

## Marketing's Ideas for the Product

Our goal is to create the next big thing, a service where people can message each other or groups effectively and securely. Users should be able to retrieve or initiate conversations easily, have information about their communications partners at their fingertips, find people, and the like - all independent of any particular device. It doesn't matter if they are using a personal or public device, the system should work as if they are in their office or at home.

We are funded until the end of April. To keep our obligations to the board, we need to have a working system capable of support a few hundred/thousand users by then, which is when the next board meeting is scheduled.

We've put our heads together and come up with the following ideas for the service. We'll continue to refine our thinking, but this hopefully will be enough for you to get started. We've organized our thinking some. We put things into a list, but the list isn't particularly organized. The numbers are just how we organize the discussion. They aren't indicated preference. It's just so we're not trying to talk about the "third paragraph from the bottom..."

### Users and Groups

So at the core, we're connecting users and transporting comms for them. We've put together our first list around our users.

1. Core to the system are our users. Users can be individuals or they can be part of a group. In fact, they can be part of many groups. Groups can be made of groups. Every group has at least one moderator, who is responsible for deciding who stays in the group. Individuals can ask a moderator to evict someone, but only a moderator can shut someone out. So, moderators can remove people from groups, but anyone in a group can invite another person to join the group. It's up to a moderator whether invitations to join have to have moderator approval before going to the invitee. Moderators can axe the group as well. Groups have to at least have a moderator attached to them. Same goes for adding groups to other groups. Any member of a group can invite another group to join them; however, only a moderator can accept that invitation.
2. Security is important to our users and to our service. So we expect typical log-in stuff. We don't want to overblow this part however. We can accept logins using other websites like husky, linkedIn or Facebook. We're a little concerned about the optics of using Facebook at the moment.
3. Some groups might need additional security, meaning another password to open that channel.
4. And we want all the fun stuff, like icons for users. We want to have personalities. For example, the icon my boss might see could be different from the icon my colleagues might see.

### Communicating

We think this is where we will really differentiate ourselves in the market. This is the most important part of the system and where we really need to be able to shine. There are a lot of ways we could go here.

1. Users can know who else is connected within their circles. We should offer all the same stuff as everyone else, do not disturb for example.
2. Users should be able to find other people or groups, assuming they want to be found.
3. Users can follow other users or groups.
4. At its most basic, a user should be able to send simple text messages to another user. Naturally they should be able to reply to a message.
5. We not as sure about forwarding messages. It's a privacy thing. We know it's easy to do, but we're just not sure about it. We guess since you can cut and paste the text, it is something we should allow.
6. Hey, that gives us an idea. It might be good to offer a service where someone who is the originator of a message could find out where it went. We'll have to think about this.
7. Another must have, basic service is being able to send a message to a group. And of course, you can reply to a group message and the entire group sees the reply.
8. We think it will be useful to build conversations, something slack doesn't have. Most messaging apps just give a list of communications and you have to scroll to find something in the past, something related. Our idea is a mashup with email. You can identify threads in email or message boards like piazza. We want the same thing, but for messages. We can start with the same thing as email where a subject is the starter. But, we might want to have a thread idea. Not sure if this is a subchannel kind of thing or a title thing. Again, our thinking is still forming. But this should be good enough to start?
9. With group messaging, there should be an option to reply only to the sender or to a subset of the group. And then there's those annoying me-too kind of messages. You know what we mean - messages like: who's there or anyone up for food? They end up losing value pretty fast - and so do the responses. It might be nice to do the instagram thing and have those messages expire quickly, maybe upon being read. Maybe not a default thing though like instagram. Maybe something the receiver can set, so their view of the conversation doesn't get cluttered for too long with messages that no one cares about after a short bit.
10. Speaking of message lifetimes, we should keep messages around. We want to offer service tiers for how long we keep messages around. We also think people will sign up for these services when they realize they have lost something. So, we'll want to store messages forever and expose them for some bit of time. Even on our free tier messages should stick around. We might do this on time or we might do this on counts, like slack does.
11. We definitely want people to be able to use character sets that they use normally. All those accents and other stuff need to be included. We're focusing on North America first. Our first biggies will be English, Spanish, and French. We'd like to get into Asia as well as the rest of the world. The US will give us early test-beds as we can hook into local communities that speak other (non-English) languages.
12. One stretch thing would be to translate messages for our users. So, I send Alex a note in English, and Alex speaks Spanish. It'd be cool if the system could flip the text into Spanish before it got to him.
13. We definitely need to let other media be part of the message. We definitely need to include emojis, emoticons, tunes/recordings, and video.

14. We mentioned security earlier. We want to extend this idea into the communications themselves. We want users to feel the service helps keep their messages private. So, we want to go all CIA and be able to offer users, maybe for an additional fee, the capability of encrypting a message. This idea might play havoc with the translation idea, but maybe our users will trust us in the middle. We've been reading enough spy novels to think that maybe we need two types of service: standard encrypted channels and one-time pads. We think it would be cool to offer one-time pads. We kicked around the Mission Impossible way, that a message will self-destruct in five seconds. We're not sure if that's possible.
15. Speaking of destructing, we almost forgot. A user should be able to recall/delete a message. Messages that haven't been read should be deleted or not delivered. We guess that messages that have been read, well, we guess it doesn't matter. But in this case, messages should disappear.
16. So, this bring up time-shifting. Like everyone else, we should let users time shift, that is, queue messages when users are not on-line until they come on-line. When they do come on line, no matter what device they are using, it should look like the service is picking up from where they left off.
17. When we do queue messages, it'll be important that the messages get delivered in the order they were sent.
18. Messages should have time stamps, based on the sender's local time.

## **the government**

1. We're very concerned about our liabilities with the FCC and Homeland Security, not to mention all the rules of the countries in which we hope to operate. Our view is that this will be a US-based service, so no matter where our users are, they are connecting through a US service and are subject to US rules. We're not exactly sure about all the regulations, but we suspect we'll need to provide some support for CALEA. Besides, if we want to sell into the corporate market, their internal security folks will want some of the same functions.
2. We figure we should make a start on supporting CALEA, the US government rules on communications. Think wire-taps. There's a lot to this, but we think our obligation will be to support subpoenas for communications between specific parties. What we think we need to do is be able to send a government agency a copy of the communications traffic as we get it (which might be why we might not want to be in the middle of encrypted communications). When we get a subpoena, we'll have to provide a copy of the exact message, whatever you tech people decide that means, to the agency. We might need to wrap the messages in the from and to IP addresses. We can't alter the communications in any way. We'll have to tell the government when someone logs in as well.

These subpoenas last for some fixed length of time. They are very specific about which users we have to provide the "wire-tapping" on.

The way we think about it is the subpoena is a user who is always included on every communication (or connection) involving the person of interest. We should deliver messages just like we do to the person of interest, just with the extra comms detail.
3. Oh yeah, the person of interest cannot be able to tell someone is watch them.
4. for older comm's, we can pull whatever we have out of the message database.
5. And, we don't have to decrypt anything we get that is encrypted.

## Other Thoughts

This is our grab-bag bin.

1. We think there's a market for a "parental control" feature, watching and flagging messages for inappropriate content. For example, this could be vulgarities, phrases that suggest violence, sexual imposition, bigotries of many sorts. Users would pick the type of filters they prefer and we'll filter this at our server. The user should be able to pick whether any content failing to pass this filter is blocked, delivered with the offensive material marked out, or if it's simply flagged. We don't want to be in the morals business. We just want to be able to respect any preferences our customers have.
2. The system should allow users to create private messages. Private messages may not be forwarded or cut and pasted. They must be encrypted during transport and storage.
3. The system should allow keywords (aka hashtags) in messages so users may categorize them.
4. The system should have an option to schedule meeting/events and ask for RSVPs.

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