Binatone phone problems and how to solve them



Research team

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Background

Many people have expressed negative opinions about the Binatone Phone's keyboard since its appearance back in January 2009. This is particularly notable after it entered the market; its feedback was given privately and publicly. Additionally, experts, journalists, bloggers and even Binatone Phone customers have expressed dislike for the keyboard.

The poor usability and appearance of the keyboard suggest that it's a hard product to use. Critics argue that Binatones Phone isn't suitable for business users due to its input methods. They claim that improvements to data entry - such as the use of horizontal keyboards for most features - have yet to succeed. Over the years, this opinion has changed little despite numerous attempts to fix it.

Schedule

19th - 25th of september	Construct a research plan
22th of September	Send out invitations to user test / survey
26th - 30th of September	Start confirming dates for user test Wait for submissions from survey
3th - 7th of October	Conduct user test & interviews Wait for submissions from survey
10th - 14th of October	Alternatively reconfirm backup interviews Wait for submissions from survey
17th - 21th of October	Analyzing data from interviews and survey
23th of October	Final report

Goal

Our goal is to identify the strengths and weaknesses of data entry on the Binatone Phone, and provide opportunities for improvement.

Research questions

With this research project we aim to answer a few key questions to solve the goal. They are the following:

- 1. Does the user prefer keyboard or touch as an option?
- 2. Why do people find it hard to use a keyboard for data entry?
- 3. Why do people prefer other manufacturers when it comes to mobile phones?
- 4. What is important for users when it comes to mobile phones?
- 5. What changes can be made to the keyboard to make it more user friendly?

These questions won't necessarily be asked directly to the participants but the survey and user tests will be structured to get these questions answered.

Target group - Participants

Our participants consist of one primary target group, Business workers. These users are the prime target of Binatone. We, the research team, are in contact with 3 large companies that will help provide us with users for our Surveys and user tests. The users should be 25 years of age or older and be able to read and write. No previous knowledge of the Binatone phone is required however the users should use phones for their daily work activities.

Descriptive Characteristics

Variables	Characteristics	Reason
Age	25+	Mature and experienced
Gender	All	All genders can use the service
Education level	Able to read and write	Needs to be able to read the instructions, questions, etc
Knowledge of Binatone	Not required	Since the focus is on the keyboard, knowledge of the brand of the phone is not required
Use phone for work	Required	Experienced phone user. Knows how a good keyboard should feel

Methodology

The first method chosen is "User testing", which is a qualitative research method. The main reason for choosing this method is that we get more control over the process for the reason that we can see the user's behavior and understand more from the user's perspective. Along with that we get a clear picture of the participants' experience and be able to easily compare their results.

There may be some disadvantages with using user tests, for example that the tasks they are given are very restricted and artificial. It is also very time consuming because you need to focus on one participant at the time. Within the research team we discussed the disadvantages and took that into careful consideration. We still think that a user test will be the ideal method to use, and we want to spend that time on doing the user test because we will get a clear result and see how the participants interact with the Binatone phone.

As a complement to the user test, we decided to have an interview with the participants after the user tests. This gives us more insight within the user test due to the fact that the participants can tell us what they are thinking about the Binatone phone and their experience. We in the research team will conduct an interview to ask the participants about their feelings and thoughts about the test and what they thought was either good or bad, and what they would like to change about the phone. We will have an interview where the researcher has control over the interview but still are flexible to ask follow up questions.

We have also decided to create a survey, where invitations will be sent to our target group users through collaboration with certain companies within our market. The survey will consist of 12 questions where the participants will be asked to share their thoughts regarding different aspects of using the Binatone Phone and mobile phones in general.

The first questions in the survey will be related to the participants' persona, such as gender, age, profession and annual income. Thanks to this data, we will be able to divide our participants into different groups and analyze the results based on this.

By stating a survey, we hope to gather information from a wide group of people without having to take time to meet every one of them separately for an interview, since this would be very time consuming. Our goal is to collect short and straight answers from our participants to easily be able to make statements regarding improvements that can be made to our product, the Binatone phone.

We would like to state that we are aware of the difficulties of this method for collecting data. Firstly, there are no possibilities to ask additional questions if the answers are unclear or if we suspect that the participant does not understand the question correctly. Secondly, there will also certainly be a fall-out of participants that we have to reckon-on. Fall-out participants means participants that for different reasons will not finish making the survey, and who's answers we can not count towards the result.

To prevent these two assurances, our vision is to state the questions as easily read and understood as possible and to calculate the fall-out to about 15 percent of the participants. By doing this, we are positive that we will achieve a reliable outcome.

Procedure

In the process of finding our participants we have sent an e-invitation to the head of department of the three different companies. In the e-invite we have asked the Head of Department to forward the invite to the entire department. Since the survey is not mandatory, the employees decide if they wish to participate or not. The participants will be asked to complete the survey within two weeks. As a reward for completing the survey all participants will receive two free coffee vouchers that they can redeem at their workplace café. For the survey we are aiming to get around 200 participants.

In the end of the invitation there will be an offer to be a part of the user testing. To apply for this, the participant can state their email in the last optional question of the survey. If the participant wishes to be a part of the user testing, we will contact them in a separate email with a link to a booking page, where they can book an available time slot for the interview. The participants that choose to participate in this, will be rewarded with an additional gift voucher of 50 USD.

The interview will be conducted within the 3th-7th of October. For the user test we will randomly select ten people from the ones who volunteered to participate in the survey and signed up to volunteer in the user test. The interviews will be held within a week divided with two participants each day, between 9:00 and 11:30. The user test will take about half an hour included with the greetings and the summary.

The interview will take place in an office where the participants are offered coffee or tea. One researcher will ask for consent to videotape the user test before it starts. The participant will have to sign a paper (Appendix A) where the participant gives their consent and with information that the user test is confidential and that they can cancel the test at any time.

We expect a number of participants to be at risk of getting sick or experiencing other impediments, therefore we have a whole week dedicated to reconfirming dates and alternatively, randomly selecting new volunteers of the participants.

Survey questions

(write answer)

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1. What's your age?
   (write answer)
2. What gender do you identify as?
   (a. Male, b. female, c. other, d. prefer not to say)
3. What's your current profession?
   (write answer)
4. What's your annual income?
   (write answer)
5. What phone are you using today?
   (written answer)
   5a. Why (write answer)
6. What is important for you while choosing a phone?
   (write answer)
7. Does design matter?
   (a. yes, b. no)
8. Do you normally use bigger text settings on your phone?
   (a. yes, b. no)
9. Name three things related to phone keyboards that you find important? If you cannot
   come up with 3, 1-2 is fine.
   (write answer, 1, 2, 3.)
10. Have you ever heard of the Binatone Phone?
   (a. yes, b. no)
   10.a If yes, what was your first impression of the phone? (written answer)
11. How many times do you approximately use your phone for typing per day?
   (a. 10-20, b. 20-30, c. 30-50, d. 50+)
12. Do you have any complaints regarding the keyboard on the Binatone Phone?
   (yes, no)
   12.a If yes, please elaborate.
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Interview questions

Questions before user test;

- 1. What's your age?
- 2. What gender do you identify as?
- 3. What's your current profession?
- 4. What phone do you currently use?
- 5. What do you use your phone for?
- 6. What's your previous knowledge about Binatone company and its products?

Questions after user test;

- 1. What part of the task was most frustrating?
- 2. Which is the main area you see potential for improvement?
- 3. Which part was more simple?

Tasks for the user test

- Task 1: Use the phone to send a text to the presented number. "070-123 45 67"
- Task 2: Use the phone to call this certain number. "070-123 45 67"
- Task 3: Use the phone to add a contact, name it. "BINATONE"

Appendix A: Informed Consent Form

Invitation

We are a research team conducting user experience research for Binatone Phone. We would like to invite you as a participant for our research, which will last for a maximum of 30 minutes. We are aware of your hefty workload and busy lifetime. Therefore, we have created a schedule for the upcoming two weeks so that you can choose the time you will be available for your own comfort. The research team is working for the Binatone Cooperation with a vision to locate the drawbacks and to ensure that the users have no complications with the device and that the product is up to date. Everyone who will attend our research studies will be compensated.

What will happen?

During this research study, you will be asked to complete a survey which will be sent to every volunteer through their emails. When a volunteer accepts the invitation, they will be asked to fill a survey paper only if manageable. There will also be an opportunity to participate in a user test. If you wish to participate in this, we kindly ask you to fill in your email at the bottom of the survey. We will then contact you and offer you a few different dates and times for where the user test interviews are to be conducted. Choose a date and time that works with your schedule and you will receive a confirmation of the booking.

The user test interviews will be conducted in different steps. First, there will be a warm-up interview (Introduction) followed by a few Interview questions which will last 8 to 10 mins. After this, the participant will be asked for their consent if we can record them while doing tasks. The participant will have a complete right to terminate the interview at any time. All this data will be used for only research purposes and after the research this data will be erased permanently. Participants will be asked to perform three easy tasks which will take 10 to 15 mins which will be finally wrapped up by a wrap-up interview (optional) and when the participant will be leaving, they will be handed a gift card.

Participant rights

- Participants will have full right to withdraw themselves from the interviews and tasks at any time.
- Participants will have the right to pause the interview and tasks to take a break.
- Participants will have the right to reschedule their dates at any given time.
- Participants will have the right to inquiry about when and where their data is being used
- Participants will have the right to ask the research team to wipe out their data on any given time by contacting any of the researchers through emails which are given below
- Participants identity will be kept incognito at all costs and the collected data will be classified for the research team only.

☐ I am 18 years old or above	
☐ I have read the conditions and give my full consent	

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