# Improving Pitches: Crowdsourcing as a Solution

In what way does the use of crowdsourcing platforms influence the quality and effectiveness of pitches for students?

Syben van der Meer Affiliation Eindhoven, NL s.y.v.d.meer@student.tue.nl Katherine Dabbs S1309730 Atlanta, GA, United States kdabbs@gatech.edu Moos van der Bijl Affiliation Grave, NL m.m.a.v.d.bijl@student. tue.nl Sophie Baars S160343 Eindhoven, NL s.e.m.baars@student.tue.nl

# ABSTRACT

For design students, it can be difficult to communicate the results of their design processes, however, pitching is crucial when trying to sell or present a concept. This research looks at presenting a pitch of a conceptual design to investors and other stakeholders, and how they can improve such a pitch. Specifically, it will look at whether using crowdsourcing platforms to get feedback aids design students in creating an effective pitch for the right audience.

This research makes use of a mixed methods approach with qualitative, in-depth user interviews and quantitative general questionnaires. It has shown that there is some interest in an app or platform that makes use of crowdsourcing to improve students' pitches. However, the students surveyed appeared relatively unwilling to videotape themselves pitching and unwilling to pay for such a service, despite that being a key factor in boosting usage and participation

## **Author Keywords**

Crowdsourcing; speeches; pitching; pitches; speaking.

## INTRODUCTION

Design is a diverse field, and designers must take many factors into account while doing their job. One of the most important factors is eventually selling their products or designs to investors or stakeholders. However, communicating the results of a long and complex design process tends to be an intricate issue, as there are many different formats and mediums to use, all changing depending on the audience one is presenting to.

Different stakeholders look for different aspects in pitches. Some stakeholders look for someone who is professional and shows enthusiasm, while other stakeholders look for knowledge and innovative concepts. [7] Both pitches need a different approach, one could benefit from a more personal approach while for a different audience a more scientific approach will be more successful.

Additionally, it is important to receive feedback to develop certain skills. Students continuously receive feedback to

eventually reach a certain level of expertise. However, students might have little experience pitching and therefore received little feedback on their presentations and pitches, thus making it difficult for them to improve.

Another important element that is only growing more popular is crowdsourcing. Crowdsourcing can be a powerful tool for many different tasks, whether you are trying to sort images, fill surveys, or receive feedback. The use of crowdsourcing for the purpose of gaining feedback brings about its own unique benefits and issues.

This research looks at presenting a pitch of a conceptual design to investors and other stakeholders, and how you can improve such a pitch. Specifically, it will look at whether using crowdsourcing platforms to get feedback aids designers in creating an effective pitch for the right audience. Through our research, we will strive to answer our question—In what way does the use of crowdsourcing platforms help designers create effective pitches of higher quality?—as true and based in facts.

# **RELATED WORK**

A variety of literature on storytelling in combination with branding, stakeholders, project success, biases of investors, design and gamification of assignments was used as background for this research project. Based on these sources, a claim and set of guidelines have been developed.

## Storytelling

Storytelling as a form of communication is highly important in the preserving and spreading of culture, the creation of organization and structure, and the development of emotional connections. [1, 2] It is also highly important in the design process, and can be found in almost every step if one looks close enough. In regards to design, you can split stories into two main categories: stories that inspire, and stories that inform. [1] Stories that inspire are largely used during the design process to bring about new ideas to the designers; stories that inform are used to communicate designs and purpose to consumers and outside parties. [1] This research will focus more on stories that 'inform' by this definition, as it is focusing on pitches and the communication of designs. In designs, stories tend to focus on a persona, which helps create an emotional bond with the audience. [6] Personas are a large part of the design process, so it follows that they would be a large part of design stories as well.

#### Investors

When design students at this faculty have their final demo day, the day on which they show their final design and final iteration of the their project, they give a pitch on that demo day to everyone that is interested. When designers pitch, they tend to tell about their subject and why they did it, however possible investors will look at different aspects of the project to see if it has any value for them and if they see any potential. Different types of investors place emphasis on different aspects of the provided information, though. [8] Furthermore, the attitude that the possible investors have towards the investment proposal is shaped by whether it is a market or industry they know anything about. [8] "Finally, in terms of its practical applications, the central message of the article is that different funders will look for different types of information in a business plan, have different expectations about what information should be included and will interrogate the business plan in different ways." [8]

#### Storytelling changes perspective

If people know the story behind something, they often view it from a different perspective. Instead of making assumptions about the intentions they actually know them. Knowing intentions creates a better form of empathy. In most cases, the actual intentions are way more positive. In the paper [9], in which brand experience is tested with and without a story, a participant states: "My favorite is this... Now that one knows its story it becomes nice somehow." This statement defines the result of the research in some way. The result is basically that the people who know the story and background view the brand from a totally different perspective. Without the story the simplicity is cheap and old fashioned, with the story it is charming and the simplicity is loved for being simple.

#### Science communication

"Science communication is defined as the use of appropriate skills, media, activities and dialogue to produce one or more of the following personal responses to science: Awareness, Enjoyment, Interest, Opinion-forming and Understanding." [10] In principle, this is exactly the same as what we want to achieve, but for responses to a pitch or a design rather than science. Communication is very important as it is the definition of getting a message across to someone. One can have a brilliant idea, but in order to share it with the world, he or she must communicate it successfully. As we think that it is such a vital part of everything, particularly in getting others to understand and believe in your design, we want communication to be our main focus in this research.

#### Crowdsourcing

The term 'crowdsourcing' was coined by Jeff Howe in a Wired article from June 2006. [13] It refers to the use of the 'crowd' to find creative solutions to problems. [11] More and more crowdsourcing platforms are appearing as time goes on and as more people realize its potential, such as Amazon's Mechanical Turk, Kickstarter, uTest, and many others. Many of these websites work by presenting a call or a problem to their users, collecting the responses and solutions, then sending those solutions to the businesses or people that initially submitted the problem. Crowdsourcing websites typically also reimburse their users for their work, however it tends to be a significantly smaller amount than a professional would be paid for the same work. [11] For simple tasks like clicking through a website to search for bugs-tasks that Mechanical Turk provides, for examplethis is more reasonable, however for more skilled work the crowdsourcing model can be seen as exploitative.

The sub-section of crowdsourcing that sites like Mechanical Turk use is called the "micro-task market". [12] This can be defined as a collection of many short (ranging from seconds to a few minutes) tasks on one database. [12] These microtasks usually result in much less compensation because they are typically so short and simple. Examples of micro-tasks include clicking through websites, looking through and sorting images and taking surveys. However, asking for feedback through a site like Mechanical Turk can lead to empty or unhelpful responses to open-ended questions due to people simply trying to game the system to earn the reward. [12] If one designs the questions and tasks in such a way that faking answers requires as much effort as writing genuine answers, though, the results will be more effective and helpful. [12] If it is utilized correctly, crowdsourcing can be a powerful tool for both businesses and individuals.

## **PILOT**

The user test subjects (N=8) took part in our pilot user test. The main goal of this pilot test was to discover what elements of a pitch are most difficult and important. The participants were asked two sets of questions. First, the participants were presented a list of aspects that make up a pitch, and were asked to rank them from most important to least important. The list consisted of 9 aspects: Body language, tone, articulate, two-way, preparation, listening, follow-up, clarity and visuals. After answering the first set of questions, the participants were asked to present a short pitch. The second set of questions were presented after they pitched, and asked the participants to rate their own performance in each of the aspects from the first guestionnaire.

From this pilot test, a few conclusions were drawn. Body language, tone and preparation were said to be the most important aspects in pitching from the first set of questions. After pitching, the test subjects gave their overall pitch performance a 6.25 average, out of 10. Clarity was given

the highest mark with a 7.00 and preparation the lowest with a 5.00.

From this data and the additional short interview questions that were asked, it can be concluded that the test subject would benefit the most from feedback regarding their body language, tone and preparation. As the test subjects rate themselves relatively low on all aspects, we can conclude that the test subjects would benefit from overall feedback regarding their pitches.

## **DESCRIPTION OF THE DESIGN**

To conduct the research, an app is used to explain the concept of online crowdsourcing in pitching. The designed app concept contributes in the experience during the interviews with the test subjects. The app sketches an image of how it would be when a participant would use a crowdsourcing app in order to get feedback on their pitches and give feedback on other student's pitches. The app has three different options in the main menu. One can either choose to got to the "video" section, to the "feedback" section or to the "my progress" section. Every section gives another dimension to the app. The video section, gives one the opportunity to record a video of his/her own pitch or select a video from the files and upload it for others to review. The feedback section allows the participant to look at the feedback from others on their own pitches or give feedback on someone else's pitch. Last but not least, the my progress section allows the participant to look at what he/she has improved on and what still needs to be improved to become for instance a Steve Jobs kind of pitcher. For this variant of the prototyped app, money is used as the rewarding system for giving and getting feedback, since that is the way that crowdsourcing is mostly done nowadays. Moreover, video seemed to be the best possible format to record a pitch, since this would show the entire body and would give someone who gives feedback a bigger chance to also look at the body language of the pitcher.

#### **MEASUREMENTS**

Our study focuses on the influence of crowdsourcing on the quality of speeches. This will include video and voice recordings from speeches shared with a group of observers to obtain feedback on performance and quality.

The measurements will be done through the completion of tasks and the logging of user behavior. The main focus will be on their behavior in the video. These, in combination with questioning before and after receiving the feedback, will give insight towards the influence of crowdsourcing platforms on the quality of pitches and presentations for both the speaker and the observer.

#### **METHODS**

To examine design student's experience with the concept of crowdsourcing regarding pitching, a mixed methods approach is needed. Collecting this data will be done through quantitative questionnaires and qualitative interviews to gather the student's personal opinion on the experience. Once the speaker shares his or her video, the observers will analyse the speaker's videos and give feedback on the speaker's performance. This will be done with a quantitative approach and will use online questionnaires to collect the observer's opinion. Finally, a qualitative approach will be used when collecting the speaker's opinion on the received feedback. This data will be gathered with in-depth interviews. With this data, the influence of the concept of crowdsourcing can be tested regarding the quality of pitches.

## PROTOCOL

The user test will be arranged in the following sequence: *Speaker (15 min):* 

- 1. The subject prepares a pitch
- 2. The subject records a video while performing the pitch.
- 3. The subject sends the video to us.
- 4. The subject will be asked a few questions regarding the experience with the recording and the previous experience with crowdsourcing.

Observer (10 min):

- 1. The subject is shown a video of one of the speakers.
- 2. The subject is asked to answer a few questions regarding the performance of the pitch.
- 3. The subject is shown a second video of one of the speakers.
- 4. The subject is asked again to answer a few questions regarding the performance of the pitch.
- 5. The subject is asked to answer a few questions regarding the experience and crowdsourcing in general.

#### Speaker (10 min):

- 1. The subject returns.
- 2. The subject is given the feedback.
- 3. The subject is asked about the usefulness of the feedback.
- 4. The subject is asked to answer a few questions regarding the experience and is asked for any improvements or tips.

After each session an in-depth interview with both measurable and subjective data will be held with both the speaker and the observer, where they will elaborate on their experiences, behaviour and emotions.

## PARTICIPANTS

The target group consisted out of two different sets of participants, fifteen speakers and thirty observers, all between the ages of 18 and 60. All participants currently study or have studied a design related study, like Industrial Design. All speaker should be willing to improve the quality of their pitches, while all observers should be willing to help the speakers achieve this goal.

This target group is relevant for the study, because the study focuses on pitches and improving their quality by means of crowdsourcing.

## **ANALYTICS**

The test consisted of three different questionnaires; one for general opinion, one for reviewers to give feedback on the pitches, and one for the participants to give feedback on the test and feedback they received. The first, more general questionnaire was filled out by 28 TU/e students. During the testing, 9 participants sent short—around one or two minutes each—videos of them pitching, which were then reviewed. Each pitch was reviewed by 4 people, and the results were sent back to the participants. All 9 participants filled out the test feedback questionnaire.



+ 7 comments (figure A, Initial Response)



(figure B, Test Feedback)

#### **INSIGHTS FROM DATA GATHERED**

#### Initial Response

At the beginning of the research, a general questionnaire was sent out in order to gain an overall sense of whether students would perceive a crowdsourcing method of improving pitches as useful and helpful or not.

The questionnaire also included a free response question that asked for any additional comments on the concept. As this questionnaire was sent and filled out before testing began, these responses were helpful and considered during the creation of the feedback surveys' questions and wording. [quotes] They were also useful because they showed potential issues with the concept that were not able to be expressed through the questions; things that were not considered initially. [quotes]

In Chart 1, the percentages

#### Test Feedback

The feedback received on the testing process and the form the feedback was delivered in is compiled into a graph above (*fig. B*). The scales of each score were from 1 to 7. It shows the scores each participant gave in each category, as well as the overall scores in each category. None of the categories were given 7s, though several participants gave 6s. The highest category, the understandability of the feedback they received, had a total score of 51 out of a possible 63, and got scores of 5s and 6s. The lowest category, how fun receiving feedback like this was, had a total score of 36 out of 63, with scores as low as 1. Another category with a relatively low score of 40 was 'Likable'. 'Clear' also received a low score of 41. Many of the categories received scores in the 40s, but these were the lowest.

An interesting insight from these numbers is that 'Clear' had a total of 41, but 'Understanding' had a total of 51, and

was in fact the highest-scoring category. So, somehow, the feedback our participants was understandable but unclear. A drastic example of this difference can be seen in Participant 6, who gave 'Clear' a score of 2, but 'Understandable' a score of 6. This disparity between these two categories could have multiple different possible causes, ranging from differences in the understanding of the words' definitions to simply changing their mind as the questionnaire went on. Unfortunately, the only way we could know for sure why this different exists is to interview and ask the participants directly.

This data shows that the questions of and the statementand-rating form the survey came in were both relatively helpful to the participants. However, the form the feedback was sent to them in would likely need to be changed in a future iteration. As is, the feedback was delivered directly from the results of the surveys. A more filtered and simplified version of these results might be more engaging and helpful, based on this data and feedback.

This feedback survey also asked whether the participants would be willing to receive and give feedback in this form. A similar question was asked in the Initial Response survey, though that question did not specify exactly the form the feedback would come in. These questions in this survey are useful as they focus on this form of feedback. The statement that said they would be likely to ask for feedback like this received a score of 41, still out of 63. The statement about giving feedback in this way received a lower score of 33. Both got relatively low scores, but we can see that participants were less willing to give feedback than they were to receive it.

# DISCUSSION

#### **General Discussion**

This research has provided several interesting insights, however it has its downfalls as well. Ideally, the sample size for surveys and user testing would have been larger, but time restraints and lack of enthusiastic response limited that. We would also like to redo the wording of the broader questionnaire to gain more specific and relevant insights into the general feelings about a crowdsourcing app to improve pitches. While the questionnaire we created was suitable, we would have liked to work on it for longer.

Time also limited the number of tests we could run. Ideally, we would have liked to run a second test where participants redo their pitches based on the feedback we provided them, which then would be rated again to gauge if there was significant improvement. However, after the completion of the first round of testing there was not enough time left for participants to comfortably create a new pitch, especially when you consider that they are all students and have to focus on their projects as well. Despite these shortcomings, however, we believe the data and insights from this research are still useful. The lack of willing participants can be attributed to time, but also to lack of interest in such a tool. A larger round of testing would certainly help to back up the results from this research, though.

#### Redesign

The research has looked at the concept and opportunities for improvement. Corresponding to the results of the user tests, it was most likely to change the rewarding system into something different than money. Moreover, video recording yourself brought along negative feedback. People are generally not willing to record themselves and upload it on the internet, where it will stay for a longer time period. Therefore, an improvement could be a change of format. However, making a audio recording would eliminate the chance for the observer to look at body language, which is a crucial part of pitching.

#### CONCLUSION

From the literature, pilot test, and actual tests done during this study, it can be seen that there is some interest in an app or platform that makes use of crowdsourcing to improve students' pitches. However, the students surveyed appeared relatively unwilling to pay for such a service, despite that being a key factor in boosting usage and participation. There also seems to be a general interest in a convenient way to improve and get feedback on pitches; crowdsourcing is just one way to implement this.

## **REFERENCES** (ACM)

- 1. Beckman, S., & Barry, M. (2009). Design and Innovation through Storytelling. International Journal of Innovation Science,1(4), 151-160.
- Sametz, R., & Maydoney, A. (2010). Storytelling through design. Design Management Journal (Former Series),14(4), 18-34.
- Atasoy, B., & Martens, J. (2016). STORYPLY: Designing for User Experiences Using Storycraft. Collaboration in Creative Design,181-210.
- Baker, H. (2002). Psychological Biases of Investors. Financial Services Review,11(2), 97-116.
- Barata, G., Gama, S., Jorge, J., & Gonçalves, D. (2013). Improving participation and learning with gamification. Proceedings of the First International Conference on Gameful Design, Research, and Applications - Gamification 13.
- 6. Herskovitz, S., & Crystal, M. (2010). The essential brand persona: Storytelling and branding. Journal of Business Strategy, 31(3), 21-28.

- Davis, K. (2014). Different stakeholder groups and their perceptions of project success. International Journal of Project Management, 32(2), 189-201.
- Mason, C., & Stark, M. (2004). What do Investors Look for in a Business Plan?: A Comparison of the Investment Criteria of Bankers, Venture Capitalists and Business Angels. International Small Business Journal, 22(3), 227-248.
- Lundqvist, A., Liljander, V., Gummerus, J., & Riel, A. V. (2012). The impact of storytelling on the consumer brand experience: The case of a firm-originated story. Journal of Brand Management,20(4), 283-297.
- Burns, T. W., Oconnor, D. J., & Stocklmayer, S. M. (2003). Science Communication: A Contemporary Definition. Public Understanding of Science, 12(2), 183-202. doi:10.1177/09636625030122004
- Brabham, D. C. (2008). Crowdsourcing as a Model for Problem Solving. Convergence: The International Journal of Research into New Media Technologies, 14(1), 75-90. doi:10.1177/1354856507084420
- 12. Kittur, A., Chi, E. H., & Suh, B. (2008). Crowdsourcing user studies with Mechanical Turk. Proceeding of the Twenty-sixth Annual CHI Conference on Human Factors in Computing Systems - CHI 08. doi:10.1145/1357054.1357127
- 13. Howe, J. (2006, June 1). The Rise of Crowdsourcing. *Wired*.

# **APPENDIX**

- survey copies
- Transcriptions if we do interviews
- larger versions of the graphs
- (Required: indication of contributions. Advised: more detailed descriptions of aspects needed as evidence for assessment: e.g., process visualisations, technical descriptions of prototype or software, extended statistics, user evaluation protocols, design argumentations)
- Comments receives from initial feedback questionnaire