation methods, and user data analysis. I would like to defend the notion that the majority of North-American development companies are extremely unsuccessful in evaluating the local user experience of their internationally marketed products. This is not only because of the cultural inappropriateness of the methods used but also because of the mediocre quality of usability 'research' performed by industry.

As the only academic contributor to the panel, I would like to question the validity and reliability of the methods used by my co-panelists who all work in industry. I would also like to introduce the idea of 'local user centered development processes' where there is not one universal optimal process but optimal solutions for each target locale.

Vanessa Evers has 8 years of work in cross-cultural research and international project management. Her experience includes a Ph.D. study in cross-cultural aspects of interface understanding, international human computer interaction research and managing international e-commerce projects at the Boston Consulting Group. She currently works at the University of Amsterdam as assistant professor in Human Computer Interaction and head of the user experience group at the Faculty of Social and Behavioural Sciences.

Colleen Page (Panelist)

A product or service developed in one region can be adopted and used in unexpected ways in different cultural contexts. Some of our services have been adopted and used more in Europe and Asia than in the US where our development team is located.   We are planning targeted global research to evaluate our localized products and gain a better understanding of the user experience in these markets.

Management is concerned with the need for team members to have direct experience with the cultures in which our services are most popular. Due to this need for cultural immersion, we have elected to travel to conduct research. However, we need local support to carry out a successful research project in another language and unfamiliar environment, so we will also hire consultants. In this project we will triangulate market research, travel to conduct research, direct experience for key team members, plus research assistance provided by a local consultant.

In previous Microsoft studies the role of the consultant has varied. In a recent ethnographic study we contracted with a local research agency to recruit participants and provide a researcher to accompany our ethnographers on site visits. This enabled our team to observe a foreign culture with translation provided by a researcher who understood their objectives. In other cases we have hired remote consultants to conduct research with minimal travel on our part.

Our justifications for combining travel with hiring a consultant in the current study are:

- The local consultant provides usability lab facilities.
- The local consultant enables us get directly into the field situations that we need to study, conducts the study in the language of the participants, and translates the findings and content of key artifacts into English.
- Key members of the product team can travel to share the cultural experience, and observe usability tests, focus groups, and site visits.
- We control costs by allocating some research tasks to the consultant and performing some ourselves.

Colleen Page is the MSN Communications Usability Lead at Microsoft. She was a panelist for "Usability in Practice: Field Methods Evolution or Revolution" at CHI2002. Ms. Page holds an MS in Human Factors Engineering from the University of Southern California. She has 10 years of experience in usability at Microsoft and is currently conducting lab and field studies in Asia and Europe.

Ann-Byrd Platt (Panelist)

People don't just use technology differently around the world. They also imagine and create it in surprisingly dissimilar ways. Differences range from such lofty intangibles as trust, "creative solutions," and What Users Really Want, to the

mundane realities of schedules, office politics, quarterly earnings, and what users <u>really</u> want (in Switzerland, usually a phone or [fill in the blank] that is well designed, built to last, stylish if possible, expensive if necessary.) "Usability" itself is not defined in quite the same way here.

Global evaluation needs to encompass much more than just better localization and usability testing techniques. How technology is created in other parts of the world (not the U.S. nor Asia), how it is perceived by its local designers and end-users, how it is sold, and how and why it is used all matter more than most of us realize.

For my proposed contribution to CHI 2003 Evaluating Globally, I would like to debate the following with fellow panelists:

- Which cultural differences matter and which ones don't for software design and application?

- Is it better, for example, to design and test a mobile-phone payments interface that works only for the Swiss (credit averse and subject to strict bank scrutiny) or to build a more general interface that works for all Europeans and the many tourists and business visitors as well?

- Is it only about market share and expanding always to include new users? Should designers start with one specific target in mind, create the best possible application for that target, and then recreate—if useful or even necessary—different versions for new markets?

- If your most beloved, tried & true design and testing methods don't work in your host country, how much do you adapt? All? As little as possible? Depends on the alternatives?

Ann-Byrd Platt's first job was at the UN, cutting up newspapers from around the world for a daily press review. She has been paying close attention ever since to how different people see and describe the same events in distinct and utterly subjective ways. She has worked on a wide variety of telephone, web and multi-media design projects in New York, Beijing, Geneva, Paris, Brussels, San Francisco, and now back in Switzerland again. She has also taught and lectured on user interface design and usability research at Columbia University, the American University of Paris, and l'EPFL in Lausanne. One constant has emerged from all this gadding about: the more it becomes the same around the globe (technology, news coverage, clothes, food), the more individuals change it, whatever "it" may be, to suit their own individual needs and tastes.

Laurie Roshak (Panel Organizer / Panelist)

I began conducting international usability evaluations remotely at Sun in 1995. To help overcome the "remoteness", I employ various technologies including video conferencing, teleconferencing, and application sharing. A local moderator/translator is also involved in the evaluation if language or culture is potentially problematic. In 1998, I expanded our remote user research to include unmoderated usability evaluations.

Conducting international usability evaluations remotely, especially unmoderated, may not be ideal for some user research. The biggest disadvantage of these remote evaluations is some results may be irrelevant. These evaluations do, however, allows us to evaluate our products and obtain user feedback when challenging development schedules and limited funding precludes other methods of user research. The biggest advantage of these remote evaluations is the elimination of travel costs and travel time; I can conduct usability evaluations in several countries in a single day without leaving my office. At Sun, we combine remote usability evaluation with other user research methods to enhance the advantages and reduce the disadvantages. With this panel, I will discuss the advantages and disadvantages of remote international usability evaluations. I will also discuss how remote international usability evaluations are best combined with other user research methods.

The advantages of unmoderated international usability evaluations include:

- No travel costs are incurred.

- Number of participants is not limited by the availability of the moderator.

- Do not have the hassle of scheduling participants, especially in multiple time zones.

- No time is lost with "no shows."

- The language of the moderator does not limit participation, only the availability of translated material.

The disadvantages of unmoderated international usability evaluations include:

- Cannot redirect a participant if s/he goes down a wrong path while completing a task

- May receive unclear and/or invalid answers if a participant becomes confused and/or goes down the wrong path.

- Moderator is unable to diffuse participants' frustration, which may lead to a participant stopping the evaluation.

- Unclear answers need to be clarified at a later time, increasing the probability that the participant cannot recall his/her intended answer.

- Typically not aware of technical problems in real time resulting in greater troubleshooting difficulties.

- Tools are limited and problematic.

- Participants' system environment (e.g. LAN, firewall) could prevent the participant from accessing the tools and materials used in the evaluation.

- Some research questions cannot be adequate answered using remote methods, especially when unmoderated.

Laurie Roshak is a Human Computer Interaction Engineer at Sun Microsystems. She has been the HCI lead at Sun for case management, clustering, customer life cycle, distributed objects, installation, printing, network storage, system administration tools and internal tools projects. She is currently working on redesigning sun.com to better meet the needs of Sun's global customers. Prior to Sun, Ms. Roshak was a Human Factors Engineer at IBM, Logicon (a subsidiary of Northrop Grumman), and SSDS (a systems integration consulting firm). Ms. Roshak holds a M.S. in Human Factors Engineering from the University of Southern California and has been in the Human Factors industry for over fourteen years.

Rolf Molich (Panelist)

Rolf will be the devil's advocate in this panel. His devilish advice about international usability research includes:

- Don't waste time on international usability work. The rest of the world can live with it.

- Have no measurable criteria for the quality of your work. If you have no measurable criteria, anything, including nothing, will do. This helps keeping your cost down.

- Save by sending your own people abroad. Make sure they don't know the local language. Always test in your own language so you can understand what's going on. For example, US facilitators should always use English when testing in France.

- If you have local people in the foreign country, let them do the work for you. Sales people are usually best.

- If you must work together with a local partner, select that partner exclusively based on price and photos of their lab.

- Whenever possible, use unattended testing. Call it "remote usability testing." It sounds good and helps you save.

- Don't waste your time familiarizing yourself with the country where you want to do usability work. US facilitators, for example, should bring their hairdryers when they go to Europe.

- Always keep Jerry Weinberg's wise words in mind: "If you don't care about quality, you can meet any other requirement."

Rolf owns and manages DialogDesign, a small Danish usability consultancy (www.dialogdesign.dk). Rolf conceived and coordinated the comparative usability evaluation study CUE-2 where 9 usability labs tested the same application. Rolf was a principal investigator in the NN/group's recent large-scale international usability test of 20 US e-commerce websites. Rolf has worked with usability since 1984; he is the co-inventor of the heuristic inspection method (with Jakob Nielsen). Rolf has conducted a large number of international usability tests, mostly in Europe. He has made most of the mistakes outlined in his position statement. Rolf's previous CHI panel experience includes the following successful, interactive panels:

- Ethics in HCI (CHI2001, Organizer).

- Comparative Evaluation of Usability Tests (CHI1999, Organizer).

- Usability in Practice: Formative Usability Evaluations - Evolution and Revolution (CHI2002, panelist).

Jared M. Spool (Moderator)

Keeping a panel lively and informative for the broad CHI audience is always a challenge and this panel is no exception. The issues in this panel have deep implications for both academics and practitioners. As moderator, I'll focus on bringing these implications to the surface, allowing the various viewpoints to be discussed.

The perspectives of the panelists have some common elements and many interesting differences. Identifying where everyone agrees is important -- it gives us a common ground to work from. Exploring the differences let's us understand the boundaries in context, need, and experience. We'll exploit the panel format to inform, educate, and entertain the audience participants on both the commonalties and the differences.

Jared M. Spool guides the research agenda at User Interface Engineering, one of the world's largest research organizations focusing on usability issues. There are few people with more experience moderating CHI Panels than Jared -- he's been a regular presenter and moderator at CHI since 1992. His interests in the validity of usability techniques and his involvement with the practitioner community, along with his quick wit, entertaining style, and informed understanding of the issues make him the ideal candidate to moderate this panel.