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EVOLVING AN IDEA INTO A COMPANY: A GENESIS OF MEANING

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## **Abstract**

This study examines the methods and characteristics of creating and leading a successful web-based, technical company offering a software as a service (SaaS) solution. Centering around an eight month case study of a startup specializing in creativity and innovation, the importance of finding problems from customers, evolving the concept, producing a solution, and growing the product are all encompassed by this study. Since the dot com bust over a decade ago, the cost of utilizing Internet technologies has dropped significantly, creating a rich environment for starting a web-based company with reduced initial investment by the founders. The study will explore the impact of this paradigm shift on turning ideas into companies and ways that this has been accomplished through a shift of focus to customer driven design.

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## Chapter 1: Introduction

Considering the recent economic climate, starting a company sounds irresponsible at best and outright dense at worst. However, the market and industry that a company emerges within drastically affects the expectations of revenue and costs. This thesis will examine a specific subset of companies called “startups” which are defined as “human institution[s] designed to deliver... new product[s] or service[s] under conditions of extreme uncertainty” (Ries, 2010). In many ways, startups are experiments. They begin with a new idea, form hypotheses about the outcomes, and then rigorously and repeatedly test that new idea. Startups face the unique challenge of needing to revamp more than just their idea after each failed trial. They often need to modify their product, marketing materials, and philosophy – essentially an entire company with each iteration.

The depth and frequency of the changes that occur throughout a startup’s evolution exemplify the stresses and difficulties a founder faces. Though the barriers to starting a software company drop each year, the task should not be taken lightly. For example, any teenager with access to a computer and internet can learn Ruby on Rails overnight, and deploy their first web application on Heroku for free. Most teenagers have more resources than just these basic tools at their disposal. Despite the decreasing barriers to entry and corresponding influx of web based applications, the success rate of startups has not changed over the past few years (Rajappan, n.d.). This lack of increased success demonstrates that there is more to a successful startup than technical skill. The passion and vision that entrepreneurs have for their product and market will drive their companies to success or failure. A startup cannot be a part-time venture. Dedication to

a project will push an individual quite far, but previous entrepreneurs offer advice and processes they found particularly useful whenever given the chance.

The entrepreneurial community has capitalized on the growing interest in (and continued failure of), startups. Former and current founders offer bounteous advice, often attempting to make a business out of that alone. Steve Blank, Ash Maurya, Eric Reis, Mark Suster, and Brant Cooper have successfully turned their advice into a career. Each offer their research, past experience, and advice to budding entrepreneurs who are trying to find a way to success. Specifically, they document the processes they found effective behind customer development, discovery, and validation. Customer discovery, shown in Figure 1-1, involves finding a market and problem worth solving creating a process from hypothesis to minimum viable product (Maurya, 2010). After discovery, the effectiveness of the tool in reaching the market must be validated. The process shown in Figure 1-2 displays the steps in customer validation from communication of the solution to data verification (Maurya, 2010).



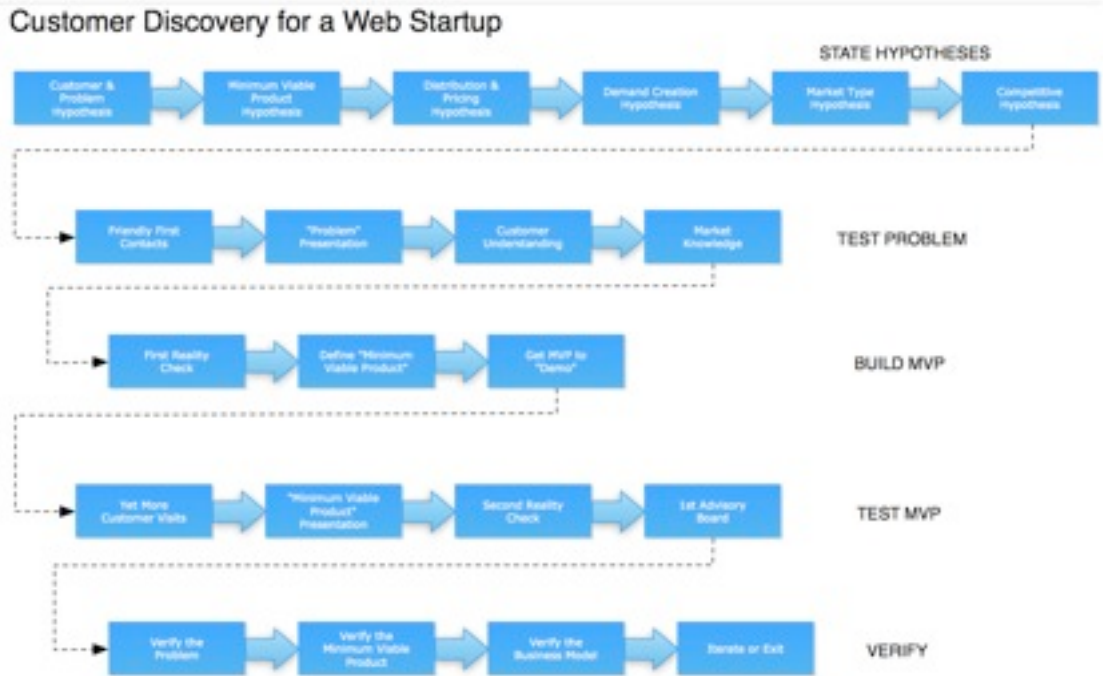


Figure 1-1 Maurya's Process for Customer Discovery

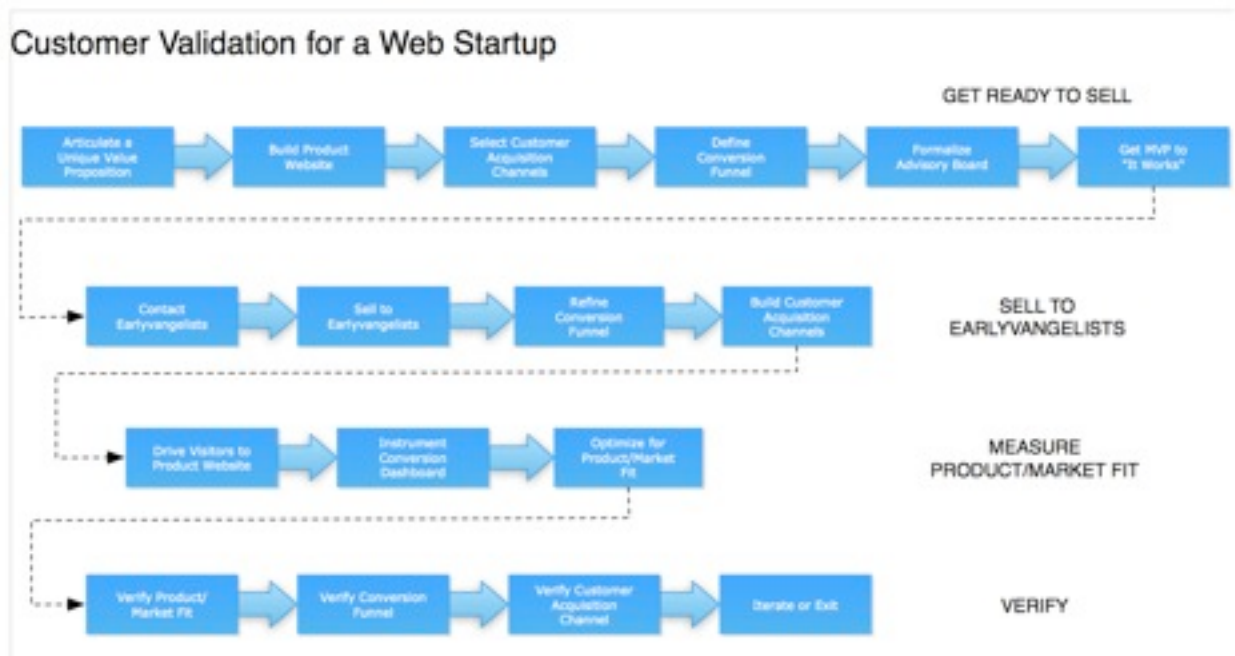


Figure 1-2 Maurya's Process for Customer Validation

Both customer discovery and customer validation as proposed are solutions to problems entrepreneurs face, but the aforementioned authors rarely touch upon the drive required to successfully implement these processes. A drive and passion to take action at every level of the startup will be most important, no matter how many customers are discovered or solutions validated. However, not every solution to the issues a startup faces will be the same.

This paper describes the solutions to customer development, discovery, and validation employed by a specific startup, Crowdstorms. The processes, decisions, and developmental conversations are analyzed in a case study to provide insight into the effectiveness of the founders, Josh Hepworth and Andy Mangold. The startup remains currently active and evolving, but this case study will focus on the activity between August 2010 and March 2011. The case study will attempt to determine the success of the founders' unique solutions for customer discovery, customer validation, and continuous effort in achieving improvements in key metrics relevant to Crowdstorms.

After presenting the results of the case study, this paper will discuss the evolution of Crowdstorms as an idea and business. The discussion will begin with an analysis of the effect people inside and outside of the startup had on development. Next, the role of intuition in evolving ideas and features of the startup will be explored. Finally, the importance of drive and effort in product success is highlighted.

## **Chapter 2: Review of the Landscape**

### **Overview**

As context for this case study, information on the creative environment surrounding Crowdstorms' market, its relationship to the entrepreneurial community, and recent trends in the startup community are covered. It is necessary to understand these three areas because the creative environment, as a consumer market and place of creation, has changed significantly over the past forty years. Additionally, as a group of generally creative people, the entrepreneurial landscape has changed dramatically along with it, especially on the west coast where entrepreneurs will often follow many of the latest technology trends.

### **Creative Environment**

During the past forty years the percentage of the United States population in the Creative Class, as defined by Richard Florida (2002), has increased from around five percent up to 26 percent. Of these 26 percent, or about 40 million Americans, approximately 50 percent of them fit into the Super-Creative Core that “fully engages in the creative process” (Florida, 2002). While Florida (2002) emphasizes the impact that this shift in values has on the local economies across the United States, he discusses a lifestyle in which the distinction “between participant and observer, or between creativity and its creators” becomes blurred.

This environment has naturally evolved in multiple cities across the United States, and Florida (2002) discusses the impact that creative epicenters such as “classical Athens and Rome, to the Florence of the Medici and Elizabethan London, to Greenwich Village and the San Francisco Bay Area” have in centralizing creative forces. The centralization of talent and the potential for economic growth brought by this talent has led to multiple city and state

government programs to encourage creative growth (City of Denver, n.d.). The talent found in the creative class has high value in the entrepreneurial community, as Steve Blank (2011) notes, “founders fit the definition of a creator: they see something no one else does. And to help them create it from nothing, they surround themselves with world-class performers.”

The creative environments identified by Richard Florida’s research have a high correlation with the cities in the United States considered to be both technologically innovative and great environments for entrepreneurial endeavors. Austin, San Francisco, Seattle, Boston, Portland, and the Washington-Baltimore metro all sit in the top ten when ranked by a creativity index. The creativity index is a compilation of technology, talent, and tolerance ranks that attempts to rate a locale’s ability to meet the environment expectations of the creative class (Florida, 2002). While research regarding the success of a startup and its environment is immature, it has not stopped some leaders in the entrepreneurial community from claiming that the city can make or break a company (Graham, 2008).

### **Entrepreneurial Landscape**

Six hundred thousand new companies start each year in the United States, and it seems almost unfathomable to think that unemployment remains an issue (Mills, n.d.). These brand new companies should be ensuring citizens remain employed, but this rarely is the case, as most of these new companies will close within two to five years (Mills, n.d.). Despite this, the draw to start a new tech company has increased as companies like Zynga, Twitter, and Facebook receive valuations in the tens of billions of dollars (Suster, 2011). Despite the lure of headline-making high valuation, budding entrepreneurs cannot expect this kind of capital when starting a business. Given the small chance of success and the even smaller likelihood of large capital gains, methods

that decrease the cost of implementing web-based services, such as “Lean Startup”<sup>1</sup> that combine agile development and lean practices, have become increasingly useful among software based companies (Maurya, 2010). Still, an entrepreneurial endeavor requires a high level of commitment, as the risks and hours required have not changed (Mills, n.d.; Maurya, 2010).

### **Being Agile and Lean**

Even outside of the fast-paced startup world, agile and lean software development has taken hold over the past decade. It promotes a more efficient way of creating software. The lean methodologies developed within Toyota for manufacturing inspired these processes. The seven main principles: “eliminate waste, build quality in, create knowledge, defer commitment, deliver fast, respect people, and optimize the whole” effectively optimize the software development lifecycle (Poppendieck, 2007). The adoption of this methodology is indicative of another change in the software development landscape toward customer driven development, rather than a rigid development plan. Jim Highsmith and Alistair Cockburn (2001) explore how agile methods respond to the shift of the customer’s role in the development process and find that the focus on teamwork, change, and a dynamic environment lead to a more effective method.

In the world of web-based startups, this applies on two levels. On the software side, it applies directly to the development process. However, startups are entire companies. They operate in software development, customer development, and many more areas. Recognizing this, Mark Suster (2010), Eric Ries (2010), and Ash Maurya (2010) have applied these concepts to the operation of the entire company. By applying the ideas behind lean methodologies, these

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<sup>1</sup> Trademarked by Eric Ries

individuals have identified the characteristics of the new wave of startups and identified the processes that capture the philosophy of the movement.

To better describe this process, Eric Ries identified three items and three actions as part of the cycle lean startups utilize. “Ideas,” “product,” and “data” capture the three categories of tools a startup will be working with, and “build,” “measure,” and “learn” are the three basic actions a lean startup will take (Maurya, 2010). See Figure 2-1. Each of these six enable the founders to move quickly and minimize any wasted efforts when used properly. In a traditional development environment, the context and the problem the team faces are often known. This is frequently not the case for a startup. Because a startup may be experimenting with a completely new idea, the problem and solution could both be unknown, making waste reduction important (Ries, 2008).

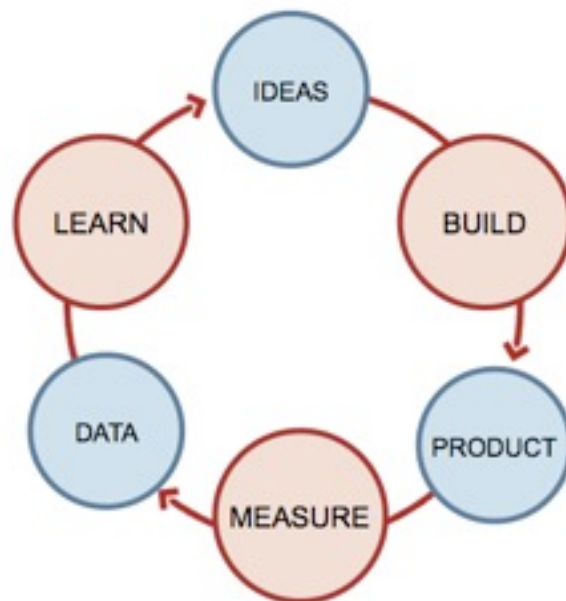


Figure 2-1 The Lean Startup Cycle

This uncertainty leaves the process for problem identification and solution development wide open, although a haphazard approach to either will inevitably lead to waste, over commitment of time, and little to no learning (Maurya, 2010). To avoid these negative outcomes, Ries (2010), Maurya (2010), and Blank (2010) promote specific models for achieving customer discovery and customer validation based on the lean startup cycle. The cycle ensures that every action taken within the startup has validation for being executed and evidence about every action will lead to increased learning (Maurya, 2010). This process keeps the startup on track, and prevents the team from using time and resources to implement features the customer may not need or even want. It functions as a feedback loop that embodies the entire startup's creation and evolution.

## **Chapter 3: Case Study**

### **Overview**

This case study follows the genesis of an Internet startup, Crowdstorms, and its founders Josh Hepworth and Andy Mangold. It observes the founders from the first notion of an idea through early releases of the tool. The inspiration behind methods to break creative blocks and ways to promote ideation are explored and the tangible processes they led to in Crowdstorms are examined.

The evolution of the idea is complex and multifaceted, so an introduction to the core of the current solution will provide context on the journey. From there, this case study examines the sources of inspiration for the founders, how they matured the idea, where they found a solution, and how the solution has affected users. While the startup remains operational and is continuing its evolution, the case study only covers the period from August 2010 to March 2011.

### **A Tool and Solution**

Crowdstorms seeks to assist in breaking creative blocks by encouraging lateral thinking inspired by the varied associations each person has. As an individual goes through life, he or she gains unique experiences and insights. Crowdstorms references these particular thoughts as associations that a person has with a higher level concept of that experience. For example, an individual that travels to Miami, FL often will associate that with the general concept of travel. These associations become more varied as the experiences an individual has vary by a greater degree, and these weak ties are particularly powerful in developing innovative ideas (Granovetter, 1973).



With this knowledge in hand, Crowdstorms allows the user to pose a concept or idea as a topic on the website. In Figure 3-1, the user is posting the topic “Things That You Wait For.” This then brings the user to a screen where he is able to begin adding his or her personal associations with the concept.

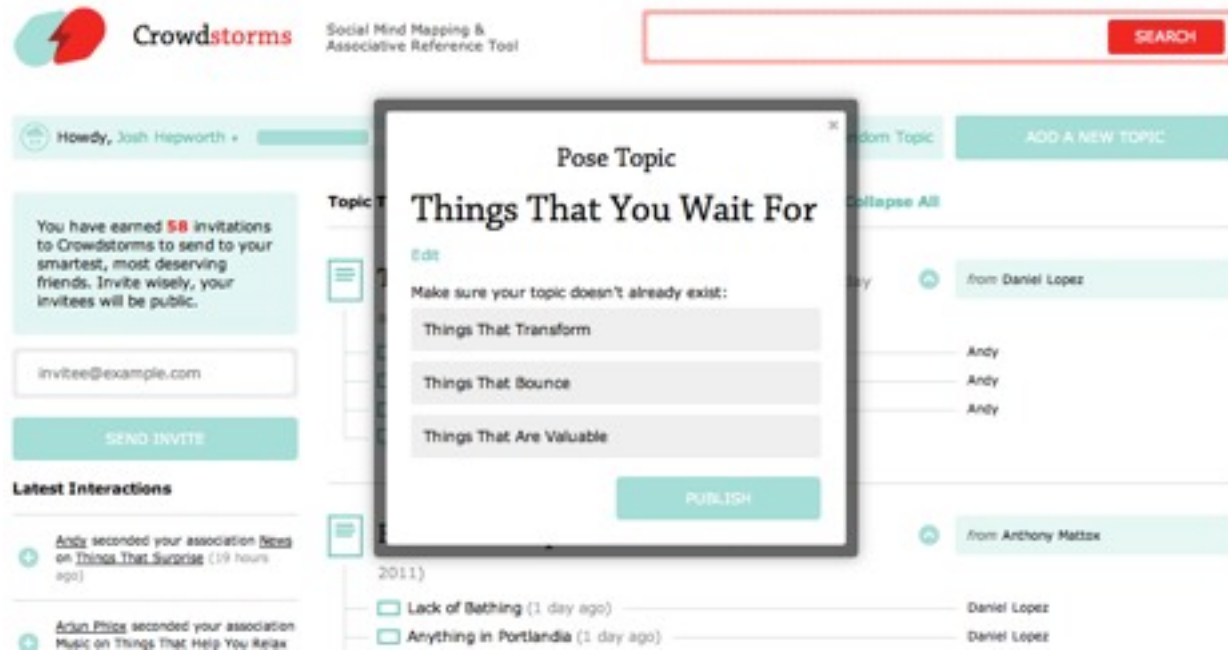


Figure 3-1 Crowdstorms user posting a topic

Shown in Figure 3-2, the user is adding his or her personal associations to the topic just added to Crowdstorms. This topic is also accessible to the entire Crowdstorms community, and followers of this user are notified of its addition to the system. This allows Crowdstorms to gather the associations of all the users willing to go through the simple process shown in Figure 3-2.

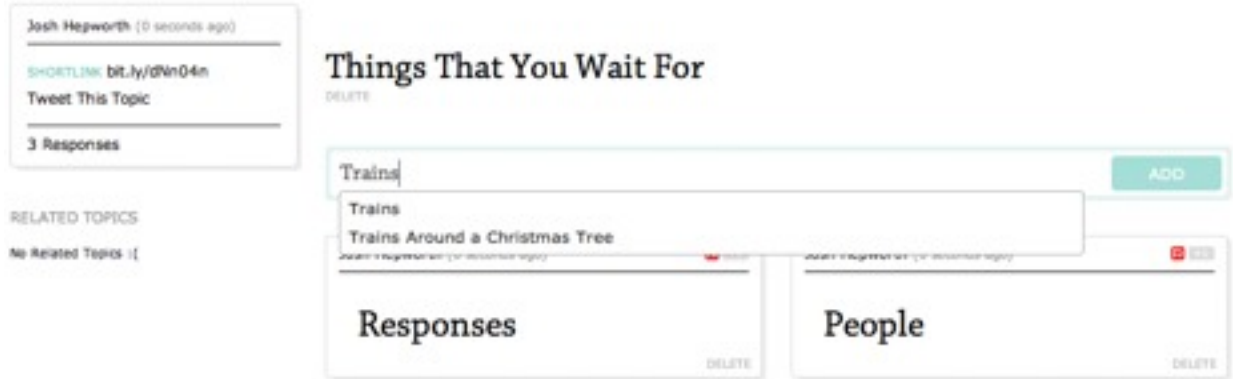


Figure 3-2 Crowdstorms user adding associations, with site header removed

At this point, the user has his original concept and the associations of various users that have posted to the tool. Next, the tool uses this information to relate other previously added topics and the topic the user has added, expanding the thought about the current idea even further. Crowdstorms uses the associations to assist in developing the weak ties behind concepts. Figure 3-3 shows the related topics after just six associations have been added to our example topic.

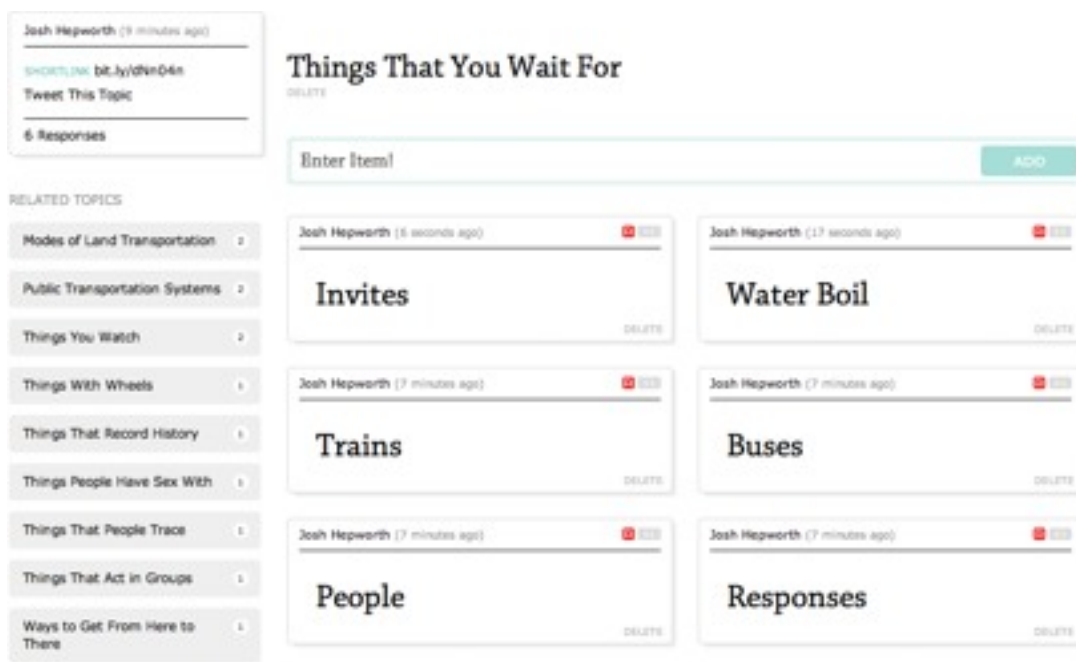


Figure 3-3 Related topics to “Things That You Wait For,” with site header removed

The user is then encouraged to explore these connections further by hovering over the related topics to view the associations that related the two topics. Figure 3-4 shows the result of this animated interaction. It shows that our associations of “Water Boil” and “People” connect “Things That You Wait For” and “Things You Watch.”

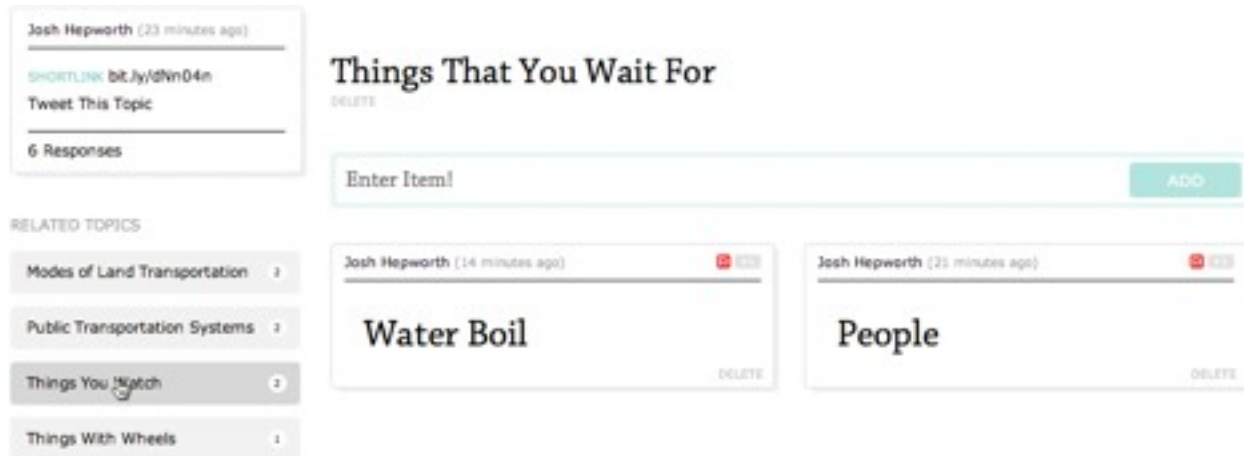


Figure 3-4 The connection between related topics, with site header removed

This process allows for Crowdstorms to take the next step in the associative process for the user, hopefully taking them where they would not have thought to go. It documents natural, human links between two concepts in a way that makes sense because they are linked similarly to the way humans think about concepts. However, the tool highlights the way these connections are formed, which the founders felt is often unclear in one’s own mind.

### **The Seed of an Idea**

A startup of any kind should be creating a solution for its customers. Crowdstorms wants to be a tool for inspiration, helping break through the creative blocks that graphic designers, illustrators, and writers hit in their everyday lives. The tool will help creatives push their ideas further and come up with truly original concepts. These problems resonated with the founders,

and their problems and experiences informed the initial design. While the positive effects of this type of internal development are debated, the founders used their knowledge of the problem to accelerate the early stage processes of customer development. Fueled by the “Think Wrong” concept of John Bielenberg, the power of weak ties, and a passion for creating, the founders began to evolve an idea. See Appendix A for an early blog posting of the idea’s genesis.

The work of John Bielenberg for Project M in pioneering the “Think Wrong” concept planted the seeds for the beginnings of Crowdstorms. “Think Wrong,” at its core, involves keeping an open mind and pushing out prejudice against ideas (Dickinson, 2009). The utility of free association in Think Wrong exercises is huge, and the concept behind Crowdstorms attempts to utilize this effectiveness in “thinking wrong” and breaking internal barriers. Along with the movement spawned by John Bielenberg and Project M, the idea of social design played an important role in the development of the concept for Crowdstorms. The social design aspect plays to the community involvement in the concept and benefits the startup is working to bring to the design community.

The diversity of ideas and associations within the “crowd” would increase the success of the tool. Thinking wrong is about taking ideas or concepts and applying a different set of logic or associations with them (Dickenson, 2009). Without the ability to tap a resource that naturally thinks differently than the individual customer, the tool would have limited use. Because the crowd would (ideally) be diverse, the people in the crowd will have naturally different associations with a concept. These interpersonal relationships are weak ties, and they are the most likely to bring out innovation (Granovetter, 1973).

Crowdstorms utilizes the social graph to determine the connections that individuals have to discover content. With the rise of Facebook and Twitter, these connections have become increasingly important in the online world. While the reach of these services in older generations is growing, the reach of them in the younger generations is enormous. The Crowdstorms founders initially decided this connection between individuals fits the era and product, so they implemented the social graph to build the structure for content discovery.

Crowdsourcing technology to advance open innovation and ideation has gained popularity individually and by corporations (Brabham, 2008). Companies like Dell, iStockPhoto, Threadless, and Innocentive have taken advantage of this trend by launching their own site or by starting a service to facilitate conversation between individuals. The Crowdstorms founders will be entering the ideation market along with these companies. While most of the existing sites focus on refining an idea, Crowdstorms is a platform to spark inspiration that originally forms an idea in an individual's mind. Crowdstorms differentiates by finding utility in an area before the ideas have formed rather than a community to share and refine the ideas already conceived. Existing solutions seek to circumvent the creative block by looking to other individuals. The founders of Crowdstorms saw opportunity by changing the context and trying to break through the creative block rather than work around it.

While not in consideration during the earlier stages of the startup, there are an increasing number of individuals in the Creative Class. Crowdstorms enhances lives of the super-creative core because of the increased demands on creation within this group. This not only defines a clear market for Crowdstorms to appeal to, but the growth of the creative class over the past thirty years shows that the demand for ideation and inspiration tools will likely increase.

Limiting themselves simply to the graphic design market, the number of employees in the United States alone is 286,100 and expected to grow by 50,000 in the next six years (U.S. Bureau of Labor Statistics, 2010). As a core market, these graphic designers represent a solid base upon which to grow. The tool should appeal to a much wider audience than this with 3.6 million self identified creative professionals and upwards of twenty million individuals searching for ideation related terms on Google, shown in Appendix B. With a clear base audience and room to grow, the founders believe they have an arena to provide a tool that will enhance the lives of many people.

### **Creating a Solution**

Initially, the founders were able to document personal solutions to determine critical features. To identify problems, the founders documented tools used in their current process. They considered pen and paper brainstorming methods as well as virtual tools like The Free Dictionary by Farlex. While the founders had first hand experience, inspiration also came from knowledge and experience of other methods and tools, like RhymeZone, that graphic artists consult for inspiration (Pieratt). Methodologies utilized in real world brainstorming like mind mapping, free associations, and think wrongs provided a goal for the outcome of the solution. In addition to these physical tools, the founders' utilization of tools like The Free Dictionary, Thesaurus.com, and RhymeZone provided insights for perceived shortcomings of current virtual tools in direct competition. These ideas provided the basis for free association, the connection of ideas, crowdsourcing, social connections, and targeting inspiration in Crowdstorms.

Being able to quickly and easily post whatever came to mind about a given subject would be at the core of the Crowdstorms experience. The needs instilled by John Bielenberg's "Think

Wrong” method of inspiration rooted the tool firmly in a space where an individual's connections to an idea are paramount. The focus on free association meant that the tool would have to be primarily text based. Pictures come attached with partially or fully developed concepts that funnel the associations that the viewer has in a specific direction (Walker, 2006). The associations posted to the tool on a given topic should be influenced by an individual's own notions, not ideas or concepts portrayed by the photographer.

People think in terms of relationships; we associate one person with another or one thing with another or a person with a thing. This meant that the tool should also “think in terms of relationships.” Using the associations posted to an idea, the tool would determine which other ideas in the tool it is related to and show how they are connected. This provides context for the user and uncovers the unexpected naturally, an important part of the “Think Wrong” process.

Diversification of associations to truly bring out the unexpected connections between ideas would also be important in bringing the “Think Wrong” process to the center of Crowdstorms. A tool fundamentally designed around crowdsourcing would provide a user base full of weak ties and organically create an environment full of associations that seem normal to one user and insane to another. The perfect storm for inspiration and thinking wrong.

However, users will still need to discover and participate in the creation of this database of connections, so Crowdstorms connects the users with other users. The ideas and associations powering the tool cannot exist without people. Social and democratic tools such as the follow button and plus one button provide ways for people to interact and create bonds at the social level. Engaging individuals within the ecosystem of the tool will be important. Often, in a design

or marketing firm the ability to find, connect, and review coworkers' contributions will be important.

Heavily based in the ideas of John Bielenberg, Project-M, and "Think Wrong," Crowdstorms presents a unique set of features ready to capture and display the unexpected to inspire anyone trying to create. As a tool where users generate the content, it will naturally tailor to the needs and whims of the creator. However, all this theory will not solve the founders' problems in the real world, so they monitor usage of the tool and solicit feedback from user in order to gauge successes and failures.

### **Utility in Data**

Even without external validation, the founders achieved relative success in the first iteration of their tool employing the ideas they conceived in relative isolation (Estrin, 2003). With a simple splash page and a unique value proposition, over 900 interested individuals provided email addresses to learn more. However, this small success does not provide the validation required to show the ability of the tool to meet the customer's needs. Unfortunately, much of the data currently collected by the founders uncovers potential problems rather than the suggestion that Crowdstorms offers a real solution. This section of the case study covers ways the founders have gauged engagement in the tool, satisfaction with the tool, value of the tool, reach of the tool, and flaws in these metrics.

Problems the founders were seeking to solve with Crowdstorms received validation through casual conversations with the interested market, a positive response to a launch page, and increased traffic on launch days through customer driven social media exposure. While these are promising results, the informality and relative infrequency of the interviews when compared



to processes as presented by Steve Blank and Ash Maurya show a potential weakness in our definition of the problem space. To determine the potential for these faults, the founders have utilized data regarding the frequency of associations being added to the tool. Figure 3-5 shows the number of associations added each day over the history of the tool with major events in the development of the tool labeled. The inconsistent nature of the data prevents much interpretation, but the founders agree that Crowdstorms has not achieved any lasting level of engagement.

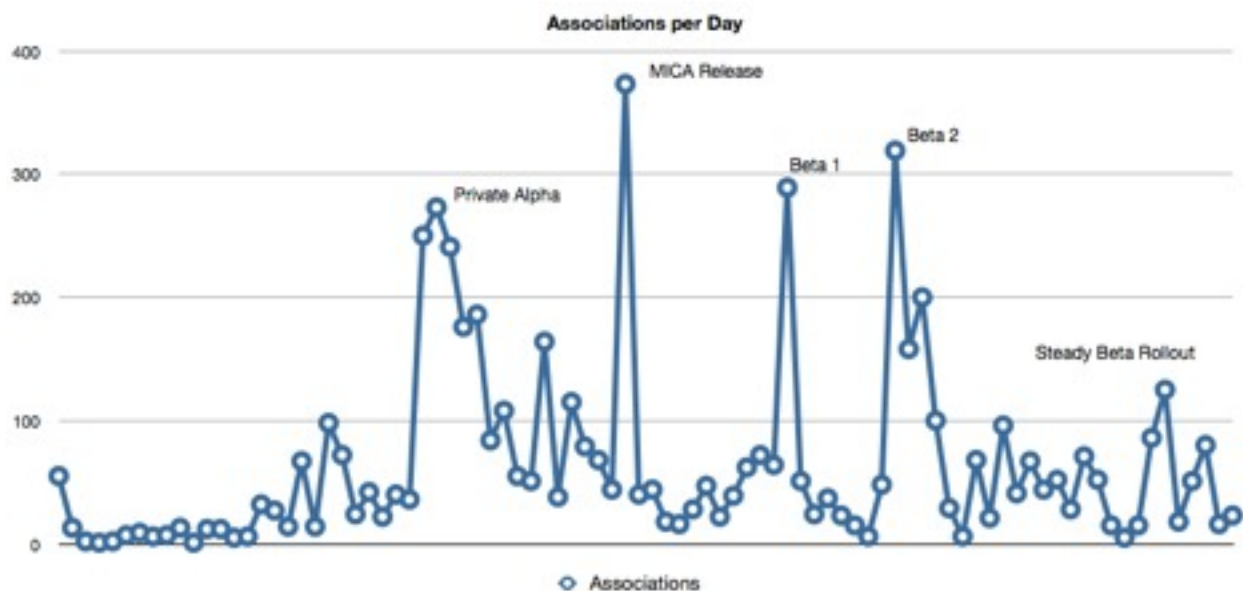


Figure 3-5 The number of associations added per day

In Figure 3-6, increases in visitors at the launch of the private alpha and the private beta show outside interest indicative of the potential product/market fit and engagement. This data also shows an average time on site of almost five minutes, but recent activity on the site trends to an average closer to six minutes. Additionally, the thumb for the graph next to Pages/Visit show that has increased with a similar curve to average time on site, which is show in orange. This data also hints at the levels of effort required to maintain and grow a community. After the roll

out of Beta 1 and Beta 2, visitors decline, coinciding with the period where both founders began heavy work on projects outside of Crowdstorms.



Figure 3-6 Engagement data from Jan 1, 2011 to Mar 28, 2011

In addition to the indirect data from users gathered through Google Analytics, the founders utilized Get Satisfaction, an open user feedback tool, to document the ideas and problems that users had from day one of the private alpha. Found in Appendix C, these ideas and problems cover technical issues and conceptual issues the users faced. The largest issue stemmed from communication of the purpose and usage of Crowdstorms. While the founders communicated the problem clearly and have designed a solution for that problem, the current iteration fails to properly demonstrate the value of the tool to the customer.

Conversations with users like Eric Ingram and individuals at InnoBlue, a Pennsylvania State University entrepreneurial community, have indicated the current home page does little in portraying the potential value a tool like Crowdstorms has in the creative process. Additionally, the conversion rate of the landing page dropped significantly after the redesign, showing communication of the unique value proposition had lost significant impact. Figure 3-7 shows the ratio of visits to applications on Crowdstorms over the period before the redesign and after the redesign. It shows that while visits had not decreased significantly over the given time period,

the number applications to join Crowdstorms had fallen considerably. While correlation is there, the founders have made the conclusion that communication had caused the decreased based on the conversations with customers.

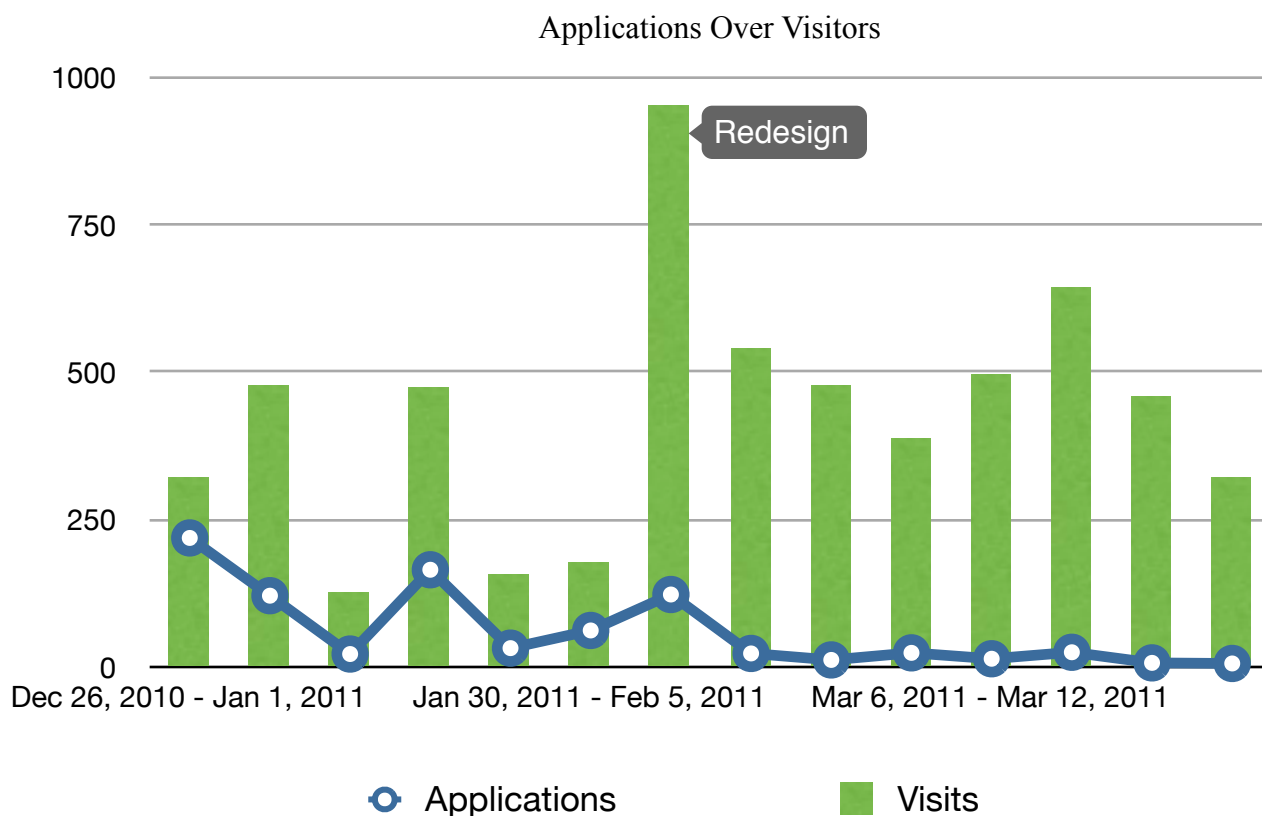


Figure 3-7 The Number of Applications as a Line Over the Visits as Bars

Methodology presented by Maurya (2010) and Blank (2010) involves validation for every feature added to the product. While development of the initial solution followed this loosely, several features have been added as pure experiments since the initial version of the product. With the goal of increasing user engagement, observations of ranking systems in video games, and the idea that Crowdstorms can be incentivized through meritocracy, the founders believed implementing a “class system” where users received points for positive actions on

Crowdstorms would increase the number of associations that users added upon initial registration and overall engagement.

Unfortunately, the experiment ended with results that proved the hypothesis of the founders incorrect. While a slight effect was seen early on, over time the results show no reasonable difference between the average number of associations a user posts before and after the class system was introduced. Running a query on the data in Crowdstorms showed that the users joining the week prior averaged 4.7 associations per user while user joining the week the feature went live averaged 4.3 associations per user.

While showing mostly issues with the site, feedback and data from users shows the core concept still resonates with users. As shown in Appendix D, the public reaction on Twitter and various blogs remains positive. It demonstrates the market for the tool, but it also shows that the founders have not created a solution that has achieved product/market fit.

### **Vision for the Future**

Reiterated by Maurya and Blank, stated by Paul Graham, and an idea likely conceived before being popularized by the three, “build something the customer wants” provides a mantra to design ideas around (Graham, 2003). The founders of Crowdstorms identified wants and needs through the problems they experienced as designers and applied it to a market. This follows the conventions described by Ash Maurya and has successfully led the founders of Crowdstorms to the beginnings of a solution. Graphic designers and other professional creatives must face and overcome creative blocks as part of their profession and inspiration for good ideas is hard to find.

While Maurya poses that premium services should charge from day one, the founders believed they knew too little about the problem on day one, much less if their solution would provide a benefit from day one. Crowdstorms becomes more powerful as a tool when it gets more data and the founders believed that a tool that requires users' data should simply accept that data as payment. Though initially feasible, this revenue model will obviously not scale, so the founders often reviewed usage, customer interactions, and personal thoughts to identify potential revenue sources. Despite the emphasis on low cost implementation of the solution, this plan obviously has flaws if the founder requires more immediate revenue. The more relaxed revenue generation has led the founders to more disruptive ideas.

Finding the biggest issues that customers face will lead to sources of revenue if a product provides an adequate solution. While Crowdstorms' ability to provide a solution in any area is currently uncertain, the vision of the founders addresses huge issues that reach far beyond the tool's problem space. Without the context of thinking wrong, getting around creative blocks, or mind maps of any kind, Crowdstorms' data set holds the associations that are inherently human in a format easily understood and analyzed by software. Bringing context back in, Google, Microsoft, and Yahoo require the ability to take two pieces of human-created content and determine the relationship between them. The founders plan to experiment with the Crowdstorms data in providing a human context to the determination of a relationship between two pieces of content. It would attempt to automate the semantic web.

For example, Google Sets returns the following as related items to "save" and "safe:" seal, carl, smilla, snow, squid, canada, water, seals, morani, muza, morandi, angels, me. Some of these are interesting, but the set as a whole fails to express a full range of human connections to

those words. In comparison, Crowdstorms provides the following as related: shoebox, floppy discs, arrow pointing down at horizontal line, time capsule, life preservers, safety deposit box, lifesavers, life preserver, piggy bank, purity ring, coupons, capes, flotation devices, red tags, jesus. Using this information while building search results and rankings could provide tremendous insight to the current algorithms and stave off the feeling of decline in search result quality (Hartzer, 2011). The founders feel their vision shows that disruptive ideas will not always naturally spawn from processes that focus on known customers with existing needs. Ideas that change the world will often come from unmet and unrealized needs. The formal models presented by Blank, Maurya and Ries provide less utility in this latter problem space.

## **Chapter 4: Reflection**

### **Overview**

The founders of Crowdstorms have explored the inspiration and brainstorming space extensively. While the founders methods differ from many recommendations made by Maurya, Blank, and Ries, they all value learning and action. The founders may gain speed and efficiency through the adoption of stricter processes, but value the freedom to think disruptively embodied by their current methods. This chapter reflects on the shortcomings the founders identified in themselves during the case study as well as the value discovered in their deviations from the path set by others.

### **Improving a Process**

The Crowdstorms founders seem to have a lot to gain in the immediate future by adopting more processes that align with the lean startup methodologies. Current iterations see waste from experimentation in features tangentially related to the problem, and the informal nature of customer interviews has made conversations marginally useful. Starting with improved records would allow the founders to more easily identify and reference problems that customers face right now as they hit creative blocks and seek inspiration. This will better serve the customers and the founders while the solution finds its place in the market. Implementing this change in process will naturally lead to less experimentation that does not provide direct benefit for the customer, as the problem space will be clearly developed.

Launching and iterating faster with smaller changes would have been ideal for identifying problems more rapidly. Although developing Crowdstorms using an agile technique, the founders discovered they sometimes included a larger number of features in an update than

necessary. This hinders both the ability to draw strong conclusions from data and reduction of waste.

### **Being Meaningful**

The founders believe that a meaningful service must connect with the user on an emotional level, and often this is true (Carpenter, Glazer & Nakamoto, 1994). Focus on the big picture and features solely providing an expected emotional benefit, such as the class system, will often shift focus with negative consequences. Their implementation takes away from time spent developing a true solution to the problem users face, and a solution will provide the most powerful emotional connection to the user (Diller, Shdroff & Rhea, 2006). The long-term vision and dreams for the solution also provide meaning for the tool, but in a way that can disrupt the ability of the solution to succeed in the short term.

This means that to be meaningful the solution will not only have to solve a problem, but it must also solve a problem that people really want solved. Ideally, their life will be better because they found and used Crowdstorms. This requires dedication to the project, talking and listening to the customer, and the ability to shift directions when required.

### **Remaining Relevant**

Data provides insights into user behavior and user benefits from the solution, and it can show when a solution does not fit the market. By setting expectations with the data collected regarding the usage of a solution, these misalignments will be easier to identify and correct. The reaction to these events will affect the ability of a solution to survive, so they are important to capture. The founder must be ready to shift his or her solution and capitalize on the user's needs in a given problem space.



The founders also realized relevancy requires recency. As the development of Crowdstorms slowed during their focus on outside projects, user engagement with the tool began to fall. The effort put into contacting and personally engaging with customers through Twitter, Get Satisfaction, and email dropped; this let Crowdstorms fade from the users' minds. While this could indicate lack of product/market fit, non-existence of a problem, or a failure to communicate, the founders hope it shows that Crowdstorms will disrupt through meeting an unrealized need. The founders need to both build a tool to solve a problem, and they must explain the utility of a tool designed to inspire creative ideas.

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## Appendix A: Genesis

This post from my blog (almost a full year ago!) is where this thing all started:

It seems to me pictures have become a much bigger part of the way we communicate these days, largely due to the internet, methinks. Of the 95 RSS feeds I am subscribed to, only two or three ever have the backbone to post content free of pictures, and a solid five or six *only* post images. While I may agree with the ol' adage "A picture is worth 1000 words," I hope people aren't forgetting how valuable and powerful a word can be.

With this time between semesters comes not a break, but rather a frenzied attempt from me to finish, or at least start, all of the self initiated or otherwise school-unrelated projects I have piled up for myself over the last six months. This means I have been doing a lot of brainstorming recently, and with some reflection I have come to realize that my methods for working through ideas are almost completely based on words. While I think most people sit down and start sketching to hash out ideas, I tend to start writing. (Probably largely due to [this exercise](#) from earlier in my education at MICA).

Words hold such power because they are a hot medium, as McLuhan would say. An image is flat and tells the whole story; if it is crisp and in focus, it leaves little to no room for interpretation (of the image itself at least, the "concept" that produced the image is a whole different matter). A word however, is completely unique, not just to other words, but to every individual person. In reality, there are no true synonyms: big, huge, gigantic and massive may be more or less interchangeable, but each evokes a slightly different *feeling*. I have found these nuanced differences between words to be the best way for me to represent, sort and generate my ideas. Once I have found a set of words, maybe two or three, maybe twenty or thirty, that I think represents the idea I have, the sketching process becomes an investigation into what these words look like, both in and out of context of the words surrounding them. You'd be amazed at the scope and scale

of visuals that can spring from something as simple as “What does authenticity look like?”

We have done a lot of talking and writing about *what* CS will do, but we haven’t addressed *how* yet, at least in the public forum. So without further ado, here is the very first iteration of the “how,” in the form of an email I sent Josh all the way back on March 9th: (with the ideas that have since been tossed stricken from the record)

K so ideas:

Name: Crowdstorm or Crowdstorming, something like that. (crowdsourcing + brainstorming)

Logo: ~~Profile of man’s head with the top half of his brain showing then a lightning bolt coming out of the bottom of his brain, which is cut on a perfect horizontal.~~

Architecture:

-Lists of things

-“things that are red”

-“fruits”

-“things that come in pairs”

-“things from the 70s”

-“things with wheels”

-“things people punch”

—etc.—

Anyone can add anything to the lists, or create new lists. There is a vote up/~~vote down~~ system on every item of the list, allowing the items held in it to be democratically sorted. List items that are dumb and get negative votes won’t be removed, just hidden by default. ~~When submitting a particularly creative item to the list, the user has the option of including a source link that explains why their answer is appropriate to the list. (would appear next to the answer as a small icon~~



~~linking off site~~). When the user begins typing in their addition to the list, an autocomplete box that contains every item on every list on the site will cross reference spelling and capitalization (which we need to set standards for)

ANY ITEM on the list can be clicked, opening up a page specifically about that item, showing all of the lists on which it appears. Once comprehensive, this page will provide a definition for the list item through context. FOR EXAMPLE: I am on the list of “things that are red” and I click on “Strawberries” without knowing what it is. That takes me to a page saying that Strawberries is found on the following lists: “Fruits” “Things with Seeds” “Berries” “Things you can eat” “Things that go into smoothies” etc. Seems pretty boring with the example of strawberries, but remember the whole thing is democratic, like digg comments. SO funny/creative answers will float to the top of every list. So on the famous scientists page, I click on “Stephen Hawking” and am taken to his page where I find that he is on these lists: “things with wheels” “celebrities I could beat in a fight” “robots” “things that are best autotuned” etc.

Now the entry point for this is for creative people brainstorming. Brainstorming is better in a group, and the internet is the biggest group of them all. So if I was working on a project and I needed to brainstorm things that are found in trees, I can create the list and people will help me. The whole going a level deeper links it all together and makes it a really dynamic brainstorming tool. Eventually, we will have most things in a list somewhere, so when i create a new list it’s just a conglomeration of items that are already found elsewhere. We of course track all of these things that are going on and we can have items of the week (things that appeared in the most lists that week) weekly featured lists that had creative themes, which would encourage people to keep coming back and give us something to throw in an RSS feed. Think about it: if you saw a link that was like “featured list! go to this page and help us list things that are fun to dropkick!” you would do it in two seconds. PLUS it becomes about creative one-upmanship: people must create an account to start a list, and when they are logged in all of

their list items' votes get tallied and they get some sort of participation score and also creativity score. Everyone will want to be the most creative answerer!

Also, our weekly featured list could be pertinent to the news of the week when appropriate: "Better names for Apple's iPad" "Good things that are from Haiti" etc. <-- BOOM MORE GREAT MARKETING MATERIAL

And the design of the whole site will be SO beautiful and type based, AND there will be an iPhone app and a freestanding application.

I am sure I am missing one of the great ideas I had in the shower, but that's it for now. Add your ideas!

This has of course gone through MANY changes since this original email from half a year ago, but hopefully it gives you the general gist of how Crowd Storms is going to function. As always, feedback and ideas are really appreciated.

## **Appendix B: Measuring a Market as a Startup**

As Crowdstorms has figuratively taken off (it's live and we're improving it everyday) and the beta launch looms ever closer, we've needed more and more to explore the market potential for our platform. Unfortunately, no tool exists that will automatically take your concept as input and output your potential market size and place. Fortunately, the ever present search giant, Google, provides us with an interesting tool. We can also utilize other information posted about social networks that highlight communities that would be interested in your startup.

Their Keyword Tracker for AdWords boils down to a graph of user interest that can be filtered down to the local level. Great! So then you just need to figure out what words someone would be searching for if they were interested in solving the problem your start up solves. It's tempting to think of the list of keywords as the words people would search for to find your startup, but don't limit yourself!

At Crowdstorms, we're not just a mind mapping tool or associative reference tool. We're in the business of ideas and inspiration. Search terms relevant to that broad category will likely capture our potential user base. (Figuring out how to target the users in this broad category is another thing entirely.) For our purposes we looked at "inspiration" at first, but then explored "ideas."

While you could easily argue that every user in this list won't be looking for Crowdstorms when they search, it's quite likely that they're looking for some kind of content in our realm, and that's great! Twenty-five million potential customers! Though we can take it a step further and begin to scroll through the related results and identify more specific areas where we feel Crowdstorms might have greater success. "Advertisement ideas," "marketing ideas,"































“invention ideas,” “drawing ideas,” “business ideas,” and others all show more specific interests that should be more heavily considered when we move on to targeting our users.

While this might not work for everyone, any startup that could be used by someone doing their job should be looking for data from sites that either contain the set or subset of the users the startup targets. Initially targeting creatives that specialize in creating websites, corporate identities, or anything else you might see on a site like Dribbble, we felt that the Behance Network would be a good place to start. As a “network for creative professionals,” they target a similar audience, but sit outside of our “axis of competition.” Some quick research shows that their network receives 26 million pageviews a month!

We also took a look at LinkedIn demographics for some alternate sources of data more directly linked to a number of users. This one can be tough to find, but a bit of Google-fu should help here. We ended up finding that about 3.6% of LinkedIn users described their area as “Creative” (and we think some people in marketing, engineering, and information science could end up being creative too). That’s about 3.6 million users as of the beginning of this month (based on 101 million users).

These two strategies came up with a solid amount of data that would reasonably estimate our market between 3 million conservatively, and 25 million optimistically. While neither number represents something close to the users Facebook sees even daily, the data makes it obvious that this is something worth pursuing!

## Appendix C: Get Satisfaction Activity

	Topic Title	Status	Created At
 ▾	Crowdstorms is fun	- ▾	03/24/2011
 ▾	Examples, use cases	- ▾	03/20/2011
 ▾	Choose Image Link	- ▾	03/07/2011
 ▾	What would make you want to use Crowdstorms more often?	- ▾	03/07/2011
 ▾	icon tooltips	complete ▾	03/07/2011
 ▾	Notifications	- ▾	03/06/2011
 ▾	A quick add/random topic function.	complete ▾	02/11/2011
 ▾	Tween the vertical positioning of the profile	complete ▾	02/10/2011
 ▾	Number of topics an item is in listed on the item tile	rejected ▾	02/11/2011
 ▾	Profile Graph cropped by a few pixels on top	pending ▾	02/16/2011
 ▾	Entries remain in 'add item' text field after entering	complete ▾	02/11/2011
 ▾	Timeline needs collapse all button	complete ▾	02/10/2011
 ▾	Needs way of seeing public topics	complete ▾	02/08/2011
 ▾	Limit suggested entries	complete ▾	02/11/2011
 ▾	Unsubscribe link not functioning	active ▾	02/11/2011
 ▾	Items in search results are unstyled	complete ▾	02/11/2011
 ▾	'Remember me' not working on sign in.	- ▾	02/10/2011
 ▾	Bugginess with the back button	pending ▾	02/10/2011
 ▾	Should be able to click "# more"	complete ▾	02/10/2011
 ▾	Display name not displaying	pending ▾	02/09/2011
 ▾	Voting up	pending ▾	02/08/2011
 ▾	Update 'follow' state after follow	complete ▾	02/08/2011
 ▾	Style the welcome message	complete ▾	02/08/2011
 ▾	Loading graphic when adding new item	active ▾	02/09/2011
 ▾	can't delete items	complete ▾	02/09/2011
 ▾	'Pose a Topic' text field too large	complete ▾	02/09/2011
 ▾	Adding a picture	active ▾	02/09/2011
 ▾	Needs testing with Firefox 4	active ▾	02/08/2011
 ▾	New Topic window doesn't resize horizontally.	complete ▾	02/08/2011
 ▾	Clicking 'How to write a good topic' does nothing.	complete ▾	02/08/2011

## Appendix D: Selected Social Reaction to Crowdstorms

Tweet from Daniel Lopez: <http://twitter.com/#!/flatfootdesign/status/53848759347585024>

Just got my invite to [#CrowdStorms](#) - I'm pumped to try it out - <http://bit.ly/ftiVOL>

Tweet from Mark C Mitchell:

Monday will work fine. Thank you very much! Fantastic site + idea, always great to be apart of a new community

Tweet from Eric Ingram:

[@crowdstorms](#) played with crowdstorms, really dig the concept, looking for use cases to help me develop ideas for [@betacandy](#), bravo!

Tweet from Nick Rovisa:

Let's try that again: Hmm. I'm actually loving [@Crowdstorms](#) so far. Nice work

Tweet from Ayaka Noaka:

[@crowdstorms](#) Will do! I absolutely love it so far.

Tweet from Omar Fouad:

It's always brain refreshing having a daily morning look at [@crowdstorms](#)  
[#crowdstorms](#)

Tweet from Bon Champion:

[@jg\\_kelley](#) [@crowdstorms](#) ugh it looks super cool, really want an invite

Tweet from Janna Kimel:

[@crowdstorms](#) looks like a cool tool you have there! Look forward to the launch.

Vita  
Josh Hepworth

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**Education**

Schreyer Honors College  
at The Pennsylvania State University  
B.S. in Information Sciences and Technology  
Thesis Title: Creating a Meaningful Company  
Thesis Supervisor: Dr. Irene Petrick

**Experience**

Bonsai Studios, LLC  
*Owner & Development Consultant*  
Designed and created a custom time and project management client  
Managed design, development, and SEO projects from initiations to closing

Crowdstorms  
*Owner & Lead Developer*  
Created market and customer fit plan for social mind mapping concept targeting creatives  
Developed web application for Crowdstorms from scratch using CodeIgniter, PHP, JS

PNC Financials Services Group, Inc.  
*Continuous Improvement Engineer Intern*  
Managed DMADV project during Analyze and Design phases  
Created internal Service Partner Satisfaction surveys for corporate scorecard

Motorola, Inc.  
*Application Development Intern*  
Managed, designed, and developed project to increase team schedule visibility  
Coordinated application migration project during implementation phase

**Activities**

Web Design & Development for various Penn State clubs like HVC, PRSSA, and IDEAS@IST  
Designing and crafting furniture and home accessories from raw lumber and other materials

**Awards**

Johnson & Johnson Business Case Challenge  
IST Academic Excellence Scholarship  
Schreyer Academic Excellence Scholarship  
PNC Technologies Award Scholarship