



“Googling Google”

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B. Executive Summary

ChaCha is a question and answer service whose main modality is through feature phone SMS (short message service). Typically a user will come across a concept or issue they cannot immediately deal with, thus assigning the solution to ChaCha. For example, a person may need to know if it will rain tomorrow, but is not near any mode of communication besides their cell phone. With ChaCha, that individual can send an SMS in the form of a question via their cell phone, and in 3-5 minutes receive a response. However, all questions are limited to 160 characters and can only be in text form (no pictures).

For our study, we began by recruiting 4 users, all of whom had either a feature phone or Smartphone with an SMS plan. For ten days, we had them keep a diary of their experiences with ChaCha, making at least one entry per day. Users were asked to also provide the context, time, results, etc. of their queries to us. From this data, combined with a questionnaire on the tenth day, we were able to make conclusions about both the effectiveness of ChaCha, as well as what specific ways we could enhance its design.

It became apparent to us that participants' experiences with ChaCha were not always positive. One of the biggest issues that participants had was that on occasion their questions would either not be answered within the typical 3-5 minute frame, or would receive no answer at all. Participants also mentioned that alternatives to finding answers were more effective than using ChaCha. By asking a friend or looking up their query (or its keywords) on Google, participants were able to experience the same degree of satisfaction that ChaCha's services (when positive) would create.

Google, in particular, was quite a common alternative to using the ChaCha service, especially for participants who possessed 3G-enabled Smartphones, since they could access the internet at any time. Many of users felt that because Google's scope was wider, they could find an answer more efficiently. Thus, by embracing each participant's familiarity and trust of Google, with the added and personalized human element of ChaCha, we designed a system that would allow the user to seek answers to their questions, but within strict domains the user specifies. That way, ChaCha guides would have little excuse for an incorrect or inappropriate response, since the scope of *their* search is so narrowed. Plus by utilizing the internet as the medium, we were able to keep the design multi-modal, allowing the user to access our design via a Smartphone or computer. To summarize our design, a user could perform a typical Google search, yet instead of clicking on each individual search result until the desired information is found (which could take several minutes or even hours), they could instead assign up to five results to a corresponding guide, through our Google ChaCha (working title) design. This could potentially lead to users saving great amounts of time and stress, as well as adding massive amounts of new data to ChaCha's "golden database" of archived questions and answers. In short, such a paradigm would allow the user to essentially *Google* Google with the help of ChaCha.

Overall, our users thoroughly enjoyed the concept and straightforwardness of the design. While there were a couple outliers here and there regarding, for example, one or two interface elements, for the most part users responded very well, and showed a genuine enthusiasm for using Google ChaCha.

C. Fieldwork Activity and Data Collected

Preliminary Research

ChaCha is a search service which uses humans to answer specified questions sent in by users in order to acquire answers quickly when Internet access is not easily available to the user, or when questions are of a more subjective nature. ChaCha is currently limited to only accepting short message service (SMS) messages, which are limited to 160 characters, including spaces, but ChaCha's answers can span numerous SMS message, if need be. An example of such a question is, "What is the best Italian restaurant in Indianapolis?" in which case a human could offer their answer based off of a database, personal experience, and word of mouth.

Prior to our study, we had heard of ChaCha, but none of us had ever used it. As a result, we wanted to become familiar with ChaCha so we each created our own account on ChaCha for internal use and study. ChaCha's services are free, but the cost of sending a text message still applies. While we enjoyed asking ChaCha questions to see their responses, we realized that if we wanted to get a fuller view of the ChaCha experience, we would need some assistance from other people.

Fieldwork Activity

We sought help in understanding the "ChaCha experience," and how ChaCha itself was experienced by individuals, so we asked some individuals to assist us by using ChaCha on a daily basis. We had four individuals in total help us collect data:

- Our first participant was a male, 22 years old, who is an undergraduate student, and, on average, spends 35-50 hours a week on the computer.
- Our second participant was a female, 56 years old, who is a physician's assistant, and spends roughly 10-20 hours a week on the computer.
- Our third participant, a male, who is 32 years old, is a postal worker and he spends roughly 15-25 hours a week on the computer.
- Our fourth participant was a female who is 33 years old. She is a housewife and part-time researcher and she spends 25-35 hours a week on the computer.

The individuals varied in age but were for the most part younger adults. There was a wide gamut of occupations covered, as well as time spent on the computer. Needless to say, the individuals had lots of experience with a computer, so they had a greater chance of being comfortable with an interface that operated off of the Internet, or through an SMS message.

We provided the individuals with a consent form prior to the study (to see the consent form verbatim, please see the Appendix), in which we asked the participants to submit a question to ChaCha daily and to answer nine questions prepared for each interaction with ChaCha, which we asked each individual to send to us after communicating with ChaCha as soon as possible. We were interested in capturing a slice of the experience, so we asked our questions in hopes of isolating particular encounters with ChaCha. In order to capture some of the experience, we asked the following questions to our users:

- Where were you when you sent your question to ChaCha?
- What were you doing before you sent your question to ChaCha?
- What time was it when you sent your question to ChaCha?
- What prompted you to send your question to ChaCha?
- What was the question you asked ChaCha?
- What was ChaCha's response?

- How long did it take ChaCha to respond to your question?
- Were you satisfied with the answer you received?
- Do you think you could have found the answer yourself in a more efficient manner? If so, how?

These questions were asked of the individuals for ten days, from March 26th to April 4th.

Following the ten days of data collection, the data was sorted by participant and date. For information's sake, we asked a final set of questions to our individuals which were geared more toward their experience with ChaCha as a whole as opposed to individual instances. We asked the following five questions after receiving the tenth and final set of answers from each participant:

- How would you rate your experience with ChaCha in the past ten days?
- Have you asked your daily questions out of curiosity, or because you felt it was required as per the study?
- What is one thing you liked about ChaCha?
- What is one thing you disliked about ChaCha?
- Was the process of submitting a question to ChaCha a positive experience, or a hassle?

When our data collection had concluded, we had 360 answers to our questions (4 participants x 9 answers each day x 10 days), as well as 20 post-test questionnaire answers (4 participants x 5 answers). Please see the Appendix for a detailed listing of our participant's responses to the asked questions proposed by us. A timeline of our study is shown below:

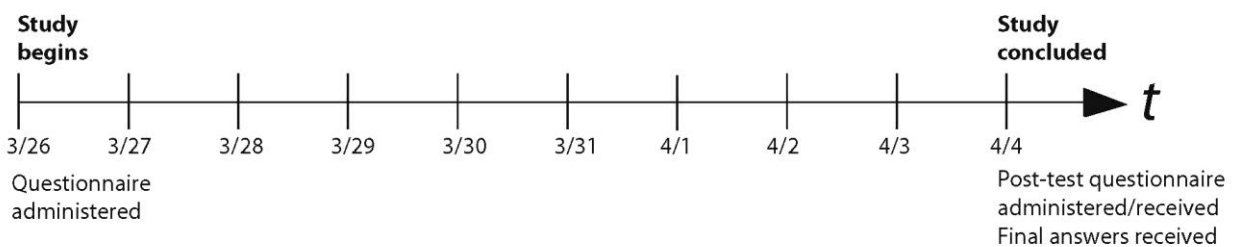


Figure 1: Timeline of Research Study

As thanks for helping us with our study, our participants were offered compensation for their assistance, as well as to help offset the costs incurred by participating in our study, should fees for sending a text message to ChaCha apply.

Data Results

After looking at all of our data, we pieced together the experiences as a whole and acquired a more complete interpretation of the individuals' ChaCha experience. We also tried to expand upon the data by creating work models to better frame various components as they played out in the individuals' experiences with ChaCha.

After looking over all of the data, it became apparent to us that the participants' experiences with ChaCha were not always positive. One of the biggest issues that each participant had was that sometimes their questions would not be answered, either right away, or not at all. When the participants' questions were not answered, there were two explanations: either the participant was sent a survey or he/she was sent a reply stating that the question could

not be answered. When the participant received a survey, they would either return it (which cost money as they were sending another SMS message to ChaCha) or they would become frustrated and not answer it at all. When the participant was notified that their question could not be answered, they became very frustrated. Such responses to questions included, but were not limited to:

- “You are over your Q limit at this time. Try again later.”
- “Oops, we double-dribbled your question! Please try again later.”
- “ChaCha is too busy to answer your question at this time.”

Participants also became frustrated when their questions were answered, but at the expense of modifying their question slightly. Going from “When will Butler play Syracuse?” to “Which day will Butler play Syracuse?” affected one individual on two fronts: first, the question became modified so that only a date would be returned (as opposed to a date with a time), and secondly, the slight modification of the question caused the experience with ChaCha to be less personalized, since the participant could feel that they were being “databased,” in which case their question was simply being filtered according to key words or phrases present within their question to an answer. Such an experience would also bring into question the “human search engine” paradigm of ChaCha.

Last but not least, the participants mentioned that alternatives to finding answers were easily accessible in comparison to ChaCha. Whether it is asking a friend or a passerby or to look up the question (or its keywords) on Google, the participants felt that ChaCha’s services had stiff competition from other tried-and-true methods which would take less time. Despite all of these potential setbacks, all individual experiences with ChaCha were positive because ChaCha itself was very convenient.

Work Models

In tandem with the data collected to capture the experience of ChaCha, we also created work models to show different views of the ChaCha experience. A flow model, sequence model, artifact model, and cultural model were created to help illustrate each view. A physical model was not created because the physical setting of an SMS communication with ChaCha was too varied to create a universal model, plus the setting in which the user was present was of minimal concern during our conceptualization of understanding how people used ChaCha since the only “universal element” in such a situation was their cell phone, which was easily captured in the artifact model.

Flow Model

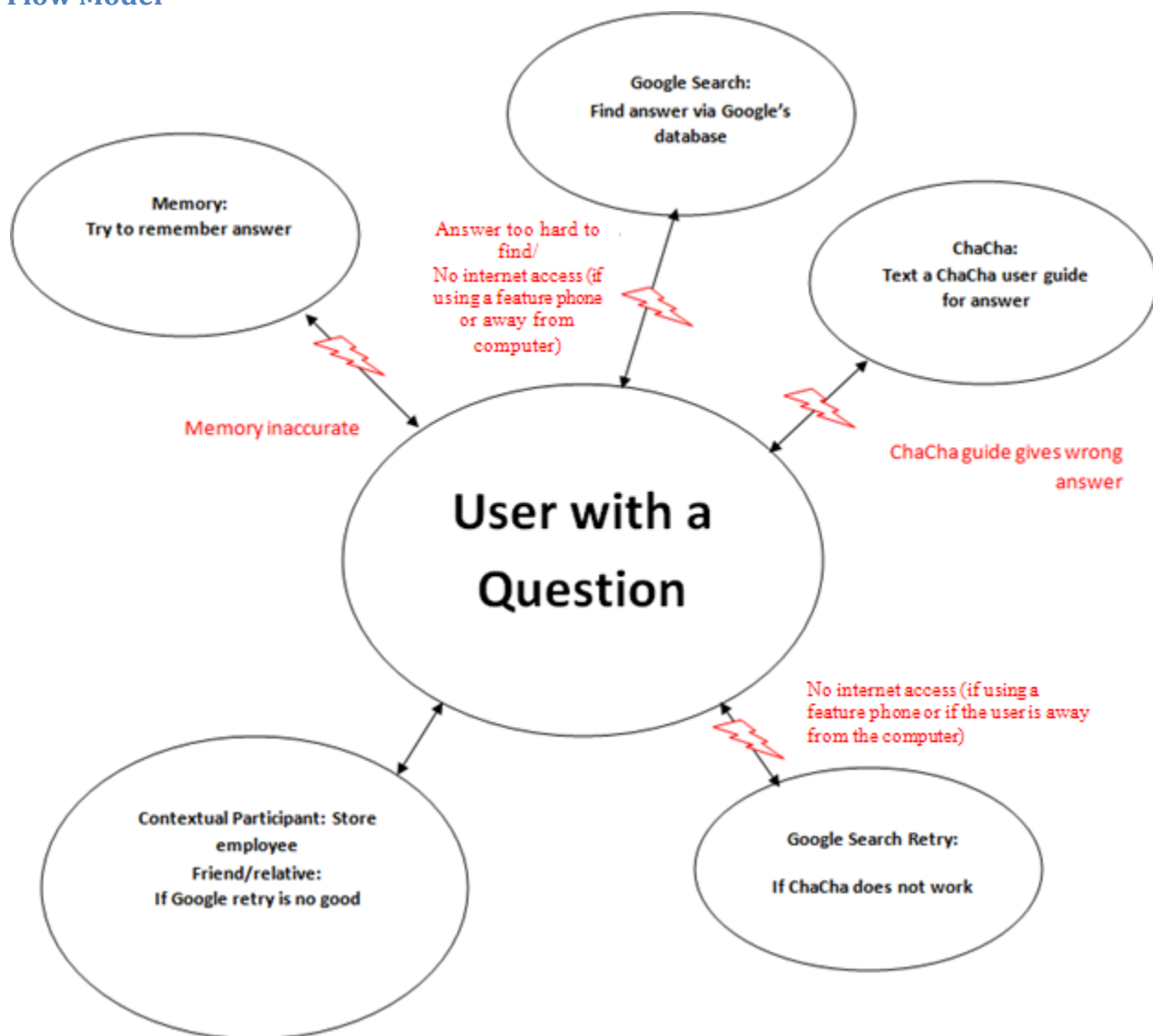


Figure 2: Flow Model

Figure 2 shows the flow model that was created from our data. The key element was the user and their question, so each other node affects them. If a user had a question, there was the possibility that they could use their memory if they knew the answer but could not immediately recall it, but there was always the chance that their memory was not accurate. Should the user not want to use their memory, they could use Google's database, but there is always the possibility that the user does not have Internet access or that the subject content itself is too difficult to find. If the user has a question for ChaCha, they will submit the question but there is a possibility that the guide may give them the wrong answer. Should the guide fail to give the proper answer, the user may look for the answer on their own, opting for a Google search. Just like before however, there may not be Internet access. In such a case of these cited possibilities, they can lead to a breakdown in the system, which would confuse the user, frustrate them, and could rub off in such a way that the user associates that frustration with ChaCha after a poor user experience. If all else failed and there was not an answer available to the user, it was possible for the user to ask someone else.

Sequence Model

Intent: Ask ChaCha a question

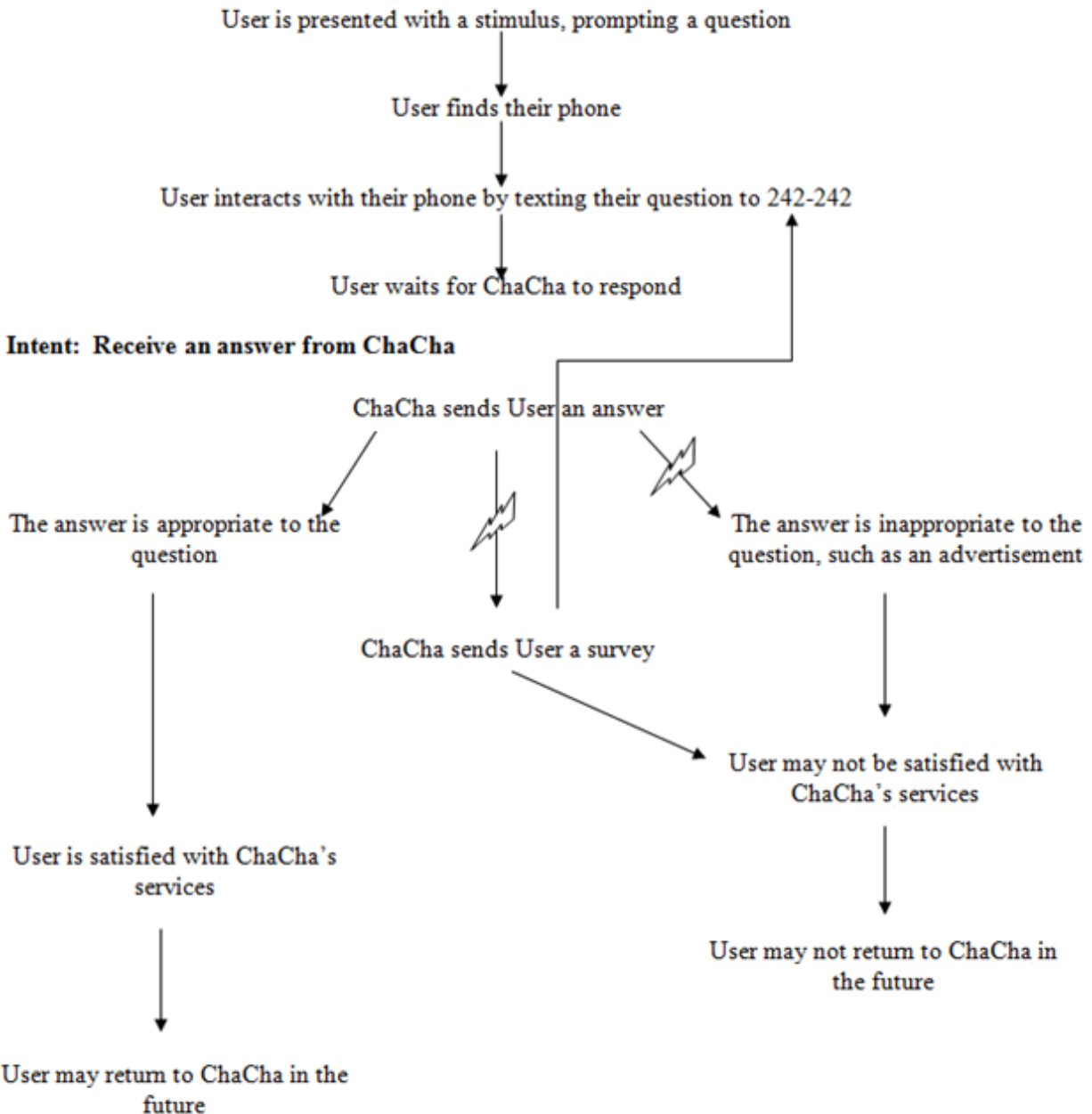


Figure 3: Sequence Model

This sequence model shows a step-by-step view of the user asking a question to ChaCha and receiving their answer via SMS. When their intent is to ask a question, the user is prompted with a stimulus of some sort, which triggers them to wonder what an answer may be to a question. Following this trigger to use ChaCha, the user finds their phone and sends their question to 242-242, the number of ChaCha. Following the submission, the user waits for ChaCha to respond. When the question has been received, our data shows that ChaCha typically follows one of three paths: they either send an appropriate answer to the question, they send the

user a survey, or they send an inappropriate answer that does not match the question at all, such as “We’re sorry, we’ve double-dribbled your question! Please try again later.”

- If ChaCha sends the user an appropriate answer, the user is satisfied with ChaCha’s services and may return in the future.
- If ChaCha sends the user a survey, something interesting happens in the sense that the survey may break the experience for the user, or they may comply and send their response to ChaCha. Following the submission, the user once again waits for ChaCha to respond, hoping their question is answered. Should the survey disrupt the experience for the user, they may not be satisfied with ChaCha’s services and may not return in the future. Not surprisingly, the more times the user has to send back a survey, the greater a chance they will stop responding and have a negative impression of ChaCha.
- If ChaCha sends the user an answer that is inappropriate to the user’s question, such as a survey or a response with the undertone of “we cannot answer your question now,” the user may feel that ChaCha itself is a joke, and may not be willing to return to ChaCha in the future. The reason behind this is that, for a new customer especially, they would be interested in how ChaCha works and may expect an answer to a supposedly simple question to test ChaCha. When their question is given a poor answer, the user may wonder how competent ChaCha really is at answering questions.

Artifact Models



Figure 4: Artifact: Smartphone



Figure 5: Artifact: Feature Phone

The **Smartphone** that a user may possess allows them to communicate with ChaCha. The user has a full QWERTY keyboard to ask their question and a large enough screen that they can read the question and answer clearly. The user also has a greater chance of having Internet access on their Smartphone with a compatible web browser, so if the ChaCha experience does not live up to the hype for them, they have easy access to Google to find their answer themselves. Also with the web capability is the option for the user to log in to their ChaCha account should they want that degree of freedom. As seen in the flow model, however, should the user not have Internet access, such features involving the Internet would not be accessible.

The **feature phone**: the user has access to a texting plan so that they may communicate with ChaCha by sending their SMS message to 242-242. The user may have a QWERTY keyboard, which is present on certain feature phones, or they may have to input their message using T9, which would require the user to press the 6 key twice to input the letter N. The feature phone may have access to the Internet, so that Google could be used, but such a feature usually

costs more to implement. Should the user not have Internet access, these extended capabilities would not be available to them. As a result, the user may not have an immediate alternative to finding their answer other than asking other individuals.

Cultural Model

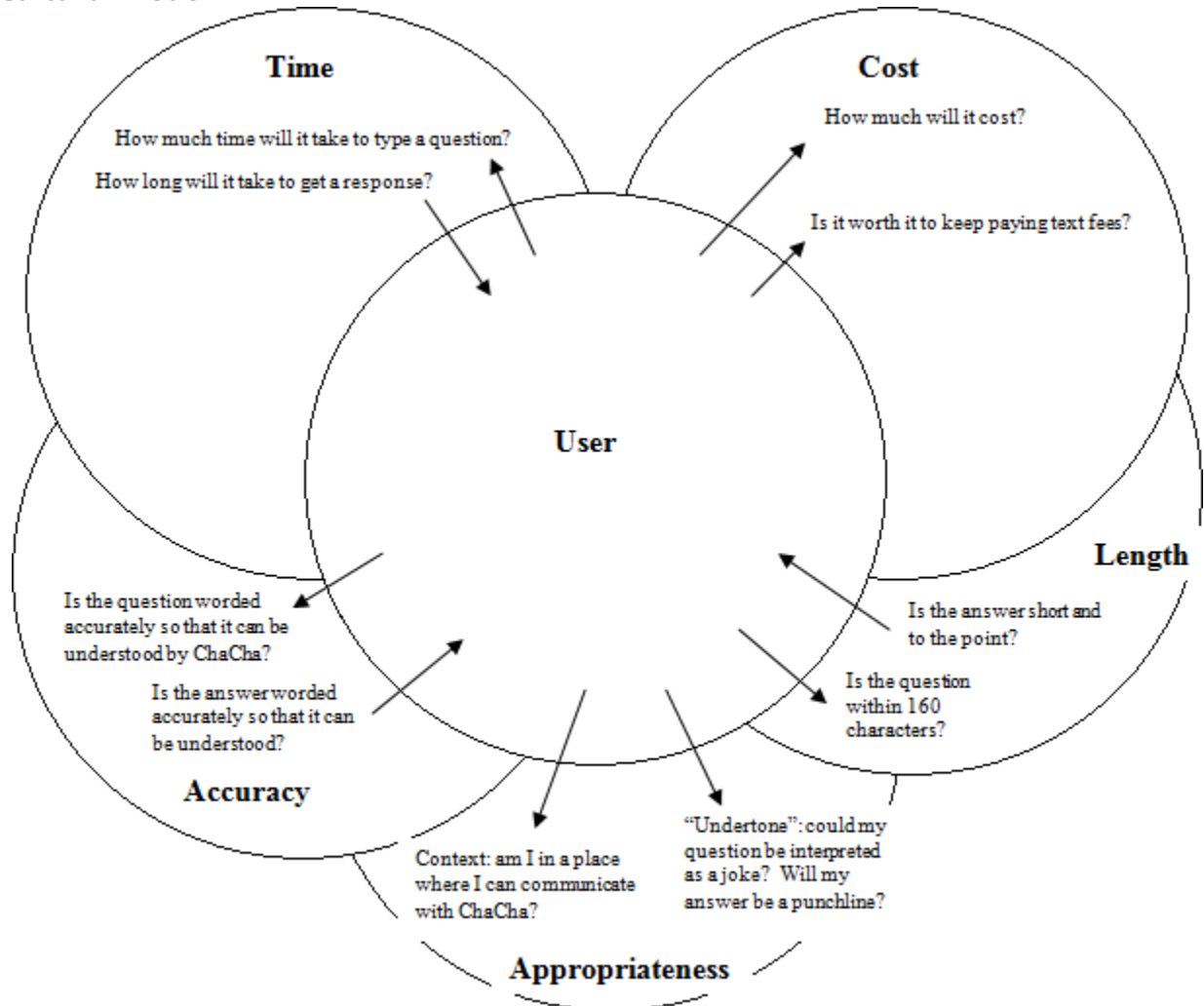


Figure 6: Cultural Model

The cultural model shows all of the questions and expectancies that influence the user during an experience with ChaCha. The user is influenced by all the factors, and the factors are arranged in such a way that factors that influence other factors are located "above" their influenced factors. The user may wonder how much time it takes to send a question or receive an answer. Likewise, upon first using ChaCha, the user may wonder how much the service itself costs, and once that is known, if it is worth it to keep paying the fees, should one apply. When the user asks a question, they must consider the length of the question, since an SMS message is limited to 160 characters, including spaces. When the answer is received, it should be short, sweet, and to the point, or else the user may have to pay additional texting fees to receive more text messages from ChaCha. Similar to the length of the question and answer, the accuracy conveyed when asking the question is important because if it cannot be understood by ChaCha, it may not be answered. The same applies to the answer: if the answer is not worded accurately,

the user may be left confused or may send a similarly worded question to ChaCha to try to elicit a more accurate response. Such a gamble may require paying another texting fee. Underlying the experience itself is the appropriateness of the question and answer: the user may not be in a situation where it is advantageous to ask ChaCha a question, such as in a board meeting. There is also the chance that the undertone of the question is interpreted in such a way that the question is viewed as a “joke” and that the answer should be the corresponding punchline. One of our participants asked ChaCha, “How can you tell a dogwood tree from a distance?” with ChaCha’s response being “from its bark.” While this participant may have been probing ChaCha with a joke, there is also the chance that they could have been asking a serious question and the answer received, while a pun involving a dogwood tree and bark, may not have been appropriate to the participant’s question. The participant may have been forgiving of the incident due to the humor received from the punchline, but in other instances, the user may not be as lax because their question may be an honest one.

D. Goals and Requirements

Having taken into consideration the problems that our users experienced with ChaCha, as well as the data collected from examining the work models, we began brainstorming possible ways for users to enjoy the ChaCha experience by building off of and improving the setbacks witnessed. One of the most common cited examples was that Google could be used as an alternative method of finding answers because Google itself had a very wide scope. Our driving goal became to merge both ChaCha and Google into one entity so that both could be used in tandem in a sort of symbiosis as opposed to being strictly orthogonal. We wanted the user to be able to make use of the broadly encompassing swath of Google with the added rigor of ChaCha and the “human search engine” paradigm used by ChaCha. This new approach would allow users to use Google as they normally would, but ChaCha’s guides would offer a helping hand in searching websites as directed by the user. Such a paradigm would allow the user to *Google* Google with the help of ChaCha.

Functional Requirements

In order to capture the key experience for which we were looking, we felt it was necessary to identify the functional requirements which our product had to perform, or else the product itself would not succeed. These requirements are listed below.

- The ability to have ChaCha’s guides answer questions about specific Google search results
 - ChaCha’s guides would have to learn how to use this new paradigm, which may take time and funding from ChaCha
- The ability to inquire about multiple search results
 - five (5) maximum
- The user could access their inquiries via history on their “My ChaCha” page
- Have guides’ answers include the relevant hyperlink so that it may be accessed by the user quickly when the answer has been received, should the user be within their “My ChaCha” page

Design Requirements

The design of the product would also have to be of importance, because the design itself would be what the user was seeing and with what the user was interacting. As such, there were requirements that our product had to communicate so as to be accepted by our users:

- Adhere to both Google’s and ChaCha’s graphic scheme, so that the user knows they are interacting with both Google and ChaCha
- Allow the user to take multiple actions within the same page, so that the user may pose a query, but should they want to, continue searching Google for other queries to ask ChaCha or to continue searching Google with no desire of submitting queries to ChaCha
- Give adequate feedback so that if the user keeps their browser on the Google page with which they posited their query, they are able to recognize when a search entry has been checked by them, when it is in the process of being answered, and when it has been answered by ChaCha
- Make buttons easily recognizable and interactive without hampering screen real estate, so that the product itself is not encumbering to the user
- Allow answers, being text based as they are hyperlinks, to be added and stored in ChaCha’s database for future retrieval by ChaCha’s guides, so that when a user texts a

question to ChaCha, ChaCha's guides can use their expanded database to provide a better answer to that person's question

Usability Requirements

During the user's interaction with our product, certain usability requirements should be followed so as to improve the user's sense of satisfaction with the product. The usability requirements for our product are listed below. These requirements will mold the user's experience with the product, and should the criteria be followed, the user will associate the following requirements with our product.

- *Effectiveness*
 - Each user will be able to inquire to ChaCha about the contents of a specific site as it appears on Google's search results page. This will allow the user greater multi-tasking privileges, as the workload is shared by ChaCha's guides.
- *Efficiency*
 - As the product will be a browser plug-in, it will be a minimalist visual design in order to give enough screen real estate for the user to work within
 - The system will also allow the user to work with multiple guides simultaneously, thus achieving better results in a faster time.
- *Utility*
 - Users will be able to choose whether to add the ChaCha database or to simply use Google to perform their search. The product will not be a mandatory requirement for every search performed.
 - Users can ask one question to multiple guides at a time.
 - All inquiries will be saved to the user's history for future retrieval.
 - Because replies will be text based, the answers can be recycled into ChaCha's "golden database."
- *Safety*
 - As the ChaCha service does not require a great deal of personal information, users' accounts will be just as secure as before, and will require not additional information from the user.
- *Learnability*
 - A simple checkbox system will allow users to select multiple search results within seconds.
 - Text entry for inquiries will be the same as before, requiring no extra learning curve for SMS messaging.
- *Memorability*
 - Any new interface elements will be designed with the classic ChaCha color scheme and interface in mind so that current users can transition to the new system easily.

Key User Profile

The key user of our product would have a few features that would be very salient, as our product would provide them with the greatest amount of satisfaction. Our users should possess the following traits:

- Someone without time to browse Google, or who does not want to browse Google for an extended length of time

- Someone with a ChaCha account
- Someone who wants help finding information online
- Optional: A person who has SMS services on his or her cell phone (unlimited messages preferred)

Such a user would have the innate desire to maximize his or her time while on the computer, especially when browsing for a search result, so a quicker or more in-depth means of searching would benefit them. As our service would pair up with ChaCha and the user's ChaCha profile, it would be required for the user to have access to their own ChaCha account. From a more "customer service" standpoint, the user would also want help finding information, because that would give our service a niche to fit into, and a problem to help solve with the user. The user would not need SMS services on their phone, but if they did not have that enabled, they would have to keep their search window open in order to see their results. With SMS services, they would be able to receive a message when their question was answered. Should these services be free, the entire process would be free for the user.

Relevant Scenarios

After having identified our key user, we imagined scenarios with which our user may be placed, to see if our product could satisfy the user's needs, or if the product would have to be revised. Two of our scenarios are presented below, illustrating how our key user would make use of our product:

1. Samantha, age 27, is a mother of one, Amy, who is two years old. Samantha is busy during the day taking care of Amy, but in the evenings, Samantha attends IUPUI to pursue a degree in Criminal Justice, when her husband, Titus, can watch Amy. Being a student, as well as a mom, Samantha does not have a lot of free time on her hands during the week, but still receives homework just like everyone else. Samantha tries to multitask when she can, but finds that searching for content online, for work or play, can be frustrating, because search engines can be specific, but not specific enough. She laments looking for something online and, because her search criteria were present within a sentence on a web page (and only mentioned in that one sentence), the site was flagged as one of her search results.

Recently, Samantha has wanted to spice up the house by finding some new wallpaper for the den. Titus likes fishing, so she thought that wallpaper that revolves around fishing would be a good idea—at least for now. Having searched "fish wallpaper" on Google in the past, she found numerous sites that had wallpaper involving fish, but none seemed to capture what she wanted. Distraught, she refined her search, but to no avail.

Upon hearing of our product from her friend, Teresa, Samantha decided that her fruitless efforts of finding appropriate wallpaper should be over. Having created a ChaCha account (also by Teresa's enthusiasms), Samantha decided to give our product a try. She entered her search criteria into Google and was presented with a list of pages, per usual. However, she identified a few sites that looked promising which she had not visited yet, and asked ChaCha, "Does this page contain wallpaper of salmon jumping?" for every site that was flagged, all at once. After sending her question, she resumed her initial activity, making Amy lunch. A few minutes later, Samantha was notified via text message that her results were present within her online ChaCha account. Delighted, Samantha logged

in to ChaCha and found that one of the pages contained wallpaper of salmon jumping, and the link to the product itself was provided, allowing her to see the page itself. Samantha clicked the link, went to the page, and stored the page in her Favorites for the future, when she knew the dimensions of the den, so that she could order the wallpaper.

2. Mick, age 25, is working on the living room of a Dutch Colonial home. One of his contractors was supposed to find him a marble fireplace, but that contractor has called in sick. The project cannot move along without the fireplace installed, as it will delay all other work by at least two weeks. Mick has some time (3-5 days) to get the fireplace in the home, but he has no idea where to start looking. He texts ChaCha: “Where can I find a marble fireplace?”

After about three or four minutes, Mick gets a reply: “Marble fireplaces look great in old style homes! People love ‘em!” Not only did ChaCha fail to give him any answer even remotely close to his question, it added even more useless information at the end. So Mick decides to Google marble fireplaces, in hopes that he can find some local retailers or suppliers.

Mick gets about five results that look promising, but in about 15 minutes, he has to meet with the client and doesn’t have time to search them all as thoroughly as he would like. He then decides to text each search result to ChaCha to see if they can search each site for “white marble fireplaces between \$1000-\$5000.” The problem though is he has to type in the website address, the search criteria, and stay within 160 characters. It takes so long to text one message that Mick decides to just lie to his client and stop searching altogether. His client gets wise to Mick’s lies and fires him on the spot. Mick doesn’t understand why he needs to text via the service, since copying and pasting via email would so much easier on his Smartphone.

Samantha’s scenario shows how our product would be used in a daily setting, while Mick’s shows an innate desire for something which could improve the scenario with which he was faced, as well as providing him a way to keep his job. Both scenarios show a problem that the user needs help solving, and Mick’s scenario goes a step further by examining each part and communicating the possible flaws of each part being used separately. By combining both parts, a situation similar to Samantha’s would be achieved.

E. Conceptual Design

Our product will allow users to search Google as usual, but send a predefined list of websites (a maximum of five) to ChaCha to have their guides look for a particular thing on one of the predefined websites. ChaCha will not be searching all of Google, but will be only searching the predefined websites by the user; however, the “search criteria” will be more focused, as it will be a ChaCha query.

For example, if a user wanted to do a search for a porcelain vase on Google, but they did not want to spend 15-20 minutes browsing through the different search results trying to find the right site with a porcelain vase, they could use our product. Our product would allow them to select one or more individual search result and have a ChaCha guide search that site for porcelain vases, one guide per site. The user’s search time could be cut down considerably, as they would essentially be collaborating with ChaCha on the answer, rather than relying solely on the accuracy of ChaCha’s “golden database.”

The user experience starts with Google. The user will conduct a “usual” search, and when the results are presented to them, they will flag a maximum of five links. If the user wants to flag a link, they are required to login to ChaCha first, which will be possible using our product—a browser add-on. Once the links are flagged, the user will then be able to send the flagged links to ChaCha with a query (160 characters maximum as per a standard SMS message) requesting specific criteria to search within the flagged links. ChaCha’s guides will examine the links, using their database or browsing expertise, and will notify the user via an SMS message when the results are found, either positive or negative. The user will log on to his or her ChaCha account and see the links with positive results as hyperlinks (as a specific page within the site that reflects the requested criteria), so that they may be clicked. Also, if the user is still on their search page but wants to open a new window or new tab to continue searching, the flagged links will be updated with an indication of whether or not the link flagged provides an answer to the user’s query. Such indicators will have a positive or negative valance. The links are also saved to ChaCha’s database (as they are text-only) so that if another user submits a query, ChaCha will be able to recall the links within their database should the links be needed as a query response in the future.

Initial Sketches

We thought we could integrate more of our concept with the Google page by just adding our product as a browser add-on to the web browser (e.g., Internet Explorer, Firefox, Safari, etc.). Figure 7 shows how initially we wanted to use ChaCha’s website as the interface, with a radio button where the user could search Google without leaving the ChaCha site. Our goal was letting the user ask any question by typing in natural language in Google and receive an accurate answer instantly by the suggestion assistants, ChaCha’s guides (see Figure 8). Therefore, we decided to keep the interface simplified so that the user could find what they needed across Google in an efficient time (see the Appendix for more detail).

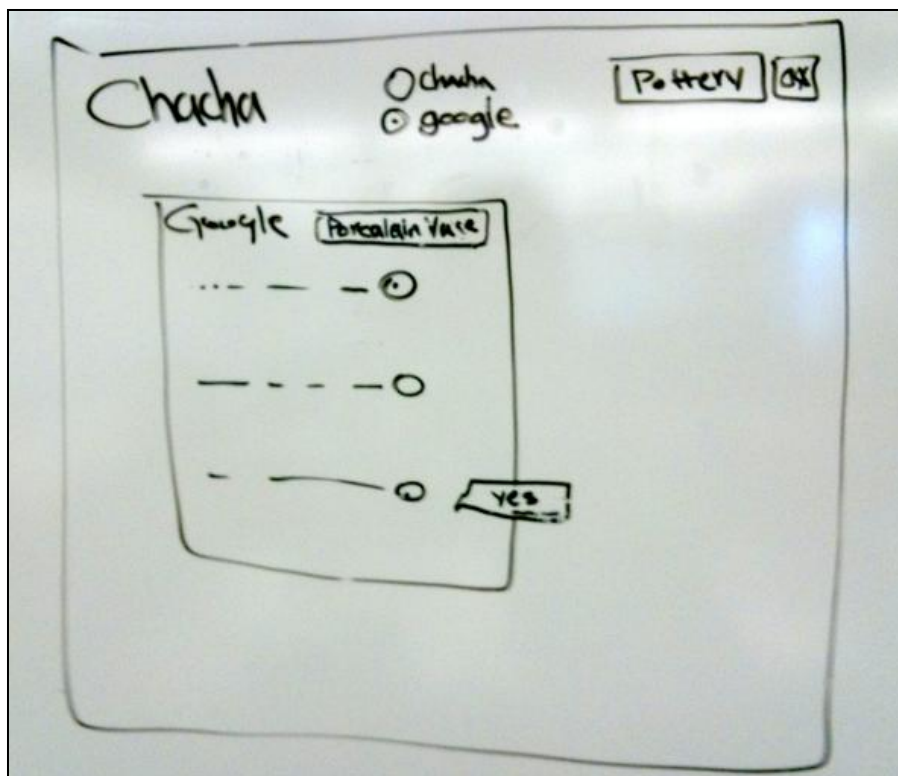


Figure 7: Google ChaCha concept #1: using ChaCha as the main interface

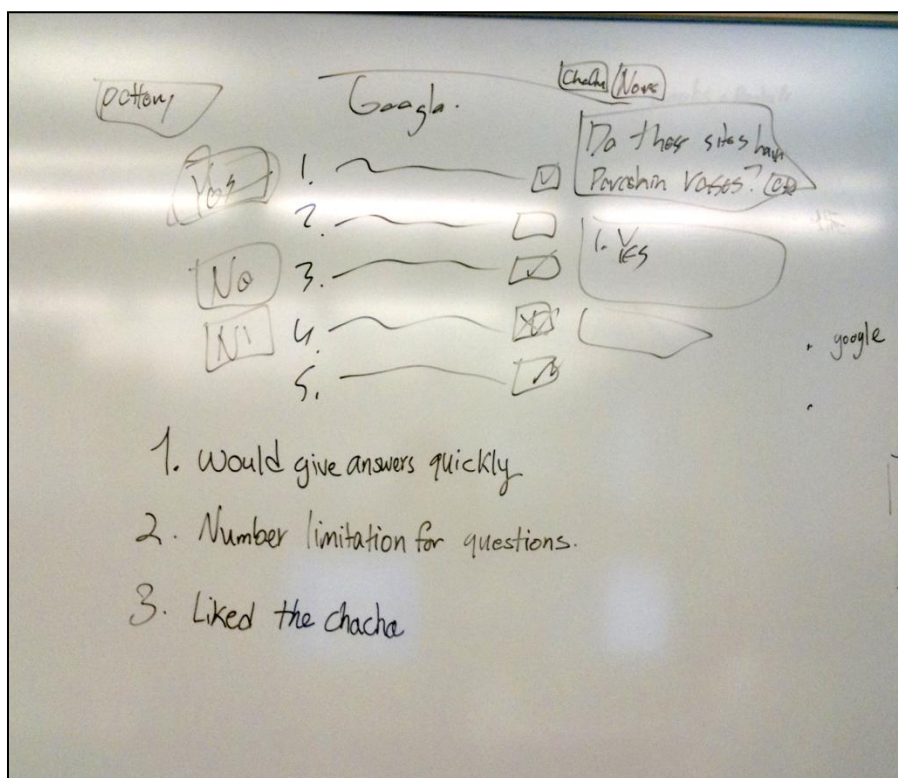


Figure 8: Google ChaCha concept #2: showing answers given by ChaCha's guides

IDM

The conceptual design of our product is based on the user's experience goals and capturing the main points that our participants addressed. IDM is a design technique for multichannel applications such as websites. Below is the IDM map of our project, which presents the logical structure of our design.

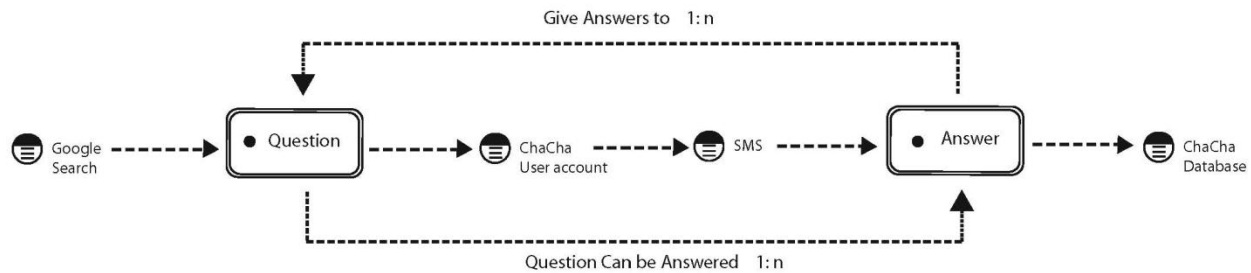


Figure 9: IDM of Google ChaCha

The user initially performs a Google search, which then prompts the user with the opportunity to ask a question to ChaCha, similar to the stimulus that prompts a user to send an SMS message to ChaCha via their phone. On a higher level, the question can be answered with many answers, and one answer can apply to many questions. Since such fields may have multiple possible responses, both fields are multifaceted. The question prompts the user's ChaCha user account, and simultaneously, ChaCha's guides. The user is sent an SMS message when the results are found, courtesy of ChaCha, alerting them that their answer is available. Said answer to the user's question is then sent to ChaCha's database for future retrieval by their guides.

F. Visual/Interactive Prototypes

Prototype Scenario

Matt is an aspiring web designer, however, Matt knows that unless he can get his portfolio online, his resume alone will mean very little. Being dead broke, he needs to find a portfolio website that is free for him to use.

- Thus Matt opens up Google
- Matt enters in the search box: **“free portfolio website”**
- Matt receives a typical results list, and because he is busy writing a paper for Karl MacDorman, he doesn’t have time to go through all these sites. Matt also remembers that one of his former project partners made a video of their product, so he should look into which sites allow him to post videos.
- Matt doesn’t have time to do two or three more searches, as well as look through each result. Plus, he does not see any indication about video postings in each search result’s description. So he decides to take advantage of ChaCha’s new service, Google ChaCha, which allows him to select up to five Google search results, which he can then submit (with his specific question) to five separate guides. With this service, Matt will be able to find a decent portfolio website that allows video posts, in a fraction of the time it would normally take.
- So he signs in to my ChaCha account via a link in the upper right-hand corner.
- After logging in, he notices all the checkboxes next to each search result
- From here he decides to try the following results via ChaCha’s Google service:
 - www.BigBlackBag.com
 - www.carbonmade.com
 - www.webresourcesdepot.com/profolio-free-and-instant-portfolio-website
 - www.mosaicglobe.com
 - www.coroflot.com
- After filling up each panel with a link, Matt asks his question: **“Which of these sites allows me to post videos to my portfolio?”**
- He waits 3-5 minutes for the results
- Matt is then given visual indicators that show him whether or not the marked site had what he was looking for.
- Matt decides to go to coroflot.com, since that is both free and has no data limits

Low-fidelity Prototype

For our project, we used a design program called Axure. This program allows for rapid prototyping in both lo-fidelity (sketch-like) and hi-fidelity (polished) formats. Because the approach to either is generally the same, we didn’t really have a low-fidelity prototype beyond the brainstorming (whiteboard) pictures above. However we did have two iterations of the high-fidelity prototype, so we will discuss those in detail.

High-fidelity Prototypes

As stated, our high fidelity prototype had a couple different iterations. The redesign of it was centered on how to accurately display feedback to the user for the results that they chose to submit to ChaCha.

The first iteration involved displaying icons on the right hand side of the Google search results page. The reasoning for this approach was one: it was visual (the user could perceivably understand that the icons represented graphical elements of the page). Two: it used up unused white space that appears in every Google search, thus not requiring reorganization of Google's content.

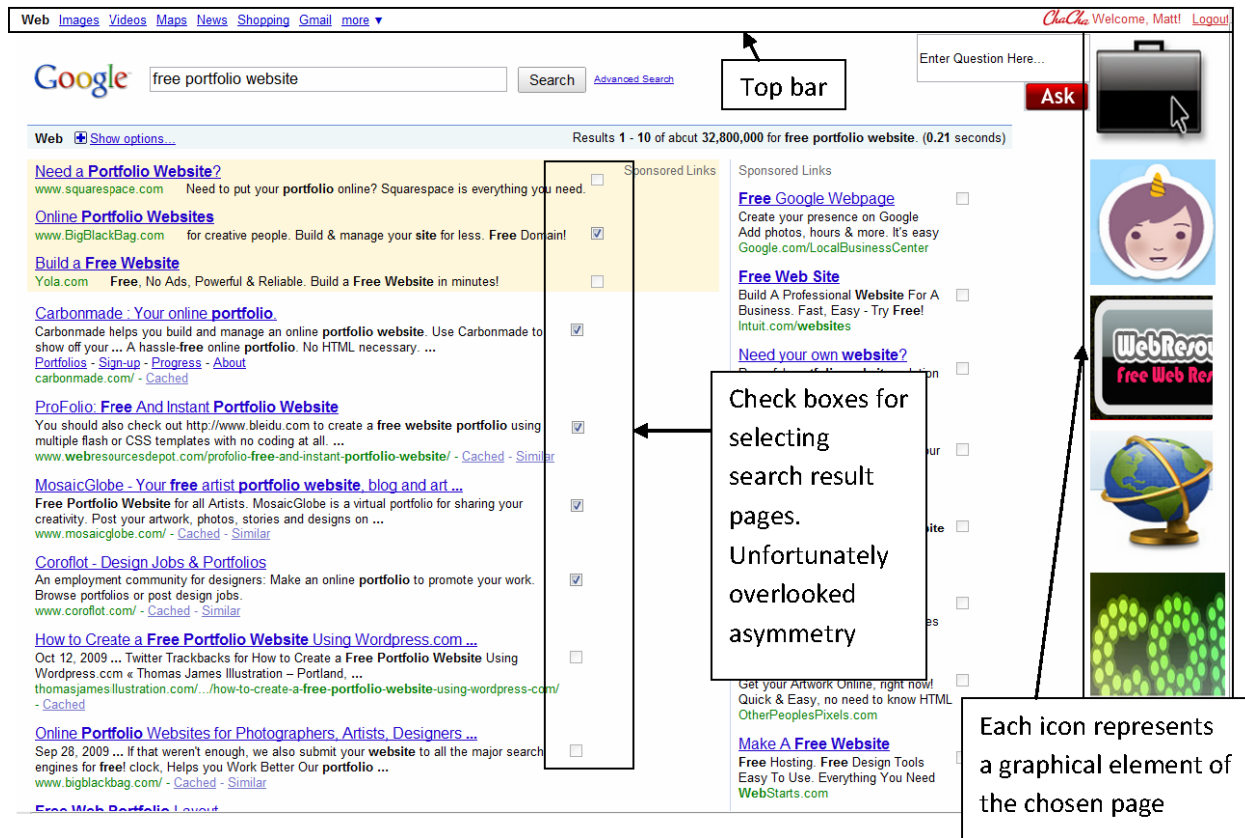


Figure 10: First iteration of Google ChaCha prototype

The problem with the first iteration was that the icons were simply too vague as representations of chosen results. In order for the icons to make sense to the user, he/she would have to have already visited the site to make the visual connection. We also understood that since we were essentially trying to design Google in a way that it worked with ChaCha, we decided to try to redesign the project as a Google service rather than a browser add-on. Typically, in the top bar of Google searches, one can connect to other Google services, but we had not taken full advantage of that.

Within the second iteration, we focused on a much simpler, tried and true method of feedback: highlighting the chosen results. We chose "pink" since it is distinct and adheres to ChaCha's red color scheme. We also relocated the "ask" bar right below the Google search bar to make the design more cohesive with Google. We also made sure to line up the checkboxes perfectly with each other, so they wouldn't look out of place in certain parts.

Changed to Google ChaCha to more resemble a Google App.

Web Images Videos Maps News Shopping Gmail more ▼

ChaCha Welcome, Matt! Logout?

Google
ChaCha

free portfolio website

Search

Advanced Search

Enter Question Here...

Ask

Integrated "ask" bar underneath search bar

Web Show options...

Results 1 - 10 of about 32,800

Need a Portfolio Website?

[www.squarespace.com](#) Need to put your **portfolio** online? Squarespace is everything you need

Online Portfolio Websites

[www.BigBlackBag.com](#) for creative people. Build & manage your site for less. **Free Domain!**

Build a Free Website

[Yola.com](#) **Free**, No Ads, Powerful & Reliable. Build a **Free Website** in minutes!

Carbonmade: Your online portfolio

Carbonmade helps you build and manage an online **portfolio website**. Use Carbonmade to

show off your ... A hassle-free online **portfolio**. No HTML necessary. ...

[Portfolios - Sign-up - Progress - About](#)

[carbonmade.com/](#) - [Cached](#)

ProFolio: Free And Instant Portfolio Website

You should also check out [http://www.bleidu.com](#) to create a **free website portfolio** using

multiple flash or CSS templates with no coding at all. ...

[www.websitesourcesdepot.com/profolio-free-and-instant-portfolio-website/](#) - [Cached](#) - [Similar](#)

MosaicGlobe: Your free artist portfolio website, blog and art...

Free Portfolio Website for all Artists. MosaicGlobe is a virtual portfolio for sharing your

creativity. Post your artwork, photos, stories and designs on ...

[www.mosaicglobe.com/](#) - [Cached](#) - [Similar](#)

Coroflot - Design Jobs & Portfolios

An employment community for designers: Make an online **portfolio** to promote your work.

Browse portfolios or post design jobs.

[www.coroflot.com/](#) - [Cached](#) - [Similar](#)

How to Create a Free Portfolio Website Using Wordpress.com...

Oct 12, 2009 ... Twitter Trackbacks for How to Create a **Free Portfolio Website** Using

Wordpress.com < Thomas James Illustration - Portland, ...

[thomasjamesillustration.com/.../how-to-create-a-free-portfolio-website-using-wordpress-com/](#)

- [Cached](#)

Online Portfolio Websites for Photographers, Artists, Designers ...

Sep 28, 2009 ... If that weren't enough, we also submit your **website** to all the major search

engines for **free!** clock. Helps you Work Better Our **portfolio** ...

[www.bigblackbag.com/](#) - [Cached](#) - [Similar](#)

Free Web Portfolio Layout

Oct 23, 2007 ... Simple **Web Portfolio** Layout I've created a new **free Web** template to help

you get started posting your own **Web portfolio** ...

[webdesign.about.com/b/2007/10/free-web-portfolio-layout.htm](#) - [Cached](#) - [Similar](#)

Sponsored Links

Sponsored Links

Free Google Webpage

Create your presence on Google

Add photos, hours & more. It's easy

[Google.com/LocalBusinessCenter](#)

Free Web Site

Build A Professional **Website** For A

Business. Fast, Easy - Try Free!

[Intuit.com/websites](#)

Need your own website?

Powerful **portfolio website** solution

100% designed for photographers

[www.photum.com/FreeTrial](#)

Create Your Eportfolio

Easily Build, Update, and Host Your

Eportfolio. **Free** Trial. Sign Up!

[www.FolioLink.com](#)

Portfolio Websites

Design Your Own **Portfolio Website**

Signup for a **Free** 14-day Trial

[www.orsso.com](#)

Create a Free Website

Build Your Own Flash **Website**

Fully Customizable **Free** Templates

[www.wix.com/free/website](#)

Art Portfolio Website

Get your Artwork Online, right now!

Quick & Easy, no need to know HTML

[OtherPeoplesPixels.com](#)

Make A Free Website

Free Hosting. **Free** Design Tools

Easy To Use. Everything You Need

[WebStarts.com](#)

Check boxes for selecting search result pages. Now symmetrical

Figure 11: Google ChaCha service enabled (second iteration), with five choices already highlighted



Figure 12: “Answer screen” for the second iteration of Google ChaCha

Above is the “answer” screen as it shows the results of the question asked in the scenario after each ChaCha guide has searched the specified domain and given a response. The first iteration used the red x and green check system, but they were superimposed over the icons. Here, they replace the checkboxes’ location, with the other checkboxes invisible (as that function is no longer necessary). The user is given a pop-up when the click on each X or check which, if it is a green check, will display a link relevant to the answer. The reset button (which has replaced the “ask” button) can be clicked in order to start the query process over. The ChaCha icon in the upper right corner can also be clicked to immediately go to the ChaCha user’s history page.

To view an interactive prototype, please go to the following place in Oncourse:

SP10 IN INFO I561 25468 Resources / Team 3 (Ansari, Sleppy, Walsh) / Final / presentation prototype.zip

Instructions: Be sure to extract all files to a separate folder, any files activated within zip folder will NOT work. Once files are extracted, locate the file: “index.html” and open it. In some browsers, ActiveX controls will need to be enabled for the prototype to work. Once activated, users can click the “close frames” link in the left-side pane for clearer and more natural viewing.

G. Preliminary User Feedback

For our user feedback, we gave a demonstration of the Google ChaCha system, followed by a short questionnaire. The questionnaire began and ended with an open question, while the other questions utilized a Likert scale (in this case, the range was: 1=strongly disagree, 4=neutral, 7=strongly agree). The questions and combined answers are below:

User Evaluation for Google ChaCha

1. Do you think this new approach to a Google search will save you time?

Participant 1: I think that I can save time when I do not have a chance to read all of the web sites and research everything that I need to find all of the information about the search. This will help in narrowing down everything that I would need to know to make my life easier.

Participant 2: Yes, It saves a lot of time and I really liked the concept. I think sometimes it is very hard to find the answers that Google provides. You have to know how to ask your question either in “” or (). Also, it’s hard to get an abstract from the answers that which one really works for you

Participant 3: Yes, I like it better than the typical ChaCha service

Participant 4: Yes

Please type in number to the choice that best matches your answer.

2. The interface was effective (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 6

P2: 7

P3: 7

P4: 7

3. When using this product, I never felt lost (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 2

P2: 7

P3: 6

P4: 6

4. I was satisfied with this new paradigm of searching for links (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 5

P2: 7

P3: 6

P4: 6

5. I like the concept of the checkboxes next to website links to indicate selection (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 6

P2: 7

P3: 7

P4: 6

6. I understood which website links were selected for ChaCha's review (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 6

P2: 7

P3: 7

P4: 7

7. I understood what the icons present in the search results meant (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 6

P2: 7

P3: 7

P4: 7

8. I understood the concept present within the pop-up when clicking on an approved link (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 6

P2: 3

P3: 6

P4: 7

9. Even though I was not using my own ChaCha account, if I was, I would feel at ease using this product (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 5

P2: 4

P3: 6

P4: 6

10. This experience felt similar to my previous experience using ChaCha (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

P1: 4

P2: 1

P3: 2

P4: 5

11. What suggestions do you have on how this product could be improved?

P1: It appears that it is working well, however with more use one may find things that may need to be improved upon.

P2: The only suggestion that I have is, maybe you can improve the way that ChaCha provides pop-up rectangular that indicates the answers.

P3: None

P4: None

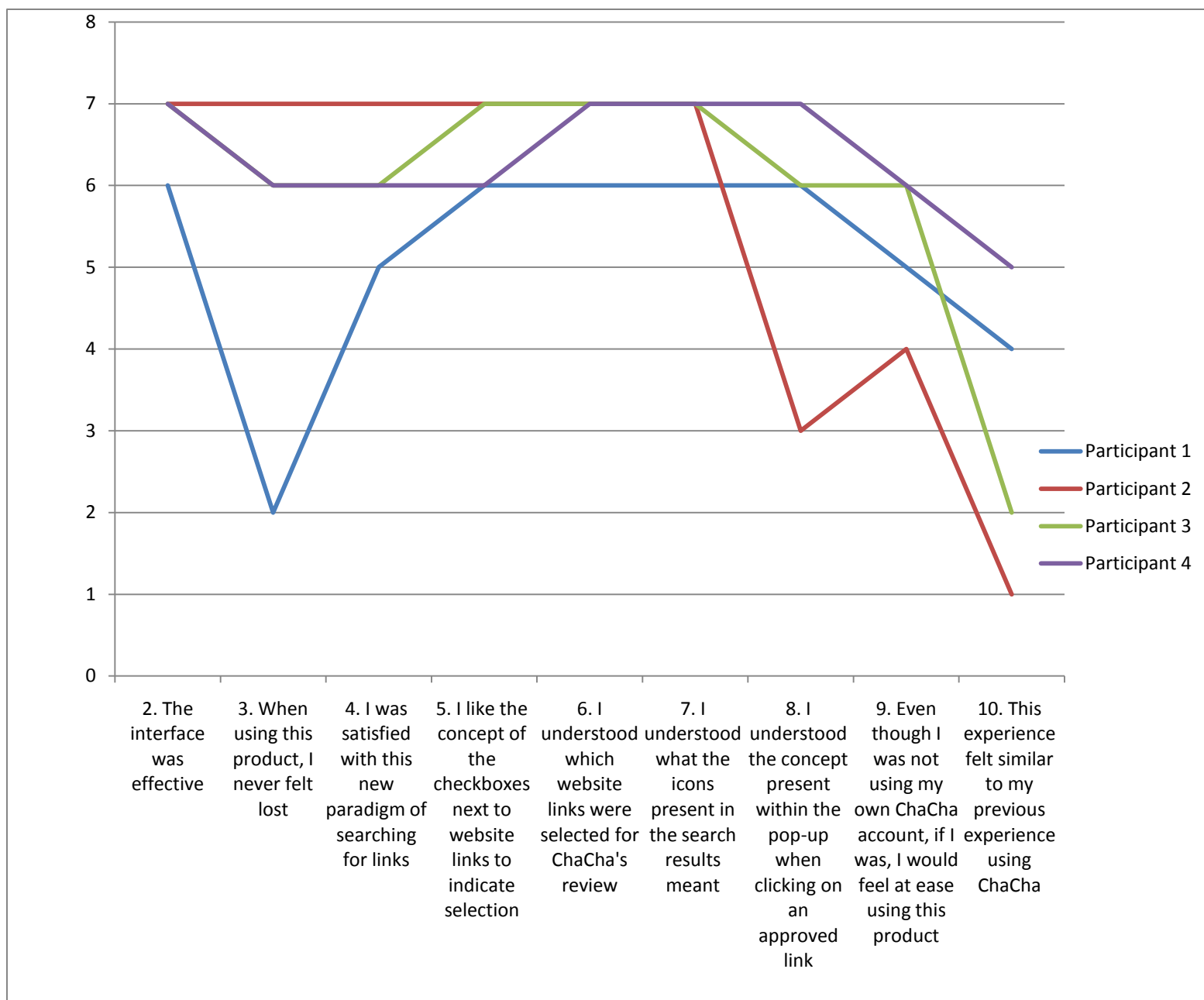


Figure 13: Compiled quantitative answers to User Evaluation for Google ChaCha

Figure 13 shows that for our evaluations, there were two sharp outliers. First, participant 1 was clearly lost during the evaluation (which could be contributed to the evaluators). Second, participant 2 clearly did not understand that the link reflected the positive nature of the answer, nor did P2 feel at ease with using the service. All four participants seemed to agree that this experience was different than their previous ChaCha experience. NOTE: the vertical axis represents the Likert scale used for questions 2-10, with 7 being the highest possible value. Overall, our participants responded positively to the design.

H. Appendix

i. Consent Form

Dear prospective participant,

Our names are Matt Walsh, Sepideh Ansari and Chris Sleppy. We are currently graduate students enrolled in the Indiana University School of Informatics HCI (human computer-interaction) program. We are very pleased that you have decided to join us in our study of usability issues within the ChaCha service.

As you may know, ChaCha is a simple question and answer service. You, the user, asks a question with a straightforward answer. For example, one may ask “When is the game between those two teams?” and the ChaCha guides’ response would most likely be “at ‘blank’ pm.” This is just an example, but we hope it illustrates the limitations of ChaCha so that there is no confusion on what it’s for. One more important note, each question is limited to the length of an SMS, or 160 characters, including spaces.

The goal of our study is to ascertain a user’s needs with regards to a service like ChaCha, which will then lead to a possible redesign or enhancement of the service. We want each user to know that there is no wrong answer, and every piece of information you give is crucial to understanding the overall user experience with ChaCha. We: Matt, Sepideh, and Chris, very much appreciate the time you are giving us for this study, and we thank you for any information or feedback that results from your participation.

Just so you know we are not affiliated in any way with ChaCha. This is not market research, and your information will not be used in any way, shape, or form for marketing. All information received will be kept anonymous within official documents (the final report), but may be tied to a name for internal discussions among group members, and just group members. Your name and personal identity will be made completely anonymous in the final report.

As with many services, there is a required registration. Below we have detailed a list of helpful instructions that hopefully explain the process of registration. This process should take no more than five minutes of your time.

Please follow the steps below:

1. Visit <http://www.chacha.com/>
2. Click “Signup” at the top-right of the screen (Upon subsequent visits, you may use the “Login” link to sign back in)
3. Fill out the form with appropriate information. Of particular importance is the Mobile Number (10 digits, no hyphens [-] or parentheses [()]) since, we’ve discovered that the best way to interact with ChaCha is via texts or phone calls, and the email address
4. Click that you agree to the Terms of Use and Privacy Policy
5. Click the “Create My Account” button
6. You should receive an email (to the email address specified) with information on how to activate you account. Click the link in the email and your account will be activated.

7. Upon activating your account, to activate your texting option, there will be a snippet to text to 242-242. Once this is complete, your account will be active.

Please note that ChaCha is free, but usual rates for phone calls and text messages still apply. In terms of data collection, please do the following:

1. Send a question to ChaCha, either via phone or text (we've found that the website's effectiveness is not the best, so calling or texting would be preferable) at least once a day.
2. Please answer the following questions about the question submitted to ChaCha:
 - a. Where were you when you sent your question to ChaCha?
 - b. What were you doing before you sent your question to ChaCha?
 - c. What time was it when you sent the question?
 - d. What prompted sending the question to ChaCha?
 - e. What was the question you asked ChaCha?
 - f. What was ChaCha's response?
 - g. How long did it take ChaCha to respond to your question?
 - h. Were you satisfied with the answer you received?
 - i. Do you think you could have found the answer yourself in a more efficient manner? If so, how?
 - j. Last but not least, what was the date you asked the question?

Please send the answers to the questions as either an email to the group member who presented you with this consent form (email addresses are at the end of the document), or write the answer on paper and submit it to the group member who presented you with this consent form. Email is preferred.

3. After ten (10) days, a group member will ask you a few questions about your experiences with ChaCha. After the questions are answered, the data collection will be complete.

Again there are no wrong answers, so you are not being tested on your proficiency with ChaCha. The data collection focuses only on the answers to the questions provided above. For research purposes, we also ask that you provide the question you asked of ChaCha.

Once again, your personal identity (including name) will be kept anonymous and confidential within the final report. We may use your first names for internal discussion about the data, but at no other time will we disclose any personal information with anyone external of this study.

We take your privacy very seriously, and if you feel that at any time your identity is being compromised, or you feel uncomfortable in participating, you have the option of leaving the study altogether. We do hope that you will contact a group member prior to your decision to leave the study. Contact details for each group member are below:

Matt Walsh: mdwalsh@iupui.edu

Sepideh Ansari: seansari@iupui.edu

Chris Sleppy: csleppy@iupui.edu

Once again, we appreciate and thank you for your time and efforts, and we look forward to hearing about your experiences with ChaCha!

Sincerely,

Matt Walsh
Sepideh Ansari
Christopher Sleppy

I have read and agree to the conditions specified above. I am familiar with what is expected of me, and I agree to participate. I am also aware that I may withdraw at any time.

(Please Sign Here)

ii. Spreadsheet of Consolidated Responses of Preliminary ChaCha Study

Participant #1

Date	Question	Participant #1 Response
3/26/2010	Where were you when you sent your question to ChaCha?	home
	What were you doing before you sent your question to ChaCha?	watching tv
	What time was it when you sent the question?	335pm
	What prompted sending the question to ChaCha?	my brother asked me to
	What was the question you asked ChaCha?	who will win the NCAA tourney this year?
	What was ChaCha's response?	Michigan State all the way, or maybe not **mike homes is Back on HGTV! http://hgtv1.us/GhrV
	How long did it take ChaCha to respond to your question?	339pm
	Were you satisfied with the answer you received?	I don't think they will win, but they have a chance so the answer is good
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	i would have waited until april 5 to get a true answer
3/27/2010	Where were you when you sent your question to ChaCha?	work
	What were you doing before you sent your question to ChaCha?	hardly working
	What time was it when you sent the question?	1053pm
	What prompted sending the question to ChaCha?	i wondered what the answer would be
	What was the question you asked ChaCha?	what is howl at the moon?
	What was ChaCha's response?	Howl at the Moon is a night club where two 'dueling' piano players face each other and take turns singing time tested tunes
	How long did it take ChaCha to respond to your question?	1055pm 3 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	i could have asked someone that has been there

3/28/2010	Where were you when you sent your question to ChaCha?	home
	What were you doing before you sent your question to ChaCha?	playing video games
	What time was it when you sent the question?	314pm
	What prompted sending the question to ChaCha?	i was thinking about it and thought i ask
	What was the question you asked ChaCha?	is IUPUI a good college?
	What was ChaCha's response?	Yes, Indiana University-Purdue University Indianapolis has some great benefits including myraid of programs to choose from
	How long did it take ChaCha to respond to your question?	321pm 7 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	it was pretty efficient

3/29/2010	Where were you when you sent your question to ChaCha?	walking to class
	What were you doing before you sent your question to ChaCha?	getting ready for class
	What time was it when you sent the question?	557pm
	What prompted sending the question to ChaCha?	i think i saw a horse fly
	What was the question you asked ChaCha?	what is a horse fly?
	What was ChaCha's response?	(they asked me a 3 question survey and then told me they were too busy to answer)
	How long did it take ChaCha to respond to your question?	558pm 1 min
	Were you satisfied with the answer you received?	no
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	i could have asked someone on the street or used the internet when i got to class

3/30/2010	Where were you when you sent your question to ChaCha?	in class
	What were you doing before you sent your question to ChaCha?	bored in class

	What time was it when you sent the question?	148pm
	What prompted sending the question to ChaCha?	pondering
	What was the question you asked ChaCha?	how much RAM does the best mac laptop have?
	What was ChaCha's response?	(i am out of questions, because they are growing so fast they need to have limits)
	How long did it take ChaCha to respond to your question?	149pm
	Were you satisfied with the answer you received?	no
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	definitely
3/31/2010	Where were you when you sent your question to ChaCha?	campus center
	What were you doing before you sent your question to ChaCha?	eating
	What time was it when you sent the question?	509pm
	What prompted sending the question to ChaCha?	i wanted to know the answer
	What was the question you asked ChaCha?	what is the meaning of life?

	What was ChaCha's response?	you just can't do a websearch for truth, love, and God's existence. It takes soul searching. Be kind and keep asking chacha.
	How long did it take ChaCha to respond to your question?	509pm
	Were you satisfied with the answer you received?	it was ok
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	discussing with people around me
4/1/2010	Where were you when you sent your question to ChaCha?	home
	What were you doing before you sent your question to ChaCha?	chillaxin
	What time was it when you sent the question?	345pm
	What prompted sending the question to ChaCha?	random thought
	What was the question you asked ChaCha?	how can you tell a dogwood tree right away?

	What was ChaCha's response?	from its bark
	How long did it take ChaCha to respond to your question?	347pm 2 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	no
4/2/2010	Where were you when you sent your question to ChaCha?	home
	What were you doing before you sent your question to ChaCha?	getting ready for a bball game
	What time was it when you sent the question?	144pm
	What prompted sending the question to ChaCha?	wondered if they could get it right
	What was the question you asked ChaCha?	how many mascots does IUPUI have?
	What was ChaCha's response?	"you are over your Q limit at this time try again later"
	How long did it take ChaCha to respond to your question?	144pm
	Were you satisfied with the answer you received?	no
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	i already knew the answer, its 2 right now Jawz an Jinx and used to be the metros before they join the NCAA division 1
4/3/2010	Where were you when you sent your question to ChaCha?	home
	What were you doing before you sent your question to ChaCha?	sleeping
	What time was it when you sent the question?	1252pm
	What prompted sending the question to ChaCha?	not sure
	What was the question you asked ChaCha?	where is the final 4?
	What was ChaCha's response?	the final four with the championship game held on April 5 is in Lucas Oil stadium in Indianapolis, IN

	How long did it take ChaCha to respond to your question?	1253pm
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	no
4/4/2010	Where were you when you sent your question to ChaCha?	work
	What were you doing before you sent your question to ChaCha?	working
	What time was it when you sent the question?	1130pm
	What prompted sending the question to ChaCha?	a customer asked
	What was the question you asked ChaCha?	who is the lead singer of the eagles that was a drug addict?
	What was ChaCha's response?	we can't respond right now ... try again later
	How long did it take ChaCha to respond to your question?	1133pm
	Were you satisfied with the answer you received?	no
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	yes, asked another person at work
Post Study	How would you rate your experience with ChaCha?	ok .. 5 on a 1 to 10
	Have you asked your daily questions out of curiosity, or because you felt it was required as per the study?	both .. i used it for the study, but the study also made me think to ask chacha when i did have a question
	What is one thing you liked about ChaCha?	it's quick

	What is one thing you disliked about ChaCha?	it didn't answer about a third of my questions
	Was the process of submitting a question to ChaCha a positive experience, or a hassle?	Positive

Participant #2

Date	Question	Participant #2 Response
3/26/2010	Where were you when you sent your question to ChaCha?	Shopping at mall
	What were you doing before you sent your question to ChaCha?	Browsing stores at mall
	What time was it when you sent the question?	11:00 AM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	2010spring fashion?
	What was ChaCha's response?	2010 spring fashion is known as shows that are exhibited throughout the world. So, places like New York and Paris have spring fashion shows, showing off the latest lines of designers.
	How long did it take ChaCha to respond to your question?	7 min.
	Were you satisfied with the answer you received?	Not really
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	I am not sure, probably I could have asked the shopping assistance at the store.
3/27/2010	Where were you when you sent your question to ChaCha?	Driving toward theatre
	What were you doing before you sent your question to ChaCha?	Driving
	What time was it when you sent the question?	6:00 PM

	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Best movie in march 2010
	What was ChaCha's response?	The 2010 Oscar Winner list shows that Avatar, The Blind Side, District 9, The Hurt Locker, Up and Up In The Air top the list. ChaCha! *Doubt?
	How long did it take ChaCha to respond to your question?	2-3 min.
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	I could have asked from my friends
3/28/2010	Where were you when you sent your question to ChaCha?	home, doing exercise
	What were you doing before you sent your question to ChaCha?	
	What time was it when you sent the question?	7:00 PM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	How to lose 10 pounds in 30 days
	What was ChaCha's response?	There is no healthy way to lose 30 pounds in 10 days. That type of weight loss is not sustainable, losing 2 to 3 pounds a week is healthy. And that can be achieved through eating less calories than you expend through exercise.
	How long did it take ChaCha to respond to your question?	5 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	not at that time
3/29/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	bottle-feeding my new born boy.
	What time was it when you sent the question?	2:00 PM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Side effect of probiotic on infants

	What was ChaCha's response?	Probiotics are considered safe for infants to use, except in certain types of circumstances. They are.....
	How long did it take ChaCha to respond to your question?	2 min
	Were you satisfied with the answer you received?	No, expected more information
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Yes, I could have google it

3/30/2010	Where were you when you sent your question to ChaCha?	Driving toward home while missing the show
	What were you doing before you sent your question to ChaCha?	Driving
	What time was it when you sent the question?	9:45
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Result for dancing with the stars
	What was ChaCha's response?	Sa-weet Q! *Who will be voted off American Idol? Who will win the big game? You could win \$50K+prizes for your vote! Get started - txt GUESS to 654654 Please let us know which episode you want those results for so we can better help you.
	How long did it take ChaCha to respond to your question?	5 min
	Were you satisfied with the answer you received?	No
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	No, perhaps asking my friend

3/31/2010	Where were you when you sent your question to ChaCha?	Kitchen
	What were you doing before you sent your question to ChaCha?	deciding baking cake
	What time was it when you sent the question?	4:00 PM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Cake with one egg

	What was ChaCha's response?	<p>Hey, b4 we answer, pls help us personalize ChaCha to better meet ur needs. Just answer 4 short Qs! -- Q1: What is your gender? Txt MALE or FEMALE back to us Female</p> <p>Q2: What type of phone do you have? Txt 1-Windws Mbl, 2-iPhone, 3-BlckBry, 4-Palm, 5-Android, 6-Other Phone w/Web, 7-Other Non-Web Phone iPhone Q3: What's ur ZIP? This helps us answer ur Qs better and hook u up with Hot Local Deals on food, fashion, Last Question! Q4: What is your age? 09.30.1978 You can substitute one cup of apple sauce for one egg or I have a recipe for a one egg cake. Would you like the recipe?</p> <p>1/3 Betty's One Egg Vanilla Cake Recipe: Ingredients * 2/3 cup of Sugar * 1/4 cup of Shortening * 1/2 cup of Milk * 1 Egg * 1/4 2/3 tsp of Salt * 1 tsp of Vanilla * 1 1/2 cups of Flour * 2 tsp of Baking Powder Directions 1. Mix all of the ingredients. 2. 3/3 Pour into cake pan. 3. Bake at 350 for 25 minutes.</p>
	How long did it take ChaCha to respond to your question?	3 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	maybe on google
4/1/2010	Where were you when you sent your question to ChaCha?	Behind red traffic light
	What were you doing before you sent your question to ChaCha?	driving
	What time was it when you sent the question?	6:00 PM
	What prompted sending the question to ChaCha?	concerned about ran out of gas
	What was the question you asked ChaCha?	Where to find best price for gas?

	What was ChaCha's response?	The lowest price I'm seeing for gas in Frederick, MD is at the the Freestate at 1180 W Patrick St. & Willowdale Dr. Gas is \$ 2.75.
	How long did it take ChaCha to respond to your question?	6 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	No, and I liked the answer
4/2/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Resting on bed
	What time was it when you sent the question?	10pm
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Tickets for Disney on ice?
	What was ChaCha's response?	The cheapest tickets for Disney On Ice in Indiana are \$49 for December 2, 2009 at Conseco Fieldhouse, Row 20 Section 112.
	How long did it take ChaCha to respond to your question?	7 min
	Were you satisfied with the answer you received?	No
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Not sure
4/3/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Responding my emails
	What time was it when you sent the question?	12:00 PM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	Why do we file the census?
	What was ChaCha's response?	The census helps the government know the exact population as well as demographics for the country.
	How long did it take ChaCha to respond to your question?	5 min

	Were you satisfied with the answer you received?	yes, expected more info
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	yes, could have wikipedia it
4/4/2010	Where were you when you sent your question to ChaCha?	My boy's school
	What were you doing before you sent your question to ChaCha?	waiting at parking lot
	What time was it when you sent the question?	2:00 PM
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	What is an average IQ of a 4 years old boy?
	What was ChaCha's response?	The average IQ is 100. IQ measures cognitive activity, so their IQ should be the same rather your 4 or 100
	How long did it take ChaCha to respond to your question?	5 min
	Were you satisfied with the answer you received?	yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Yes, on the Internet
Post Study	How would you rate your experience with ChaCha?	First 5 days: She was disappointed about ChaCha. Second 5days: She liked the way ChaCha answers the question, She felt she is chatting with her friend. In the case of misunderstanding the question, ChaCha tried to clarify the question with back and forth questions.
	Have you asked your daily questions out of curiosity, or because you felt it was required as per the study?	First 5 days: Out of curiosity, She really wanted to know the answers of the questions. Second 5days: Out of curiosity, She really wanted to know the answers of the questions.
	What is one thing you liked about ChaCha?	First 5 days: She liked the short answers. Second 5days: She felt friendly experience with ChaCha.

	What is one thing you disliked about ChaCha?	First 5 days: It wasn't clear for her. Because she had never heard about ChaCha before. So, she wasn't familiar with ChaCha and didn't know how to ask questions. Second 5days: She wasn't sure, where ChaCha get the answers(from real people, Google, Yahoo,...). There were no reference.
	Was the process of submitting a question to ChaCha a positive experience, or a hassle?	First 5 days: If it were just 5 days, she would never experience it again. Second 5days: Positive experience, She said she might turn back to ChaCha and ask more questions after this study, because she liked the experience with ChaCha.

Participant #3

Date	Question	Participant #3 Response
3/26/2010	Where were you when you sent your question to ChaCha?	In my office
	What were you doing before you sent your question to ChaCha?	Reading
	What time was it when you sent the question?	9.55pm
	What prompted sending the question to ChaCha?	Curiosity
	What was the question you asked ChaCha?	When is the next solstice?
	What was ChaCha's response?	"Oh Man, Cha Cha is extra super busy and we can't answer your Q right this moment. Sorry!"
	How long did it take ChaCha to respond to your question?	10 min
	Were you satisfied with the answer you received?	No
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google took two minutes
3/27/2010	Where were you when you sent your question to ChaCha?	Comic Shop
	What were you doing before you sent your question to ChaCha?	Listening to a debate
	What time was it when you sent the question?	2:39pm
	What prompted sending the question to ChaCha?	Curiosity

	What was the question you asked ChaCha?	What was the first comic the Martian manhunter appeared in?
	What was ChaCha's response?	"The Martian Manhunter debuted in the back-up story "The Strange experiment of Dr. Erdel" in Detective Comics #225 Nov. 1955"
	How long did it take ChaCha to respond to your question?	3 min
	Were you satisfied with the answer you received?	Very
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Maybe Google
3/28/2010	Where were you when you sent your question to ChaCha?	At work
	What were you doing before you sent your question to ChaCha?	Thinking up a question I know the answer to
	What time was it when you sent the question?	1:39pm
	What prompted sending the question to ChaCha?	Had to, part of study
	What was the question you asked ChaCha?	What year did a stamp cost 21 cents?
	What was ChaCha's response?	28 "First class postage stamp was never 21 cents. Nov, 1981 a stamp was 20 cents. The it was increased to 22 cents on Feb 17, 1985"
	How long did it take ChaCha to respond to your question?	3 min
	Were you satisfied with the answer you received?	Very
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
3/29/2010	Where were you when you sent your question to ChaCha?	At work
	What were you doing before you sent your question to ChaCha?	Working
	What time was it when you sent the question?	11:37am
	What prompted sending the question to ChaCha?	Listening to ipod
	What was the question you asked ChaCha?	How much does a headphone cable cost?
	What was ChaCha's response?	"A headphone cable can vary from ten to twenty dollars depending on the length and place of purchase"

	How long did it take ChaCha to respond to your question?	4 min
	Were you satisfied with the answer you received?	sort of
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google, Target.com, Amazon.com
3/30/2010	Where were you when you sent your question to ChaCha?	Friend's house
	What were you doing before you sent your question to ChaCha?	Hanging out at a friend's house
	What time was it when you sent the question?	12:33pm
	What prompted sending the question to ChaCha?	Just saw trailer but missed the date
	What was the question you asked ChaCha?	When is Iron Man 2 coming out in theaters?
	What was ChaCha's response?	"Iron Man 2, starring Robert Downey Jr. as Tony Stark, is scheduled to be released May 7, 2010"
	How long did it take ChaCha to respond to your question?	1 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Call a buddy, Google
3/31/2010	Where were you when you sent your question to ChaCha?	Book store
	What were you doing before you sent your question to ChaCha?	Browsing books
	What time was it when you sent the question?	3:17pm
	What prompted sending the question to ChaCha?	I didn't see the entire collection
	What was the question you asked ChaCha?	How many Discworld Novels have there been?
	What was ChaCha's response?	"Jeff Lindsay has written three Dexter books: Darkly Dreaming Dexter, Dearly Devoted Dexter, and Dexter in the Dark."
	How long did it take ChaCha to respond to your question?	13 min

	Were you satisfied with the answer you received?	No, wrong author and series, plus it made me answer a survey before receiving a response
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google, Amazon.com
4/1/2010	Where were you when you sent your question to ChaCha?	Dining Room
	What were you doing before you sent your question to ChaCha?	Having Easter breakfast
	What time was it when you sent the question?	1:22pm
	What prompted sending the question to ChaCha?	Wanted to know as I had just had breakfast
	What was the question you asked ChaCha?	When is Easter next year?
	What was ChaCha's response?	"April 24th, both Western and Eastern."
	How long did it take ChaCha to respond to your question?	5 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
4/2/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Talking to my father
	What time was it when you sent the question?	5:04pm
	What prompted sending the question to ChaCha?	Father is planning a trip
	What was the question you asked ChaCha?	What is the exchange rate for the British pound?
	What was ChaCha's response?	"One United States dollar is equal to 1.4619 British Pounds"
	How long did it take ChaCha to respond to your question?	1 min
	Were you satisfied with the answer you received?	Yes, very precise
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	xe.com

4/3/2010	Where were you when you sent your question to ChaCha?	Oil Change Workshop
	What were you doing before you sent your question to ChaCha?	Talking to employee
	What time was it when you sent the question?	2:00pm
	What prompted sending the question to ChaCha?	Employee is pushing this on me
	What was the question you asked ChaCha?	When should you change the transmission fluid on a Honda Accord 2005?
	What was ChaCha's response?	"You should change regularly every 20,000 to 25,000 miles."
	How long did it take ChaCha to respond to your question?	13 min
	Were you satisfied with the answer you received?	Yes, saved me money
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
4/4/2010	Where were you when you sent your question to ChaCha?	Gift Shop
	What were you doing before you sent your question to ChaCha?	Waiting in line
	What time was it when you sent the question?	3:00pm
	What prompted sending the question to ChaCha?	I was thinking about how long my purchase – a t-shirt – would last.
	What was the question you asked ChaCha?	Do cotton shirts shrink?
	What was ChaCha's response?	"Cotton fibers swell up when wet with water which in effect shortens the length of the fiber. Dry it on low heat. Chacha on!"
	How long did it take ChaCha to respond to your question?	1 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
Post Study	How would you rate your experience with ChaCha?	Half and Half

	Have you asked your daily questions out of curiosity, or because you felt it was required as per the study?	Occasionally out of curiosity, but because the service gave me unreliable answers at first, I also asked simple questions I knew the answers to already to gauge the system
	What is one thing you liked about ChaCha?	Some of the answers were dead on.
	What is one thing you disliked about ChaCha?	Some of the answers were either non-existent or way off
	Was the process of submitting a question to ChaCha a positive experience, or a hassle?	Sometimes both

Participant #4

Date	Question	Participant #4 Response
3/26/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Watching TV
	What time was it when you sent the question?	7ish
	What prompted sending the question to ChaCha?	Wanted to know
	What was the question you asked ChaCha?	When does Butler play Syracuse?
	What was ChaCha's response?	"Butler plays Syracuse on Thursday March 25th. Purists love the game!"
	How long did it take ChaCha to respond to your question?	3 min
	Were you satisfied with the answer you received?	No, it rephrased my question and did not give me an exact answer.
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
3/27/2010	Where were you when you sent your question to ChaCha?	Work
	What were you doing before you sent your question to ChaCha?	Making vacations requests from boss
	What time was it when you sent the question?	3ish
	What prompted sending the question to ChaCha?	Planning vacation
	What was the question you asked ChaCha?	What day of the week does Christmas 2011 fall on?

	What was ChaCha's response?	"Christmas Day 2011 is a Sunday."
	How long did it take ChaCha to respond to your question?	4 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Not at the time

3/28/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Cutting a recipe in half
	What time was it when you sent the question?	Around 2:30
	What prompted sending the question to ChaCha?	Cooking, didn't have 1/8 cup measurement
	What was the question you asked ChaCha?	How many Tablespoons in a ¼ cup?
	What was ChaCha's response?	"One quarter US cup equals 12 US teaspoons."
	How long did it take ChaCha to respond to your question?	2 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Maybe ask someone to look it up, Google

3/29/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Talking to my husband
	What time was it when you sent the question?	Around 3:30
	What prompted sending the question to ChaCha?	Watching Tudors
	What was the question you asked ChaCha?	How old was Henry VIII when he died?
	What was ChaCha's response?	"Henry VIII was 56 when he died."
	How long did it take ChaCha to respond to your question?	3 min
	Were you satisfied with the answer you received?	Yes
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google

3/30/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Reading an article about Dr. Suess
	What time was it when you sent the question?	5ish

	What prompted sending the question to ChaCha?	Article didn't say how many books he wrote
	What was the question you asked ChaCha?	How many books did Dr. Suess write?
	What was ChaCha's response?	"Between 1937 and 1991, when he died at age 87, he published more than 40 books which have sold half a billion copies."
	How long did it take ChaCha to respond to your question?	5 min
	Were you satisfied with the answer you received?	Yes, very thorough
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Not such thorough information
3/31/2010	Where were you when you sent your question to ChaCha?	Home
	What were you doing before you sent your question to ChaCha?	Paying a bill
	What time was it when you sent the question?	1ish
	What prompted sending the question to ChaCha?	Didn't know whether to buy or turn in lease
	What was the question you asked ChaCha?	What is the approximate value of a 2008 Ford Escape in good condition?
	What was ChaCha's response?	"Doh! Looks like we double dribbled your Q! Sorry!"
	How long did it take ChaCha to respond to your question?	10 min
	Were you satisfied with the answer you received?	Not at all
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google
4/1/2010	Where were you when you sent your question to ChaCha?	In car
	What were you doing before you sent your question to ChaCha?	Putting up a clothes line
	What time was it when you sent the question?	6ish
	What prompted sending the question to ChaCha?	Wondering if there is a different name for clothes pins
	What was the question you asked ChaCha?	Is there a difference between clothes pins and clothes pegs?
	What was ChaCha's response?	"Doh! Looks like we double dribbled your Q! Sorry!"

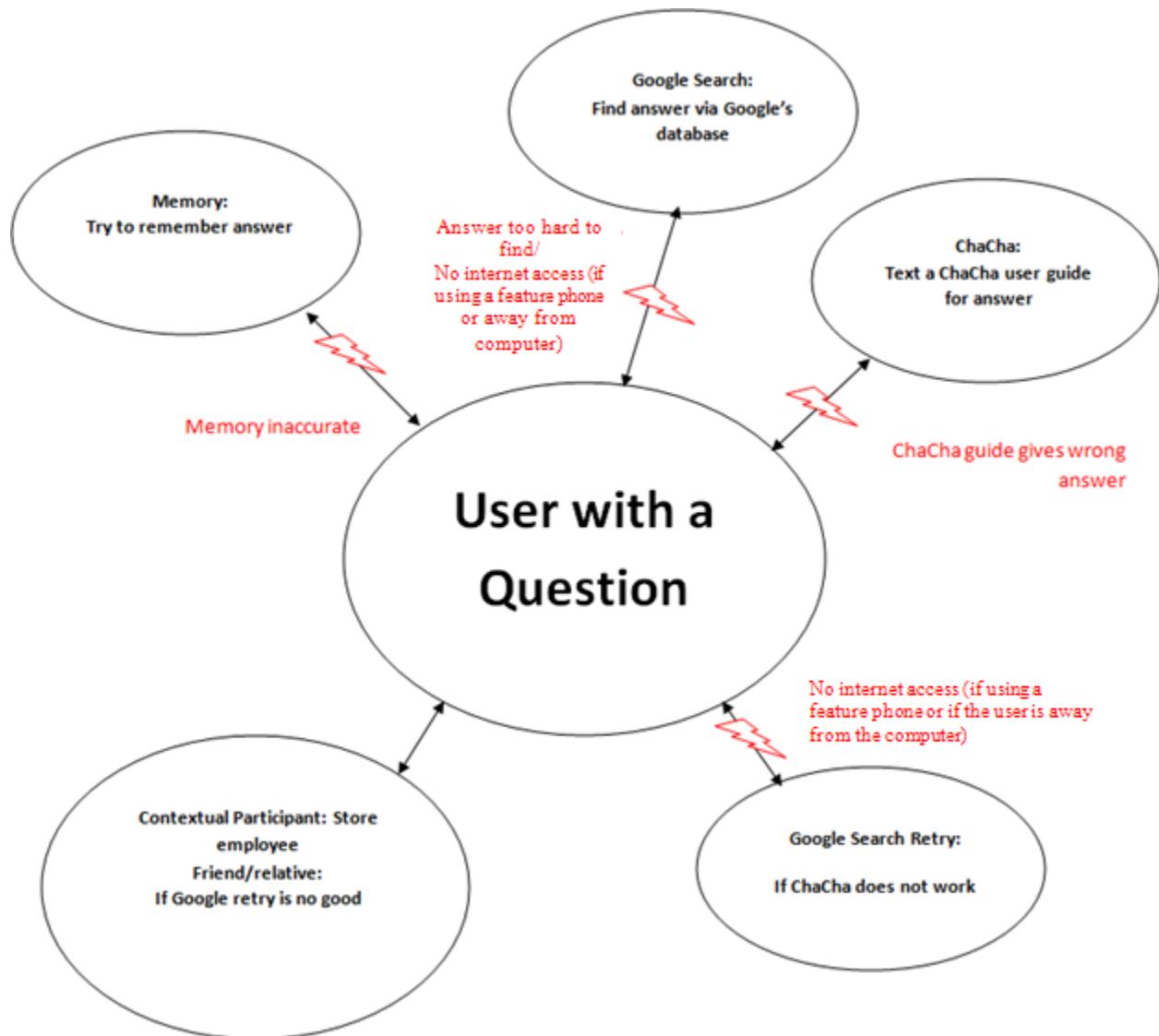
	How long did it take ChaCha to respond to your question?	8 min
	Were you satisfied with the answer you received?	Nope
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google: took a couple seconds
4/2/2010	Where were you when you sent your question to ChaCha?	Burger King
	What were you doing before you sent your question to ChaCha?	Looking for lunch
	What time was it when you sent the question?	Noonish
	What prompted sending the question to ChaCha?	In line at Burger King
	What was the question you asked ChaCha?	How many calories in a Whopper?
	What was ChaCha's response?	"A Whopper from Burger King has 670 calories, 41 grams of fat, 44 grams of carbohydrates, and 30 grams of protein."
	How long did it take ChaCha to respond to your question?	1 min
	Were you satisfied with the answer you received?	Yes, but a little too much info
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google; Call Burger King
4/3/2010	Where were you when you sent your question to ChaCha?	Work
	What were you doing before you sent your question to ChaCha?	Looking for lunch
	What time was it when you sent the question?	Noonish
	What prompted sending the question to ChaCha?	Near a McDonalds
	What was the question you asked ChaCha?	How Many calories in a Big Mac?
	What was ChaCha's response?	"Big Mac, McDonald's Calories in 100g of Big Mac, Calories 229"
	How long did it take ChaCha to respond to your question?	1 min
	Were you satisfied with the answer you received?	Yes, though it is not well written
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google; call McDonalds
4/4/2010	Where were you when you sent your question to ChaCha?	Work
	What were you doing before you sent your question to ChaCha?	Taking a break at work

	What time was it when you sent the question?	11ish
	What prompted sending the question to ChaCha?	Thinking about gardening
	What was the question you asked ChaCha?	When I can safely start planting out non-cold hardy plants?
	What was ChaCha's response?	"Doh! Looks like we double dribbled your Q! Sorry!"
	How long did it take ChaCha to respond to your question?	8 min
	Were you satisfied with the answer you received?	No
	Do you think you could have found the answer yourself in a more efficient manner? If so, how?	Google; Anything but Cha Cha
Post Study	How would you rate your experience with ChaCha?	Generally satisfied, but I can't really use it for personally meaningful questions
	Have you asked your daily questions out of curiosity, or because you felt it was required as per the study?	Half curious, half because I felt obligated to ask a question
	What is one thing you liked about ChaCha?	Some of the questions I didn't expect an answer for got one
	What is one thing you disliked about ChaCha?	That questions that clearly required a bit more research were simply avoided, and furthermore tagged with inappropriate replies
	Was the process of submitting a question to ChaCha a positive experience, or a hassle?	I would not use it again, I can always write down notes to myself and use Google at the end of the day.

iii. Work Models

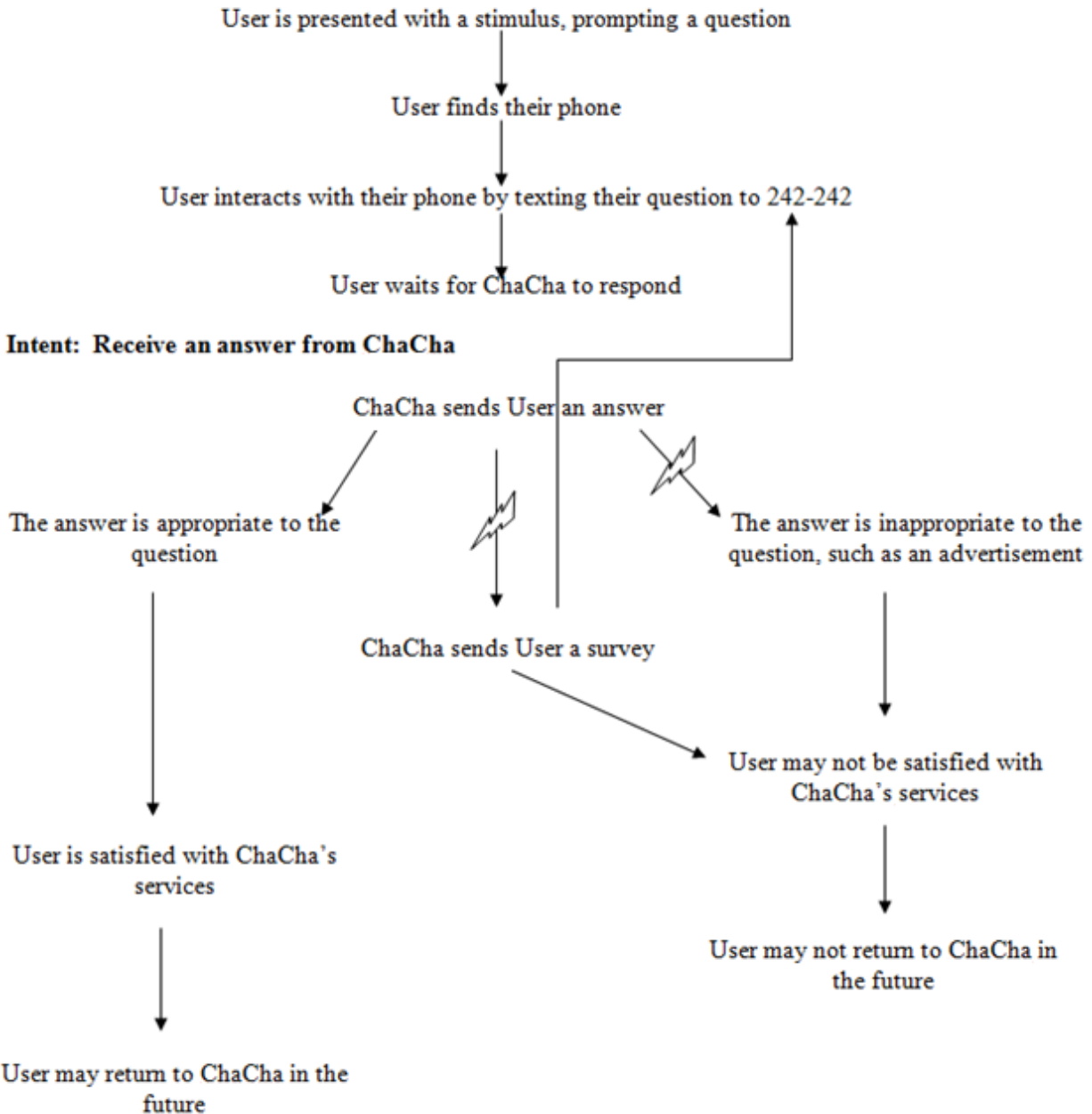
a. Flow Model

The Flow Model identifies the various flows of activity that are recognized during the User's overall interaction with ChaCha. A lightning bolt identifies a recognized breakdown in the system.



b. Sequence Model

The Sequence Model shows the typical path of interaction between the User and ChaCha when a question is sent via SMS. Breakdowns in the interaction are identified with a lightning bolt through the arrow.

Intent: Ask ChaCha a question

c. Artifact Model**Artifact 1: Smartphone**

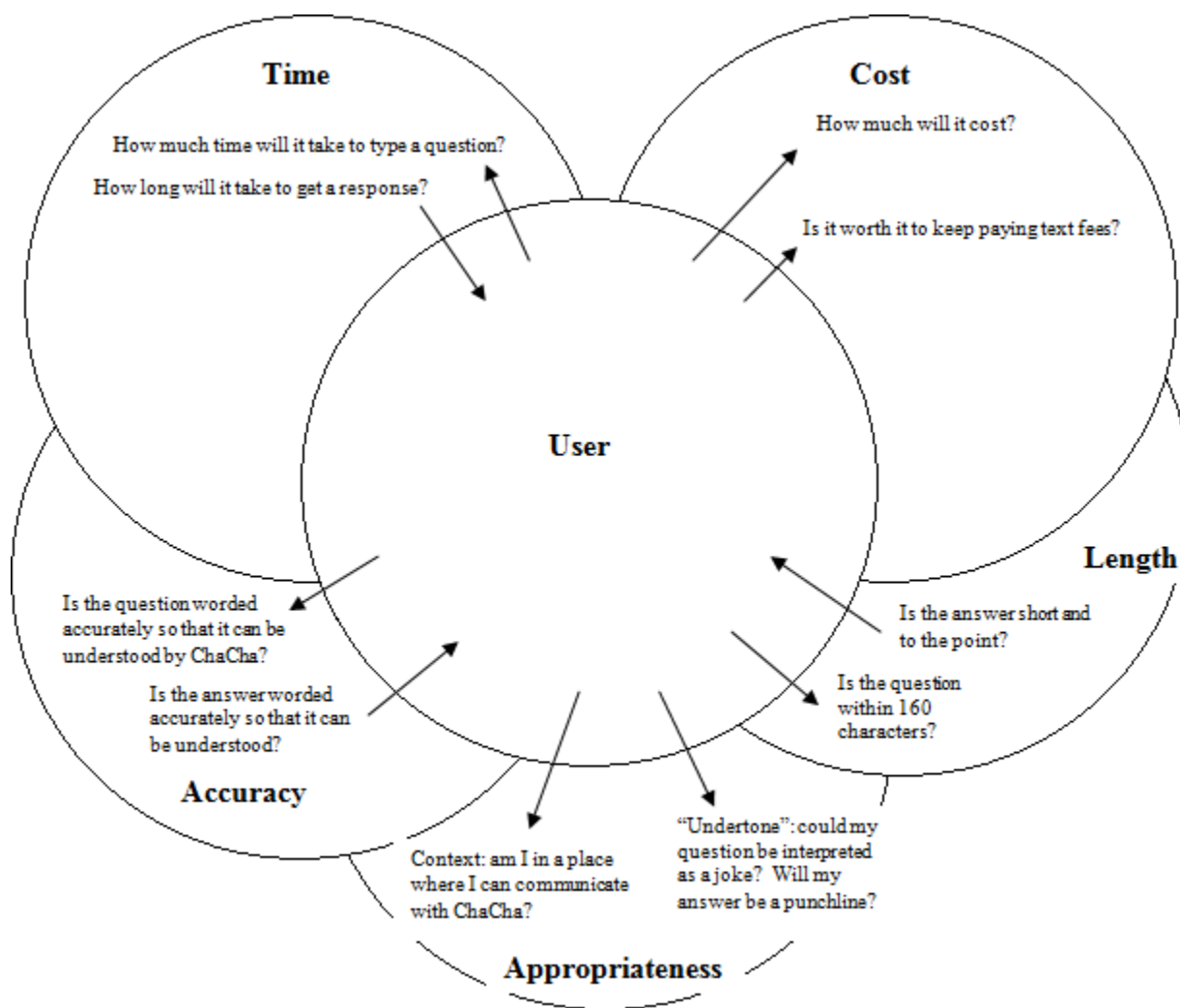
In this artifact, the User possesses a Smartphone capable of browsing the web. Because of this added functionality, the User is able to redo a Google search (or similar) if ChaCha produces a wrong answer.

Artifact 2: Feature Phone

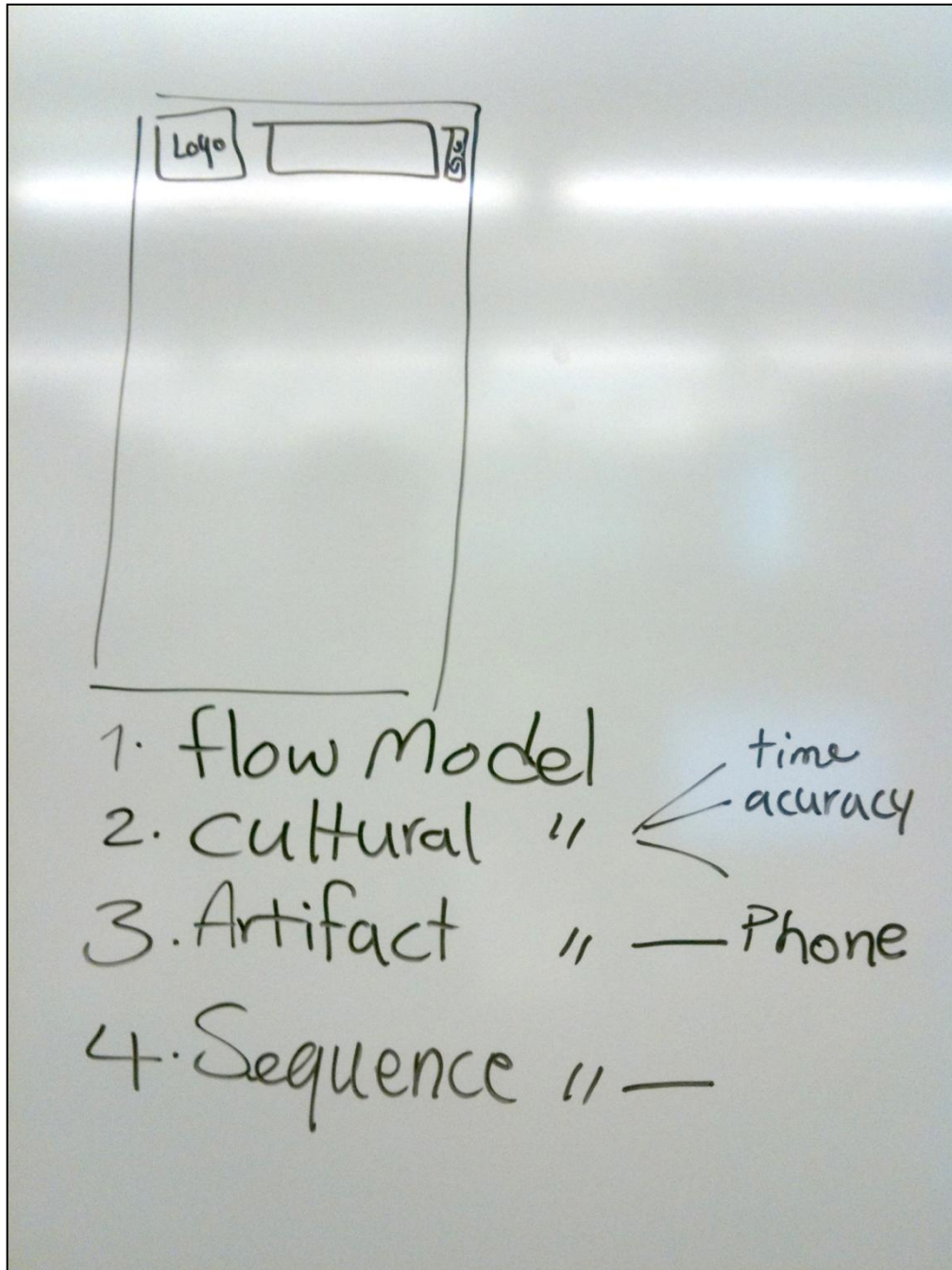
This artifact does not possess any web access. As such, the user is limited to only making calls and sending or receiving SMS or MMS. Thus, the user cannot access a search provider to make up for ChaCha should its service fail to provide an adequate answer.

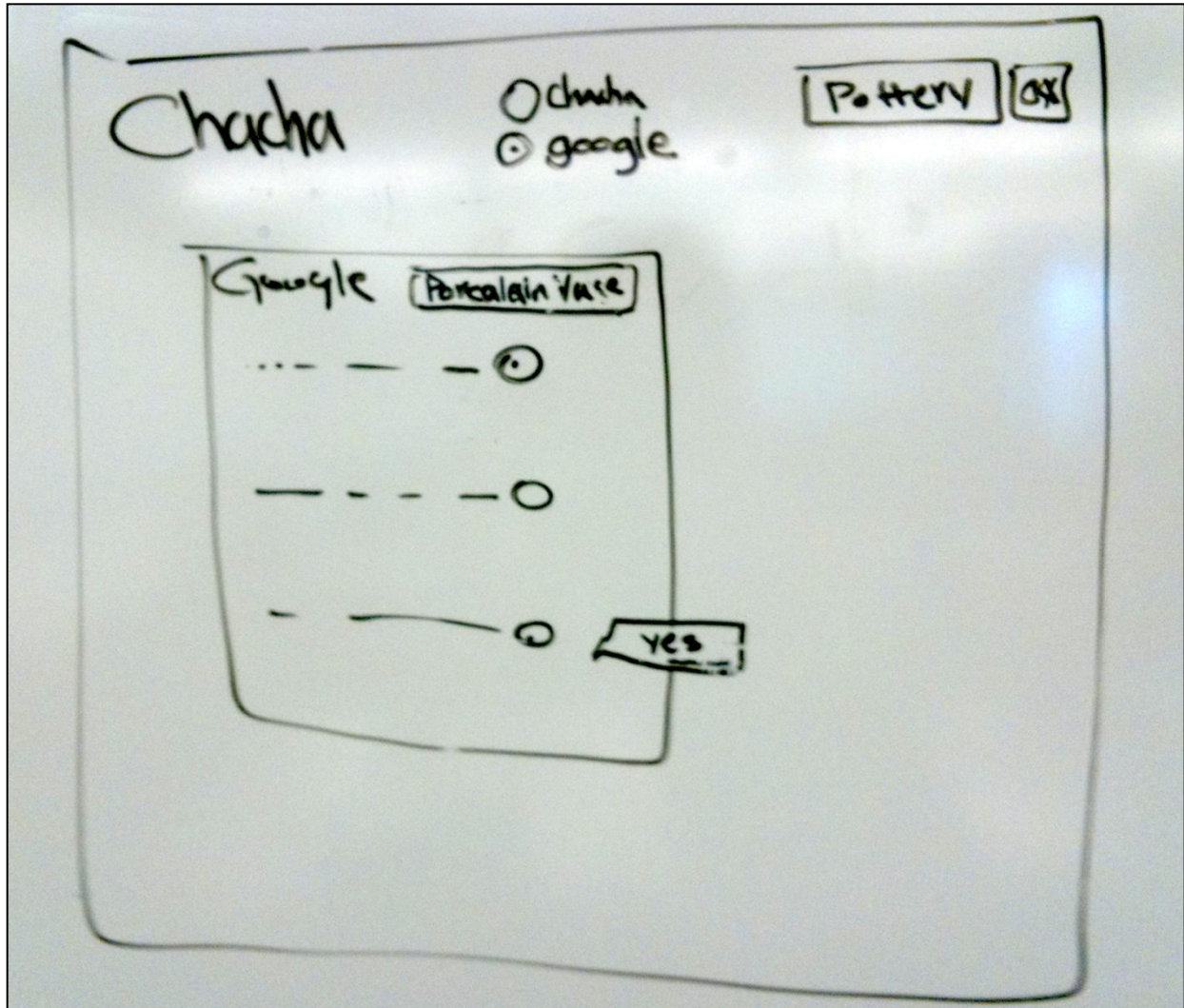
d. Cultural Model

The Cultural Model shows the culture surrounding the experience with ChaCha and how it affects the User. The z-index of the circles indicates a hierarchy, with circles at the “bottom” being influenced by the circles on top.



iv. Conceptual Model Sketches





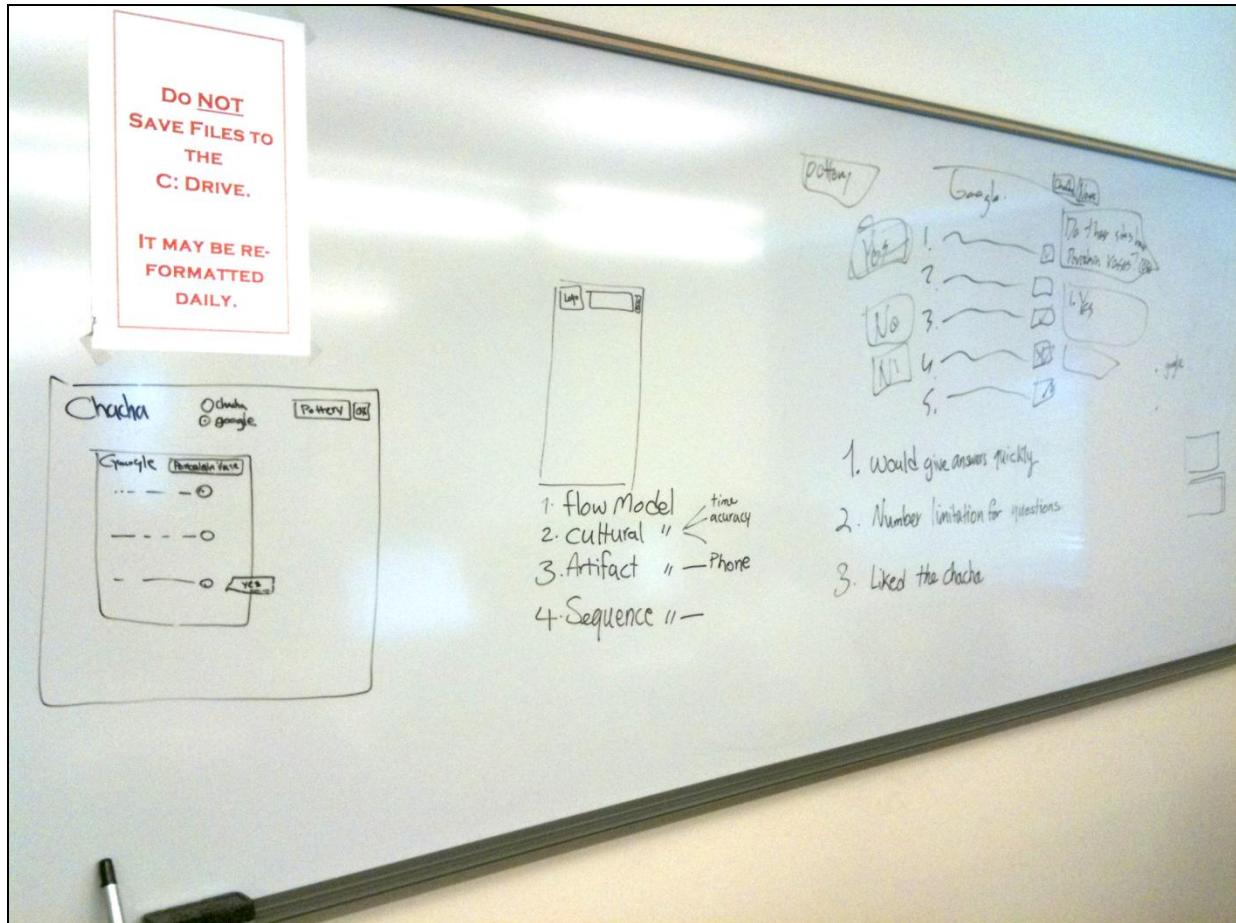
Often	Google	ChaCha	Never
<input checked="" type="checkbox"/> Yes	1. _____	<input checked="" type="checkbox"/>	Do these sites have Parachin votes? <input checked="" type="checkbox"/>
<input type="checkbox"/> No	2. _____	<input type="checkbox"/>	1. Yes
<input checked="" type="checkbox"/> No	3. _____	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> No	4. _____	<input checked="" type="checkbox"/>	
	5. _____	<input checked="" type="checkbox"/>	

1. Would give answers quickly

2. Number limitation for questions.

3. Liked the chacha

google



v. High-fidelity Prototype Screens

To see screen captures of the high-fidelity prototype, please go to the following place in Oncourse:

SP10 IN INFO I561 25468 Resources / Team 3 (Ansari, Sleppy, Walsh) / Final / presentation prototype.zip

vi. Preliminary User Evaluation Feedback

a. Participant #1

User Evaluation for Google ChaCha

12. Do you think this new approach to a Google search will save you time?

I think that I can save time when I do not have a chance to read all of the web sites and research everything that I need to find all of the information about the search. This will help in narrowing down everything that I would need to know to make my life easier.

Please type in number to the choice that best matches your answer.

13. The interface was effective (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

14. When using this product, I never felt lost (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

2

15. I was satisfied with this new paradigm of searching for links (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

5

16. I like the concept of the checkboxes next to website links to indicate selection (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

17. I understood which website links were selected for ChaCha's review (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

18. I understood what the icons present in the search results meant (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

19. I understood the concept present within the pop-up when clicking on an approved link (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

20. Even though I was not using my own ChaCha account, if I was, I would feel at ease using this product (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

5

21. This experience felt similar to my previous experience using ChaCha (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

4

22. What suggestions do you have on how this product could be improved?

It appears that it is working well, however with more use one may find things that may need to be improved upon.

b. Participant #2**User Evaluation for Google ChaCha**

1. Do you think this new approach to a Google search will save you time?

Yes, it saves a lot of time and I really liked the concept. I think sometimes it is very hard to find the answers that Google provides. You have to know how to ask your question either in “” or (). Also, it’s hard to get an abstract from the answers that which one really works for you.

Please type in number to the choice that best matches your answer.

2. The interface was effective (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

3. When using this product, I never felt lost (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

4. I was satisfied with this new paradigm of searching for links (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

5. I like the concept of the checkboxes next to website links to indicate selection (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

6. I understood which website links were selected for ChaCha's review (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

7. I understood what the icons present in the search results meant (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

8. I understood the concept present within the pop-up when clicking on an approved link (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

3

9. Even though I was not using my own ChaCha account, if I was, I would feel at ease using this product (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

4

10. This experience felt similar to my previous experience using ChaCha (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

1

11. What suggestions do you have on how this product could be improved?

The only suggestion that I have is, maybe you can improve the way that ChaCha provides pop-up rectangular that indicates the answers.

c. Participant #3**User Evaluation for Google ChaCha**

1. Do you think this new approach to a Google search will save you time?

Yes, I like it better than the typical ChaCha service.

Please type in number to the choice that best matches your answer.

2. The interface was effective (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

3. When using this product, I never felt lost (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

4. I was satisfied with this new paradigm of searching for links (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

5. I like the concept of the checkboxes next to website links to indicate selection (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

6. I understood which website links were selected for ChaCha's review (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

7. I understood what the icons present in the search results meant (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

8. I understood the concept present within the pop-up when clicking on an approved link (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

9. Even though I was not using my own ChaCha account, if I was, I would feel at ease using this product (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

10. This experience felt similar to my previous experience using ChaCha (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

2

11. What suggestions do you have on how this product could be improved?

None.

d. Participant #4**User Evaluation for Google ChaCha**

1. Do you think this new approach to a Google search will save you time?

Yes.

Please type in number to the choice that best matches your answer.

2. The interface was effective (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

3. When using this product, I never felt lost (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

4. I was satisfied with this new paradigm of searching for links (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

5. I like the concept of the checkboxes next to website links to indicate selection (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

6. I understood which website links were selected for ChaCha's review (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

7. I understood what the icons present in the search results meant (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

8. I understood the concept present within the pop-up when clicking on an approved link (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

7

9. Even though I was not using my own ChaCha account, if I was, I would feel at ease using this product (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

6

10. This experience felt similar to my previous experience using ChaCha (1 = strongly disagree, 4 = neutral, 7 = strongly agree).

5

11. What suggestions do you have on how this product could be improved?

None.