

OnionShare User Research Plan

Dr. Ashley Di Battista & Glenn Sorrentino

Email: research@scidsg.org

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User Research Plan - Current Study

Purpose

The purpose of the current research is to better understand OnionShare users.

This research will serve to lay the groundwork for repeatable, ongoing long term assessment of user needs and experiences, allowing for fast response to needs as they may emerge, change or shift over time and use cases.

Goals

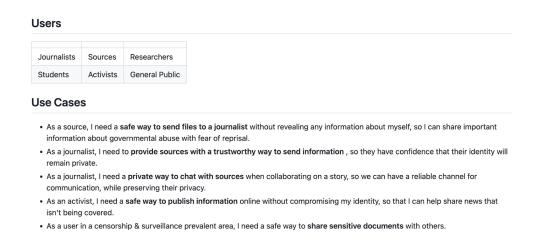
The current research plan has 3 goals, each supported by different methodologies.

- 1 Understanding Users
 - 2 User Experience
- 3 Data Driven Personas

1. Understanding OnionShare users: user types, categories and use cases

This includes validation of original users and use cases included in the initial design of OnionShare (see *table 1 below*) and identification and quantification of any new users, user types, use cases, needs and groups using OnionShare.

Figure 1: OnionShare users and use cases. Content Source.



2. Assess the current state of user experience (UX) in OnionShare on multiple platforms (desktop, mobile apps):

- a. Pain points and unmet needs
- b. Workflow experience
- c. Platform usage
- d. Expanding tool availability (geographic location, language translations)
- e. Risk assessment and credibility processes from the lens of the user experience
- f. Satisfaction and sentiment

3. Create accurate, data driven public personsonas

Data obtained from Goals 1 and 2 above will be used to develop accurate, data driven public personas, which will be used to:

- a. Inform current, ongoing and future needs for OnionShare users;
- Provide a sharable resource for other organizations to begin building an authoritative body of tools and research that others can benefit from in the wider community

Research Methods

Important Considerations Regarding Method and Data Analytics Selections

The current study is in of itself, a pilot study - or a first step to see what is possible and what requires additional, and/or ongoing assessment to ensure the best possible product is delivered to users over time.

The current study acknowledges the reality of additional effects on confidence in results, based not only on the volume of participants and appropriate method selection, but also relating to timelines and the types of outcomes desired.

Please note that the nature of OnionShare is an anonymous tool; therefore, those research methods that require capturing voice, video and or other forms of data that are intrinsically personal, are less likely to be desirable (e.g. a qualitative interview).

Ongoing research allows for methods and analytic options to adapt to changing volumes of data, in addition to gaining essential insights to guide the process of future research and product refinement.

The current proposal is written to allow for these changes, and offers suggestions of methods and data analysis that are suitable for the types of questions asked, with options for varying amounts of data.

Note that confidence in results and context will be available in all data reports, as "limitations", regardless of method selected.

The learnings from this pilot study will serve to inform next steps and serve as a guideline, or documentation, for future research studies.

The current study will include 3 testing types: usability testing, survey and data analytics, and is described in more detail in the "*Research Methods - Current Pilot Study*" section below.

Table 1: Methods Options Dependant on Sampling, Participant Availability and Timelines

Research Question	Survey	Web Analytics	App Store/ Downloads Data	User Testing (spec type TBD)	Interview	Comparative Analysis
Platforms used (e.g. Mac vs Linux) to focus efforts						
Geography of use and need for additional translations						
Functionality use, clarity, needs, simplification (eg "decoupling"						
Who is the User? Personas via use cases, user definitions						
What's it doing well? What can be improved?						
Risk assessment: There's an inherent risk when receiving files anonymously. How do users assess and mitigate risk?						
Credibility of content received: user processes						
Workflows: How does the app get used in practice? What's the overall workflow?						

Research Methods - Current Pilot Study

The current pilot study will include three research methods:

Anonymous, task-based usability testing, hosted on Maze. A representative
prototype (e.g. high-fidelity Figma prototype) will be used in lieu of access to the live
OnionShare, owing to hosting limitations (e.g. Tor vs. web). Participants will be required
to provide information about their experience with OnionShare, and job title categories.

The free trial period for Maze will be used. Should additional features, timelines and/or responses be required, consideration will be made towards the duration of access at the \$99/month fee for these services.

The prototype will be made in Figma, and include tasks related to the 4 options users have with OnionShare:

- a. Sharing information anonymously
- b. Receiving information anonymously
- c. Chatting anonymously
- d. Hosting anonymously
- Anonymous survey: the anonymous survey is hosted via CryptPad. It assesses overall
 experience and exposure to anonymous sharing tools, in addition to specific questions
 regarding usability and experience for those individuals who indicate that they have used
 OnionShare.
- Data analysis Web Analytics + Downloads: available data from web analytic and download count sources will be reviewed, to identify trends and insights about usage for comparison and contrast (e.g. downloads on Mac vs. Linux; downloads in North America vs. South America, etc).

Participants

OnionShare was originally interested in the following groups of users and job categories:

- 1. Journalists
- 2. Journalist Sources
- 3. Researchers
- 4. Students
- 5. Activists
- 6. General Public

Conceptually, there are 3 types of OnionShare use levels categories, and 5 levels of Experience categories:

OnionShare Use levels

- 1. Casual users
- 2. Power users
- 3. Other users

OnionShare Experience levels

- 1. Novice
- 2. Intermediate
- 3. Expert
- 4. Unknown ("I don't know")
- 5. Other

"Other" has been added as an option, to ensure that previous categorizations do not overshadow the reality of user experience. Adding an "other" option allows for essential insights into categorical opportunities as well as segmentation that is meaningful for ongoing product support and development.

Participant Recruitment and Compensation

Participants will be recruited via calls for interest through:

- 1. Social media posts (Twitter, LinkedIn)
 - a. Ask Micah to amplify
 - b. SciDsg + Glenn Twtr
- 2. In person at DefCon 2023 Las Vegas (at the Science & Design Booth)
- 3. Email notification of research study sent to Science & Design consent for contact by email about research studies list (*link on Science & Design homepage*)

A dedicated compensation for participation fund is available for use with this project (total = \$500 USD).

The compensation will be in the form of either:

- 1. Credits to use on the Science & Design online store
- 2. Donation to organization of the participants choice

Amount per participant is currently TBD. The amount provided to each participant will be reflective of the task completed and time required (e.g. 30 minute think aloud unmoderated user testing > survey).

Ethics and Privacy

- 1. Informed consent process
 - a. Provide information about the study's purpose, data usage, and participant rights; obtain written consent to participate in all research, regardless of method
- 2. Data anonymization and storage
 - a. Remove personally identifiable information (PII) from data; store data securely and compliantly
 - b. Participation is anonymous; no identifiable information will be collected (e.g. no emails, usernames, logins, etc).
- 3. Compliance with relevant regulations and guidelines
 - a. Follow the General Data Protection Regulation (GDPR) and other applicable regulations

Data Analysis

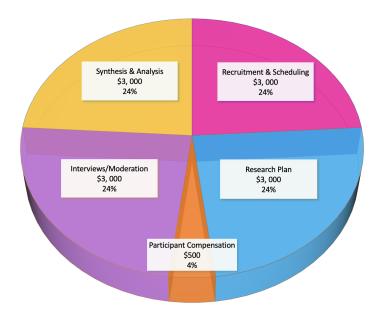
TBD after method selection and data collection completed.

Reporting and Communication

- 1. Key findings and insights
 - a. Report on user types, usage patterns, workflows, user experience and pain points
 - b. Data driven personas
- 2. Recommendations based on research outcomes
 - a. Suggest data driven improvements for desktop and mobile apps
 - b. Integrate learnings from current pilot study into plans for future research
- 3. Presentation formats
 - a. Written reports
 - i. Comprehensive documentation with findings, insights, and recommendations
 - ii. Infographics, charts, and user persona templates
 - b. Interactive workshops or presentations
 - i. Share findings with the development team

Budget

A total budget of \$12,000 USD has been allocated for the research tasks identified in Figure 3.



**Funding sources and allocation as part of internal Research & Design budget

Budget: OFT Grant

Includes: Recruitment and scheduling (\$3, 000 USD) and writing the research plan (\$3, 000 USD).

Budget: Next Steps

Includes: Participant compensation (\$500 USD); interviews/moderation (\$3, 000 USD); synthesis and analysis (\$3, 000 USD).

Note: travel and accommodation budgeting is not included, as all participants will be either remote or on site at various conferences).

Timeline and Milestones

Key dates for each stage of the research process, as part of the current grant. Note that one week has been allocated for completion of each of the milestones. This timeline is flexible noting the presence of potential dependencies and contingencies (e.g. participant recruitment) that will impact the stages of the project.

Figure 4: Proposed Timelines and Milestones



Research Plan Summary

The current research aims to assess OnionShare's desktop and mobile apps (*methods TBD*) to create accurate user personas..

The expected impact on product or service design and development will be enhanced user experience, identified opportunities for improvement, and the ability to tailor future development based on user needs.

The current study is a pilot; in addition to the expected impact on product and service design and development, the research process and methodologies will be used to inform best practices for research at Science and Design, while laying the foundation for future research activities.

Next steps and follow-up activities will be to implement recommended changes, monitor user feedback, and conduct follow-up research as needed.