Leading International UX Research Projects

Jakob Biesterfeldt[1] and Miranda Capra[2]

[1] User Interface Design, Truderinger Strasse 330,
81825 Munich, Germany
Jakob.Biesterfeldt@uid.com
[2] HumanCentric, 200 MacKenan Dr,
27511 Cary, NC, USA
mcapra@humancentric.com

Abstract. In a global marketplace, UX research often needs to span multiple target markets to ensure usable products for all users. While there is some literature on methods for international UX research, less attention has been paid to practical aspects of planning and conducting multi-cultural research studies. In this paper, we provide suggestions for leading international research based on our experience as part of a network of UX research companies spanning 30 countries and 5 continents. We address all stages of a typical project lifecycle, from planning and conducting research to analysis and interpretation of insights, with a focus on formative usability testing projects.

Keywords: user experience, international research, usability testing.

1 Introduction

In our experience, research which is spread among multiple companies, countries and time zones, entails higher risks than at home. Leading cooperative international research projects can seem daunting at first, but with proper planning and the right local vendor they can run just as smoothly as projects within your own country. Our goal in this paper is to provide practical suggestions based on our experience as long-term members of the International Usability Partners (IUP), an international partnership of UX consultancies from around the world. Our projects tend toward user research and usability testing for consumer and medical products, software, websites, and consumer/business electronics, generally as an outside consultant brought in either for the specific project or as part of a larger product development effort. However, many of these tips will also be helpful to in-house usability teams and international projects for a wider array of user experience research. The project stages as described in this paper are:

- Plan the Research
  - Select a project management approach (centralized, decentralized, cooperative)
  - Decide whether, when, and how you want to observe the fieldwork
  - Find local vendors
  - Collect quotes from vendors

A. Marcus (Ed.): Design, User Experience, and Usability, Pt I, HCII 2011, LNCS 6769, pp. 368–377, 2011.

- Design the research
  - Project Timeline
  - Participant Profiles
  - Study Materials
- Fieldwork
  - Recruiting
  - Planning for no-shows
  - Prepare the local team
- Analysis & Reporting

2 Planning the Research

Early and thorough planning is essential for international projects. We assume that you or your client already know the countries you would like to test in; for guidelines in selecting countries, see [3]. The next step in planning is to decide on your management approach, which will affect the type of vendor you select for the project and the scope of the bid request you send out to vendors.

2.1 Project Management Approach

Typical approaches to project management are *centralized*, where the project lead moderates in all countries; *decentralized*, where each country takes control of its own approach and study design; and *cooperative*, which is a balanced approach where the lead provides the project goals and approach, but the individual counties help craft the specific approach [5]. A centralized approach is appropriate for the early stages of design where the lead needs intimate knowledge of all findings. Examples of such situations include contextual inquiry and ethnographic research, such as in the creation of personas, market segmentation or usage scenarios [6]. A centralized approach is also suitable for studying products or services that require the project team to spend a lot of time on acquiring specific domain knowledge. A centralized approach generally incurs high expenses for the moderator to travel and hire simultaneous interpreters for all sessions, but it is sometimes less expensive for the project team to travel than to brief and debrief with all vendors on complex and unfamiliar products and services. A centralized approach allows the lead moderator to monitor sessions and stay more involved in all aspects of the research [3], but it also extends the project timeline, since you cannot run multiple countries in parallel.

We use a cooperative approach for most of our projects, with a central lead and common research approach but local researchers and local participants. Local researchers are essential because experts in the local culture, language and usage context provide the most useful insight in the local user experience. When the local moderator is fully engaged in the project goals, they are able to keep the project on track when the unexpected occurs, and can write sections of the final report, providing the voice of the local country and an additional perspective on the product being evaluated. Cultural aspects are easily overlooked or misunderstood if you are not already deeply familiar with them. This includes cultural aspects related to a country or region, but also corporate cultures or specific industry cultures. Involving multiple evaluators also results in more usability problems found than with a single evaluator [2,7], even above and beyond the benefits of involving more users [9]. We have developed a network of quality vendors in dozens of countries which facilitates a cooperative approach, and we discuss this more in the section about selecting a vendor.

2.2 Observing Fieldwork in Collaborative Studies

Observing sessions in person can be quite costly for travel. In general, the more complex the product and research goals, the more efficient it is for the research lead to travel to each vendor and observe the live fieldwork. For less complex products and research goals, the effort spent consolidating results from various countries is less costly than traveling. Simultaneous interpreters are often as expensive as UX consultants, especially if you have unusual language combinations, and interpreters may not understand technical terms used during the sessions. A full transcript and translation loses the context of emotions and attitudes. For most studies, we will watch a few sessions using remote video streaming (webcams for product testing and screen sharing for software testing), and rely on notes taken by the moderator or a note-taker to capture the key ideas from the remaining sessions. Once we have worked with a vendor a few times, trust their expertise, and work using methods and materials familiar to both the project owner and the vendors, we don’t need to observe any of the sessions. Decide how you want to observe either in person, live-remote or not at all before sending the project out to bid, because it can affect the type of room needed, days to run the study, time of day for sessions, etc.

2.3 Finding Vendors

In a cooperative model, it is most critical to partner with the right local vendor, someone that you trust because you will be relying heavily on that local vendor for both the quality of the research and understanding of the local culture. Allow plenty of time to find, contact, exchange costs and other information as well as securing availability with vendors, if it is a first contact. They need to have excellent communication skills to ensure smooth project planning, clear discussion of issues that arise, and a proper write-up of their section of the final report. Vendors must have a common understanding of the methods, processes and scientific background in UX so that they can answer your research questions and challenge your methodology, if needed. They should be experienced in international projects and understanding cultural differences, and have domain expertise in related products or software.

To find a qualified vendor, you can consult networks of companies that specialize in international projects, such as our network, the International Usability Partners (IUP), online directories from groups like UPA and SIGCHI, universities and market research companies. Be careful using companies that specialize in market research; while they will have smooth project management and recruiting, they may not have a background in usability for moderating tasks, localizing tasks and questionnaires, and other UX-specific activities. Similarly, be careful of companies that say they have usability experience but it are purely survey-based, and do not have a background in behavioral research [3]. Colleagues and mailing lists or discussion groups of professionals and academics in your field are also excellent sources.

We recommend establishing long-term relationships or using networks that have already established long-term partnerships. It not only reduces the effort involved in finding a vendor, it will also give you peace of mind with regards to the quality of their work and you can continually improve the collaboration until it feels like you're working with your own company

2.4 Bidding Process

When soliciting bids, create a detailed project specification and set of questions that you will provide to every vendor, and send a quote template to make sure you get comparable numbers from each at the level of detail you require. Specificity in this initial bid request is especially important when working across multiple time zones because time delays make it difficult to have back-and-forth discussions. Be prepared to stay up late or get up early to catch the vendor when they are at work. It helps to involve all vendors in each Q&A, i.e. send questions from one vendor and your answer to it to all other vendors, too, so that everyone has the same understanding of the project scope and approach. Table 1 provides a list of items that we review when creating our bid requests; we select the ones that are appropriate for each study. Make sure you specify the currency for the bid, and terms for handling changes in exchange rates between the time of bidding and project invoicing. Be prepared to receive quotes ranging from 0.5 to 3 times as much as you would calculate at home. European and North American vendors have somewhat similar costs; China and India are at the lower end of the range, with Japan on the upper end.

Table 1. Checklist of bid request items

Common Items	Occasional Items	Other information
Preparation	Simultaneous translator	Moderator bios
Moderation	Transcript	International experience
Note-taker	Participant food	Company profile
Video recording	Observer food	Facility photos
Topline report	Check fee	Recommended hotels
Full report	Parking fee	Local holidays
Recruiting	Video streaming	Days of fieldwork
Incentives	Printing	Fieldwork schedule
Facility fees	Shipping	Payment schedule
Video recording	Import taxes	Bid currency
Translate study materials	Suggested over-recruit	No-show policy
Moderator debrief		
Moderator notes		

Before confirming vendor selection, schedule a live phone call with the vendor, preferably with the specific moderator for the study. This in-person communication will help validate that you can have effective conversations without difficulties due to language barriers. This is also a chance to determine if you have similar approaches to study design and report writing, and if the moderator has sufficient familiarity with relevant techniques and standards.

3 Designing the Research

This section will discuss how to create a project plan that will translate well to other countries and for other facilitators.

3.1 Project Timeline

We prefer to run in the lead country first, to smooth out any issues with the study design and make the materials as complete and detailed as possible before providing them to the local moderators. The local moderators can then run in parallel, unless there are restrictions such as the client wanting to watch all sessions live or limited availability of product prototypes. If the timeline is too short to run all sessions in the lead country before starting the other countries, run at least 3-4 sessions to allow sufficient time to smooth out the worst issues with the protocol. The session schedule will depend on many factors, including:

- Public holidays, school schedules and popular vacation weeks in each country
- Cultural differences in the acceptability of daytime, evening and weekend sessions
- No-show rates for the local culture and specific facility
- Flexibility of dates when the vendor has their own facility versus tight schedules when using a rented facility

In China, for example, most testing is done on the weekend and it can be impossible to find any participants during working hours. In Germany, the weekends are usually kept free for family life, but it is easy to find participants during the week. In France, most recruiting agencies are closed in August.

3.2 Screeners and Participant Profiles

Creating a screener to get the proper people is always a painstaking process, with careful selection of criteria and phrasing of screener questions. It is tempting to maintain strict control over the screener to keep the user populations as similar as possible from one country to another, but this is impossible because user populations differ from one country to another and you may need different ways of identifying target users [3]. There may be questions such as cultural class, income, and life style which often cannot be directly translated from one culture to another [4]. Describe the target group in familiar terms to local moderators and participants. Make sure the target population (or its equivalent) exists and the label given to it makes sense in the target country. Explicitly describing the type of person required is often more useful than specifying exact figures (e.g. ‘holds a senior managerial position’ instead of ‘earns at least $80,000 a year’) [4]. Rely on the local facilitator to suggest changes as well as doing some preliminary research on user groups and contexts of use, especially when your research requires specific domain knowledge. For example, a while ago, we did some research on software for hearing aids. We found several differences between Germany, the UK and the US that were good to know during the recruiting process. We had to find participants who would cover the usage of a wide variety of health insurance options and procedures, completely different in all three countries. Typical training for current users of the software ranged from a 3 week course with one of the manufacturers (US) to a 3 year training for German users to highly qualified doctors of audiology in all countries. Often the screener feedback from the local facilitator is helpful in understanding differences in the product users from one country to another, and may be interesting to provide to your client or product team as a project learning separate from the other findings of the user research.

3.3 Study Materials

Explain the research goals in the study guidelines: What are the reasons for choosing this method / test setting / scenario? This helps vendors to understand the project scope. Make sure the vendor gives feedback on any localization issues regarding the scenarios. Adjust the scenarios / session guide if necessary. Provide clear guidelines on how to answer the research questions. Make sure the guidelines as well as products/prototypes under test are translated correctly [1]. Although fieldwork is done in the local language, all deliverables and communication is usually done in English. One way of ensuring correct translation of critical information is to have the content in question translated back to the original language by an external translator.

4 Fieldwork

This section will discuss issues related to ensuring that the fieldwork runs smoothly.

4.1 Recruiting

Practical recruiting issues include getting participant consent, incentivizing participants, dealing with “no-shows” [4].

Video and Data Collection Consent – laws safeguarding personal information vary from one country to another; your local vendor should be able to help you

Difficulties recruiting – if you have having trouble finding a particular user group, there are many possible reasons: the local vendor misunderstood the screener, the screener has a logical flaw in it, your local vendor has an inadequate database, or the user population that you wanted does not exist in the local country. The last point is something that needs to be carefully considered in international research. Is it possible that the product team does not properly understand the local market? This is a good time to have a call with the local moderator to understand why they think they are having a hard time recruiting. Best practice among our partners is to invite recruiters to a usability lab, show them around and make sure a mutual understanding is established of the needs and pitfalls unique to usability testing, as compared to market or survey research. It helps if the recruiter has understood the relevance of having participants who have an opinion that they are willing and able to get across [4].

Incentives - The incentives required to persuade potential participants to take part vary a great deal from country to country. This is linked to the cost of living - incentives required in the UK are substantially higher than in most of mainland Europe [4]. In China, more so than the US or Europe, there is a delicate balance to be struck in offering the correct incentive. The smaller the target segment, the higher the incentive required. Incentives must be very high to persuade people of high social status to participate. Testing during working hours also increases the figure required to persuade people to take part. However, care must be taken when offering above market-rate incentives, as we have found that many Chinese people can be suspicious of being offered obviously inflated sums [4].

4.2 Planning for No-Shows

No matter how many times we call or email participants, there will always be some that do not show up for their appointment. We assume a 10% to 30% no-show rate for a study. The specific rate depends on how much you are paying participants, the target market, cultural differences, and the characteristics of the specific recruiting agency. No-shows are an issue for any user research, but even more so for international projects because customs and conventions may differ from one country to another, and multi-country projects can be complex while still having tight timelines. In international projects, often more people are involved in each session than in local projects. You don’t want observing clients, note takers, project owners or interpreters to waste time waiting for no-shows. However, if it does happen, your clients will be grateful if you have prepared something like showing a video recording of a previous session or present some related findings from your experience, or an agenda for a working meeting related to the project (mid-project readout, planning for the next phase, etc.). If you understand the different approaches to handling no-shows, you can work with your local vendor to select one that is best for the specific project.

- **Recruiting extra participants for all sessions** – this works best for focus groups, gang surveys and other group work, where you can recruit one extra person to cover any of a number of people in a group.
- **Recruiting floaters** – these are people that are paid to sit around for more than one session, and you use them if there is a no-show. You usually pay one recruiting fee and less than the equivalent incentive for the individual sessions covered. You risk having an empty slot if there are adjacent no-shows.
- **Adding extra sessions to the end of the study** – if there is a no-show, recruit another person at the end of the study. This approach works best if the local moderator owns their own facility (no additional fees), there is little or no travel, you have other activities for the open slots, and you are not on a tight timeframe.

Which one is more cost effective depends on the specifics of the study. Additional considerations to account for no-shows are:

- How will this affect the participant budget? Does the vendor charge you for everyone recruited (usually) or just for those that show (unusual)?
- How will this affect the facility budget? Does the vendor charge you for sessions you don’t run or for a full extra day for added sessions?

- How will this affect the project timeline? Will adding extra sessions delay the project? Can you make use of empty slots for productive work or is that time lost?
- How precise is your recruit? Do you have some flexibility in replacing a no-show from one group with someone from another group?
- How tough is your recruit? Will it be hard to find replacements at the last minute?

4.3 Preparing the Local Moderator

In user research projects, using multiple moderators can create issues because there is an evaluator effect, with different moderators uncovering different usability problems [7], even when the study methodology and participants are identical [2]. When working with a new vendor, it is also difficult to get a full understanding of the quality of the evaluation and report during the planning phases of the project [1]. Through experience on many projects, we have developed a set of best practices to minimize issues and take advantage of the expertise of the multiple moderators on a project.

- Run the study in the lead country first (or several sessions, if time is extremely tight) so that you can provide the local moderator with a detailed guide that addresses common mishaps and misunderstandings that happen during the session.
- We cannot emphasize enough that the local moderator needs to understand the study goals so that they can interpret the moderator guide, handle unexpected situations, filter the most important findings from the sessions, and know how to adjust the protocol if a participant is having difficulty or is running out of time. Make sure they understand the reasons for choosing this test method and scenarios, the project scope.
- Have a live conference call to brief the local moderator. This is essential to ensure that the project goals are properly communicated and all questions are answered.
- Provide a video recording of a few sessions from the lead country for the local moderator to watch. Avoid the first few sessions, where the lead moderator is still smoothing out the study protocol.
- Provide the local moderator with a first categorization of insights to look out for. UX research tends to be explorative, uncovering issues as you go along, but providing high-level guidance will help maintain consistency and insure quality.
- Provide a detailed presentation template in order to integrate and compare results efficiently. Provide this template before the local moderator begins fieldwork, to make sure that all report topics are addressed in the user sessions.
- Ask the local moderators for feedback on localization issues and methodological concerns.

5 Analysis

Challenges in collating results across countries include

- Getting all results from the vendor to the client
- Identifying cultural differences and commonalities
- Completing findings in all countries, cross-checking against other markets.

We use the following strategies for getting the most out of our projects.

- The local moderator writes their section of the report. There are so many nuances in a usability study that may not come across fully in the note-takers notes or videos, so you want to take full advantage of the moderator's expertise. We also rely on the local moderator to provide their expert opinion of the interface, above and beyond merely reporting what they explicitly observe users to do. Expert reviews benefit from multiple evaluators and result in more problems found [8].
- Provide a report template for the local moderator before the fieldwork starts. This will help ensure that the moderator makes the proper observations.
- A minimalist approach is to have the local moderator write an executive summary of high-level take-aways, and then supplement with details from the note-taker's notes.
- A debriefing call, preferably with all markets at once

The debriefing call is a critical part of gathering the conclusions from the study. These miniature "expert focus groups" provide the most valuable insights into cultural differences and commonalities. It captures many subtle issues that may be difficult for a foreign moderator to explain in a written report but will come across better in conversations between moderators. Often we find that one of the vendors reports something that none of the other vendors did. During the call we can try to understand whether this is due to differences in the type of participants, cultural issues, moderation style and the evaluator effect [2,7], usage habits, etc. Sometimes we find that other moderators observed the issue but did not note it in their report. Having a conference call with all facilitators is essential to resolving these issues.

6 Additional Topics

There are many small details that can create large difficulties if left unattended.

- **Customs** – make sure you allow several extra days in shipping for prototypes to clear customs, be clear who is paying duties/taxes, and avoid shipping food
- **Technical standards** – provide enough plug adapters for all equipment; provide a power converter if necessary; make sure you can view the local video recording format (NTSC vs. PAL, regional DVD encodings, etc.).
  - Mobile communication standards and SIM cards can vary from one country to another, if your study involves mobile phones
- **NDA** – have a standard one available in several languages, including English
- **City for Fieldwork** – you can frequently save costs by allowing the local vendor to pick the most affordable city; usability is less subject to differences in regional markets than traditional market research questions about tastes and pricing expectations. However, some clients will balk at accepting research from unfamiliar markets, and it is sometimes worth running in a city with name recognition. If your clients are planning to travel to observe, it may be cheaper for them to travel to a large city, and easier to be in a city where they do not have to rent a car.

- **Breakages and debugging** – when working with prototypes, make sure there is local talent available to debug software compatibility, solder broken wires, etc.
- **Remote observation** – there are many software tools that are readily available now for streaming webcams and sharing desktops, which makes the decision not to travel easier, while still allowing monitoring of remote sessions, when necessary
- **Cultural challenges** – will the participants accept female facilitators? Do they say "no" when they mean "no"? For which tasks do the users use the product in various countries? Is the session guide localized? Are users reluctant to be critical about a product?
- **Internet access** – do users have access to the site you want to test? Do you understand common websites and applications that they are familiar with? Is their internet access censored?

Acknowledgments. We would like to thank our partners in and around the International Usability Partners for their continuous support and input for this paper.

References

1. Biesterfeldt, J.: Managing International Research Vendors. In: 2008 Conference Proceedings. Bloomingdale, IL, UPA (2008)
2. Capra, M.G.: Usability Problem Description and the Evaluator Effect in Usability Testing. Unpublished dissertation. Virginia Tech, Blacksburg, VA (2006), `http://scholar.lib.vt.edu/theses/available/etd-03222006-201913/`
3. Dray, S., Siegel, D.: Sunday in Shanghai, Monday in Madrid?! Key Issues and Decisions in Planning International User Studies. In: Aykin, N. (ed.) Usability and Internationalization of Information Technology. Lawrence Erlbaum, New Jersey (2005)
4. Gillham, R., Biesterfeldt, J., Thalmeier, S., Fuchs, F., Shang, T., Sabena, E.: Guidelines for Successful Recruitment in International Usability Studies. In: Valone, D., Page, B. (eds.) 2007 Conference Proceedings CD, Bloomingdale, UPA (2007)
5. Gorlenko, L., Krause, S.: Managing International Usability Projects: Cooperative Strategy. In: Grinter, R., Rodden, T., Aoki, P.l., Cutrell, E., Jeffries, R. (eds.) Proceedings of ACM CHI 2006 Conference on Human Factors in Computing Systems, pp. 159–164. ACM, New York (2006)
6. Mack, A., Dray, S., Larvie, P., Lovejoy, T., Prabhu, G., Sturm, C.: Managing International User Research. In: Grinter, R., Rodden, T., Aoki, P.l., Cutrell, E., Jeffries, R., Olson, G. (eds.) Proceedings of ACM CHI 2006 Conference on Human Factors in Computing Systems, pp. 5–8. ACM, New York (2006)
7. Molich, R., Dumas, J.S.: Comparative Usability Evaluation (CUE-4). Behaviour & Information Technology 27(3), 263–281 (2008)
8. Nielsen, J.: Heuristic Evaluation. In: Nielsen, J., Mack, R.L. (eds.) Usability Inspection Methods, pp. 25–62. Wiley and Sons, New York (1994)
9. Woolrych, A., Cockton, G.: Why and When Five Test Users aren't Enough. In: Vanderdonckt, J., Blandford, A., Derycke, A. (eds.) Proceedings of the People and Computers XV - Interaction without Frontiers: Joint Proceedings of HCI 2001 and IHM 2001, pp. 105–108. Cépadèus Éditions, Toulouse, France (2001)