TwoStep Assumptions

# Core Problems and Assumptions

1. People have a hard time getting things done.

*This is the core assumption behind creating a solution in this space. It is taken as an axiom but substantiated by enormous and overwhelming anecdotal evidence :-)*

1. People use their brains to store details instead of allowing a computer to help.

*Our assumption is that this is because none of the current tools they use are adequate. This is explored more in the next few assumptions.*

1. People have a hard time remembering what to do when, when things don’t fit neatly into their calendars.

*Calendars have solved the problem of remembering appointments, and we don’t want to reinvent the wheel, but many things don’t fit as appointments. Remembering these things is still a key problem to solve.*

1. People procrastinate because their list of things to do isn’t actionable.

*This is a key assumption that we make; support for this assumption comes from the literature (Getting Things Done) and anecdotally.*

1. People are overwhelmed with too many things to do competing for their attention.

*Another key assumption. An obvious corollary is that our product must address the cognitive overload issue by intelligently filtering the set of “things to do” based on certain criteria (like context they need to do them, or due date, or importance…)*

1. Many of the tasks that people have tend to repeat on some regular or semi-regular cadence.

*A massive assumption we’re making is that it is these tasks that are most underserved by the current batch of tools – the tasks that are repeatable in nature but don’t neatly fit the recurrence patterns of a calendar. We coin the term “Activities” for these kinds of tasks.*

1. People need help breaking down complex tasks / Activities into simple steps.

*This is perhaps our biggest assumption. It’s not so much that people aren’t smart enough to do this themselves – it’s just that they need a need an “assist” to help nudge them to transform complex (multi-step) tasks into a sequence of simple, actionable steps.*

1. People don’t have good tools for automatically tracking, organizing, storing, and referencing information related to activities.

*Having information at your fingertips relating to the activity or action you are trying to accomplish is valuable.*

1. People tend to think about ‘things to do’ related to a single activity at a time. They are not good at thinking about all the ‘next things’ to do for a whole bunch of activities they are trying to accomplish.

*Providing a prioritized, categorized list of ‘next steps’ across all one’s activities is valuable.*

# Calendars don’t address the core problems

1. Many tasks don’t fit neatly into the calendar because they have fuzzy dates and times (e.g. “get it done this month”).
2. Many tasks don’t seem important enough to put in the calendar (e.g. “take out the trash on Sundays”), and people don’t want to clutter up their calendars.
3. Calendar appointments are the FINAL stage of getting something done – people need help getting from “clean the gutters” to “find a gutter cleaner” to “call for appointment” to “schedule an appointment on my calendar”.

# To do apps don’t address the core problems

1. To do apps are a free-form medium for capturing a bunch of things together. The organization is left up to the user. A to do list is only as good as a person’s ability or desire to keep it organized. So to do lists only work for people who are already organized.
2. To do apps don’t break down complex activities into simple steps. The biggest issue people have is to take “clean the gutters” and decompose it into a series of next steps. To do apps don’t do that.
3. To do apps don’t sort “next steps” by action type. It is often easier to get actions of the same type done together. For example, making phone calls, running errands, or scheduling on a calendar. To do lists don’t have the notion of “action type”.

# Email programs don’t address the core problems

1. People use their email to capture to do’s because email is the universal list, and is accessible everywhere. But while email is a good “inbox”, it is a terrible tool for sifting through what is actionable and what isn’t.
2. Unless people methodically sort email into projects and clearly identify the next steps for each project, email ends up just being one big collection box. Email programs provide very little help in doing this kind of organization, so only people who are already organized can effectively use email as a to-do list.

# We can’t compete with Siri as a new “digital assistant”

Siri will continue to be a privileged first-party app on iOS with hooks that we can’t possibly match (e.g. press the main iOS button to get to Siri), as well as investment levels we can’t possibly match. Likewise, both Google and Microsoft will be focused on matching the Siri capability for their platforms.

*Solutions:*

1. *Integrate with, rather than compete with Siri. For example, as an input metaphor:*
   1. *Siri supports texting. “Siri, please text TwoStep: call the doctor for Sarah-Eve’s appointment”.*

# Users don’t like an “empty canvas” and prefer a guided experience

Users often have an end-goal in mind, and rather than have to reinvent the wheel every time, prefer to be able to pick from a set of templates that help them achieve that end goal (e.g. Word’s “write a letter”). That’s why they tend to pick special-purpose tools (e.g. WordPress for a text blog but Tumblr for a picture blogger/reblogger).

*Solutions:*

1. *Create an Activity Gallery that catalogs the common Activities that people tend to do, and the Steps they use to get them done.*

# Our input metaphor can’t include general Natural Language Processing in our Minimum Viable Product

NLP is a really hard problem based on the prototype that we’ve already built. In the fullness of time, we may need to get there, but in the meantime we need a simpler mechanism to allow us to extract user intent.

*Solutions:*

1. *Create a Gallery of intents (Activities and Steps) that the user can choose from. This solves both the “empty canvas” problem and the “decipher intent” problem because we understand the intents of the Activities in our Gallery.*

# Choosing and customizing (configuring) Activities requires a mouse and keyboard

Perhaps we aren’t being imaginative enough, but we have a hard time seeing users select their Activities using the limited real-estate and crude input mechanisms (soft-keyboard) of a smartphone.

*Solutions:*

1. *Create a web interface for selecting and customizing Activities. This web interface is primarily used to “bootstrap” usage of the product, as well as provide the “maintenance” UI for changing details (e.g. cadence, contacts, locations, notes) on an Activity.*
2. *Re-imagine the “bootstrap” UI so that it fits the constraints of a smartphone (and rethink the tenet around “no phone app required”?*
3. *Build up a set of Activities as you go along by inferring the user’s intent and asking clarifying questions. (This approaches Siri – see other assumption on why this would be a hard sell).*

# We must expect that the smartphone will be the primary device for “steady-state” operation

The smartphone has become the device of choice for most people across most places (obviously on the go, but even at home!) and across most scenarios (reading but also *answering* email, viewing but also *creating* appointments, browsing but also *posting to* Facebook, etc). We must support the phone as the primary place where people will view and execute their next steps.

*Solutions:*

1. *Create a native phone app that enables the “steady-state” set of operations*
2. *Create a mobile web app that enables the “steady-state” set of operations*

# People don’t want a new tool – they want to use the tools they already have

With about 1 million apps available, getting people to install a new app on their phone is becoming prohibitively difficult, much less expecting them to find a new kind of app.

*Solutions:*

1. *Don’t require a phone app. Allow access to our functionality via a web link. Make the web link universally accessible:* 
   1. *make it easy to bookmark*
   2. *put it in an all-day calendar appointment that moves each day to “today”*
   3. *text it to the user every morning*
2. *Invest in smartphone app marketing / promotion to establish the value of a new tool and make the tool an essential part of the user’s workflow every day (just like calendar and email). [Note: we don’t really believe this is practical in our MVP]*

# Viewing “Next Steps” must be supported from a smartphone

Viewing “Next Steps” is a key “steady-state” operation that people will expect to do from their phones.

*Solutions:*

1. *Create the “TwoStep Next Steps” all-day appointment on the user’s calendar that contains a link to our mobile web interface.*
2. *Text the list and link to the user every morning… etc.*

# “Executing” Steps must be supported for a smartphone

*Solutions:*

1. *Our “smart actions” must be executable by the user using one tap. For example, the user must be able to execute a “call” action by tapping on an icon or a link. They must be able to execute a “geo-find” action by tapping an icon or a link.*
2. *Without a smart client (i.e. full blown phone app), we will need to use standard URI schemes for various apps (tel:, maps:, sms:, http:, etc).*
3. *With a smart client, we can potentially do more custom things with our own “twostep:” URI scheme*

# People want an easy way to input new information on the go from their mobile phones

But people don’t want to have to categorize that information on the phone.

*Solutions:*

1. *Support the notion of an “inbox”*
2. *Allow texting any information to the user’s “inbox”*
3. *Since text messaging on every major phone platform supports speech-to-text out of the box, we get this for free. [Note: we have currently scoped out “inbox” from our MVP]*