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# Applied Research for Advertising Products: Tactics for Effective Research

**Hsiao-Chun Lai**

Yahoo, Inc.  
Sunnyvale, CA 94089, USA  
hclai@yahoo-inc.com

**Rushani Wirasinghe**

Yahoo, Inc.  
Sunnyvale, CA 94089, USA  
rushani@yahoo-inc.com

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CHI'17 Extended Abstracts, May 06-11, 2017, Denver, CO, USA  
© 2017 ACM. ISBN 978-1-4503-4656-6/17/05...\$15.00  
DOI: <http://dx.doi.org/10.1145/3027063.3053338>

## Abstract

Digital advertising is the financial backbone of the Internet industry and is what allows most companies to monetize the traffic to their Internet products. Past research studies have focused on the user's perception of personalized ads[1], ad targeting and ranking[2], however, few articles explore the role of UX researchers in creating the advertising tools themselves and the practices they use. In short, for a set of tools that are critical to most internet companies, advertising tools have received little attention in UX research literature.

This case study explores the processes, challenges, and tactics employed by UX researchers in advertising products. It provides tactics to conduct effective UX research in this arena. We explore tactics spanning the gamut from study preparation to conducting interviews to collaborating with sales managers. The hope is that this study will foster conversations in the broader CHI community on the UX research practices for advertising tools.

## Author Keywords

UX Research; Industry; Organizational Culture; Advertising

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI) Miscellaneous; K.4.3 Organizational Impacts

## Introduction

Yahoo attracts over 1 billion web and mobile app users per month [5]. Like most Internet companies today, Yahoo is able to provide its content for free to these users because its core revenue stream comes from the ads it hosts on websites/apps. Advertising is in essence what sustains the company.

In order to support this vital arm of the company, Yahoo has a suite of tools designed for advertisers and publishers. An *advertiser* is defined as a person/company that spends money to place ads on a website or mobile app. A *publisher* is a person/company that dedicates space on their website or app to display an ad.

One of the roles of the UX Research and Accessibility team at Yahoo is to ensure the development of world class advertiser/publisher tools at Yahoo (especially given the fact that many companies vie for the attention of advertisers). In particular there are three key products that our research team supports: Yahoo Gemini [4], Brightroll [5], and Flurry [6].

Yahoo Gemini is an advertising tool that allows advertisers to place their search and native ads across Yahoo properties, and third party sites and apps. Yahoo Brightroll delivers programmatic tools that allow advertisers to place video, display, and native ads in Yahoo and 3rd party apps and sites. Flurry is one of the world's leading mobile analytic solutions and publisher tools. App developers use Flurry to track their app analytics and to monetize their apps by hosting ads on them.

### *Users of Advertising and Publisher Products*

The most obvious user group of these advertising/publishing tools is the advertiser and publisher themselves. However there are multiple stakeholders that go beyond the end user, such as Yahoo's sales managers and external players such as

target buyers, account executives, and day-to-day managers. Day-to-day managers are the people who use the advertising tools on a regular basis to monitor their campaign performance and track ad effectiveness. Executives are those who oversee day-to-day managers and are held accountable for developing the overarching marketing strategies. Yahoo sales managers are the people who set up contracts with clients. Oftentimes Yahoo's UX researchers find themselves interviewing these other stakeholders as well to collect insights to improve the tool's usability or its product strategy.

In our past UX studies we have observed that Yahoo's sales managers and 3rd party users have had at times inherently different frames of reference. The differences result from the tools that they are exposed to. Yahoo sales managers are typically familiar with Yahoo's tools, whereas 3rd party users tend to work across various competitor tools to accomplish their goals. Hence it is critical to understand user perceptions of both a company's internal sales managers and 3rd party users and to then balance the needs of both types of users when recommending product enhancements.

Additionally, it can sometimes be challenging for UX researchers to reach 3rd party users, especially larger 3rd party users. These users are often considered important company clients and therefore the client relationship may be well guarded by Yahoo's sales representatives. In such a situation, UX researchers have to go through several layers of communications with Yahoo sales managers to get access to these 3rd party users.

Another important segment of users worth mentioning in the advertising domain are power users; sometimes a researcher needs to interview this group to provide strategic guidance on a product or a feature. Power

users may be executives, VPs, or directors of a company. These users are more difficult to access since there is a smaller user pool from which to recruit and also because they have tight or changing time schedules.

*The Role UX Researchers in Product Development Cycle for advertising tools*

In order to discuss how UX researchers typically involve themselves in the product development cycle of an advertising/publishing tool, it is helpful to first frame the product development cycle into the following 4 stages:

- Define what the product or feature needs to do
- Design the product (e.g. with a software product this means how the UI would look)
- Let the engineers and product team implement the mocked designs
- Launch the product (either globally or to a limited group)

Because advertising products are inherently complicated systems that don't lend themselves easily to spontaneous tweaking, it is more imperative to get the designs right prior to implementation. This means UX researchers need to offer the most support in the first two phases of the product's life:

- Inform product strategy through generative research: Oftentimes when a product team first sets off to create a new product or feature, they may not completely relate to the needs of the user. Whereas with consumer facing products, it is easier for teams to have an intuitive understanding of a users needs, that tends to be less often the case with advertising tools. Hence there is greater reliance on a UX researcher for this part. In helping define product or feature requirements, researchers often have to gain a deep understanding of the user's workflows, goals, and pain points. This is typically achieved through generative research methodologies such as contextual inquiry.
- Iterate and refine designs using evaluative research methods: Once a product team has defined what user needs they are addressing and created an initial prototype, a UX researcher can help test the designs with the various users (i.e. both third party users as well as a company's own sales/customer teams). Evaluative research methods such as usability studies are done repeatedly till users can optimally complete their tasks using a prototype. Usability studies can at times also help surface gaps between the user's needs and the current product direction.

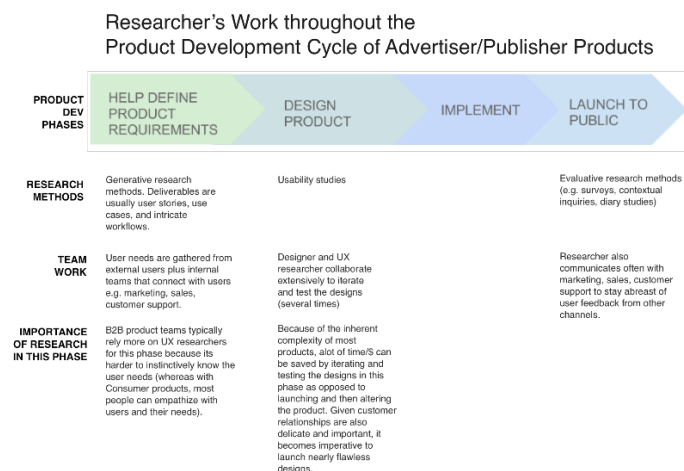


Figure 1. This is a detailed breakdown of an ideal engagement model when a UX researcher is collaborating with a team. It is noted this is only for the purposes of product development and not strategic planning or product roadmap definition.

### Applied evaluative research for advertising products

In past quarters, we have identified ways to conduct effective user research in the context of advertising products. We have learned that it is important to recognize the unique nature of the participants and developed various tactics to ensure successful user research. In the next section, we discuss key tactics and takeaways.

#### Recruiting Tactics

Past experience has taught us that the process for recruiting users of advertiser/publisher tools is quite different to that of recruiting participants for studies on consumer products. In this section, we discuss useful recruiting tactics to recruit advertisers/publishers.

When we first began recruiting advertising users, we started by using tactics that would traditionally have worked for consumer facing products i.e. we put postings on craigslist and other forums to attempt to recruit our participants. We found out quickly that the participant quality was relative low and so were the number of users we could attract. Next we attempted to recruit users by advertising our research studies via Facebook, LinkedIn, local Meetup events, and through Yahoo's sales managers. We also reached out to users who were current users of our advertiser/publisher tools (via user databases that Yahoo keeps).

We found LinkedIn and Meetups worked the best whenever we needed to recruit users who had not used any of Yahoo's advertising or publishing tools before. On the other hand, recruiting through Yahoo sales managers and current user databases were the most effective methods to reach existing users.

When recruiting existing product users, it is important for UX researchers to be mindful of the relationship between the client and the sales manager. UX researchers often have to go through several layers of communications within sales organizations to get access to external users.

Another challenge of recruiting users within the advertiser/publisher domain is that there are no consistent job titles and definitions across advertising companies. For instance a marketing manager in a small company may be responsible for all marketing efforts, including maintaining a social presence, placing ads across multiple sites, sending out newsletters, etc. However, a marketing manager in an ad agency may only be responsible for executing and tracking ad performance for Search ads for one particular site. Furthermore, there may be multiple people on the team using the advertising products. These organizational differences add complexity when it comes to targeting the right users to recruit for research studies.

During the recruiting phase, UX researchers should also be mindful about the perceived level of proficiency of a user versus their actual proficiency. We have learned that some of the more effective ways to ascertain a user's actual proficiency are 1) by asking the user how many years of experience they have in the digital advertising industry and 2) by posing some specific questions to test their knowledge of digital advertising.

We also observed that standard research consent practices such as having a user sign an NDA or agreeing to be recorded may pose an additional hurdle to getting a user to agree to a UX research study (since these users tend to wary about signing any document). We have learned that upfront communication and being flexible regarding recording a user has helped overcome most of these hurdles. We learned that the upfront communication process might take up to 2 weeks for a participant who is new to UX research.

In summary, good recruiting practices include leveraging nontraditional recruiting channels to reach the target user and then being flexible with users regarding scheduling and running their sessions. It is recommended that UX researchers leave enough time in the recruiting phase to account for upfront communication with sales managers and the additional challenges of finding and screening for the right users.

#### *Interviewing Methods*

Because most users are located throughout the country and world, UX researchers in the advertising field need to be very comfortable conducting studies remotely. During remote interviews, we have found it important to start the interview by talking about how the user's input will positively effect the product they are using today. This helps ensure the user feels that they are investing their time in a useful activity that goes beyond a financial compensation. As UX researchers we do not want to risk tarnishing the company-client relationship.

Given users could be professionals at upper management level, researchers need to maintain a friendly but professional demeanor throughout the interview. When users share product issues or negative experiences that are outside the scope of a research topic, researchers need to tactfully handle the situation. We often adopt a stance of asking follow-up questions to understand a user's point of confusion rather than attempting to correct them during an interview. This may even mean not getting the data or insights from an interview that we originally aimed to get. Most advertisers or publishers are important customers and the company cannot afford to lose one.

Another point worth mentioning is that researchers must never ask a user to see a competitor's product directly. There are legal ramifications to doing this in the advertising space.

#### *Recording and screen sharing tactics*

Using a good recording and screen-sharing tool is critical to conducting a good remote study. At Yahoo we prefer to use StartMeeting [7] and JoinMe [8] because these tools offer good flexibility in terms of screen sharing, mouse control sharing, and recording. Being able to screen share is important when a UX researcher wants to understand how a user performs certain tasks and navigates between different tools in their natural environment. Being able to give mouse control of our screen to a user is critical when we want to get feedback on clickable prototypes. We typically prefer to pull up the prototype on our own computers and then give mouse control to the participant. In this way, we do not risk sending early prototypes to external users. Sessions with users are streamed in real time to our product managers, designers, and developers, as well as recorded for later review. Real-time streaming allows the product development team to ask users follow-up questions via the researcher during a session. Recorded sessions provide the team the opportunity to view the session whenever they want.

*Incentives tactics*

These users need higher incentives to motivate them to participate in research studies. We have tested incentives with varying financial compensations and interview lengths. We found that 30 mins session for \$100 USD and 45 mins for \$150 USD work best to attract users, since it fits well in a participant's schedule and provides sufficient compensation. We had lower response rates for 15 mins and 60 mins sessions since users felt the monetary incentive was too small or the time commitment was too large. While the incentives listed work well for the majority of users, we do adjust the compensation for some job roles and user types. For instance when recruiting senior managers or experienced users who were trying Yahoo's advertising tool for the first time, we found it effective to offer higher incentives e.g. 30 mins for \$120 USD.

Compensation is usually offered in the form of a Visa Gift Card or an Amazon Gift Card; we typically let the participant choose their preference. The Amazon Gift Card has the advantage of being almost instantly deliverable via email whereas the Visa Gift card is more widely useable in foreign countries.

**Generative research through embedding in existing sales cycles**

While most of our studies (especially evaluative studies) are conducted remotely, we have found that conducting generative research using remote studies loses some of the context needed e.g. whether a user performs his job with multiple monitors. Naturally the ideal setup would be to conduct generative studies in an advertiser's/publisher's own work environment. However this is logistically challenging given few users are willing to have a researcher from another company visit their office for an extended period of time. We have found a good intermediate solution is for the UX researcher to insert 30 mins interviews into the regularly scheduled sales-client meetings and product

support office hours. We also shadow product managers on their regular visits to sales offices and use the opportunity to collect internal user feedback on early prototypes and to conduct some contextual inquiry. These opportunities to engage more directly with users in their environment enable us to get insights such as how users leverage multiple monitors to navigate between different tools, or how they learn to use advertising products by exchanging information with colleagues who sit next to them, etc.

**Building user panels to collect feedback over time**

At Yahoo, our UX researchers have tried to shift from one-time interactions with users of advertising/publishing tools to longer term relationships with these users. We currently host various programs to actively build these relationships. One example of this is Yahoo's Gemini Ad Council. This is a program that engages Yahoo Gemini advertisers throughout the year, with the goal of making users a partner in product development process and also improving the external perception of the product. Users in this program participate in diverse activities such as generative and evaluative research studies throughout a product lifecycle, bi-annual in-person meetings between product teams and advertisers, and quarterly communication via video conferencing and emails. Such activities have helped to positively impact advertisers' perception of Yahoo Gemini. A survey among program participants showed 81% of Gemini Ad Council advertisers feel more confident that Yahoo can meet their advertising needs.

Another example of a user panel is Flurry's corporate sponsorship of Hacker Dojo [10]. Hacker Dojo is a community of app developers and startups located in Silicon Valley. We originally reached out to Hacker Dojo to conduct a one-time usability study on their premises. When we learned that we could expand the relationship from a one-time engagement to a longer-term

relationship in the form a corporate sponsorship, we did not hesitate. The sponsorship has provided Flurry with a user panel that they use to collect user feedback with minimal effort. It has also been a good opportunity to promote Flurry within the local community.

Building a user panel not only helps minimize the lead time to recruit third party users but it also allows researchers to follow a community of users and observe how their usage of a product evolves over time. However, there are some limitations to this approach that are worth calling out and will be discussed in later sections of this case study.

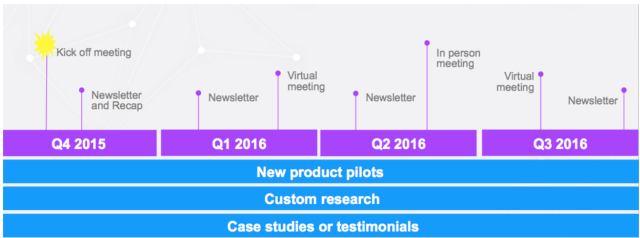


Figure 2. Gemini Ad Council program overview

**Building trust with sales managers**

Yahoo’s sales managers play two roles in the product development process: on one hand they are the users of the product (they may manage or monitor advertising campaigns on behalf of their client). On the other hand, they own the client relationship with 3rd party users. Given this dual role, we have learned that building a solid relationship with Yahoo’s sales managers is critical to conducting successful user research. At Yahoo we have an established model for how we engage with our sales managers. This involves testing new designs with Yahoo’s sales managers first and then asking our sales manager to help us recruit their clients so we may test the designs with these third party users next.

Involving the Yahoo sales manager early in the development process lets us gather preliminary feedback and fix bugs before the designs are shown to 3rd party users. It also gives our sales managers more confidence in the material we are sharing with their clients given they have vetted the designs. The collaboration is also a win for the sales manager since it helps strengthen their client relationship by giving their clients early access to upcoming interface design and early concepts.

**Limitations**

While we believe many of the practices cited in this paper will be widely applicable to other UX researchers in the advertiser/publisher space, there are some limitations that are worth calling out.

For instance, we realize that some of our UX research practices are only feasible within a large company that can fund regular research activities. Smaller companies or startups may not have the financial resources to pay the same level of incentives nor do they sometimes have dedicated sales managers to work with. UX researchers in other companies will have to determine how to adapt the proposed suggestions in this paper to fit their own environment.

Another caveat worth noting is in regards to the use of user panels. While user panels might minimize the recruiting work in the short term, there is the potential of biasing product designs towards a small pool of advertisers. UX researchers should be mindful about refreshing the panel constantly and synthesizing feedback from multiple stakeholders to help minimize this bias.

**Conclusion**

In this case study we have discussed how we conduct UX research for advertising/publishing products. We discussed our recommended practices around identifying, recruiting, and interviewing users. We introduced our approaches to engaging users via user

panels. We also shared our challenges in conducting generative research with this group of users and the approach we adopted to embed ourselves in the existing sales cycle.

We believe that most of the practices we have discussed here will be pertinent to other UX researchers in this domain. We hope it benefits researchers working in similar roles as well as prepares other practitioners who are new to this field.

On a final note, as we reflect on what we've learned from the more than 300 interview studies we conducted last year alone, we hope that we are laying the foundation to a body of knowledge that future UX researchers will contribute to. We hope this case study fosters conversations around UX research in a domain that is vital to the Internet industry.

### Acknowledgements

Our gratitude and thanks go to Frank Bentley for his feedback and comments on earlier drafts. We also want to thank Brooke White for supporting our team as we have evolved; we could never have accomplished so much without her guidance and support.

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