When Startups Start Down: How leadership, vision, strategy and design can

enable a startup to breakdown the barriers killing the company

By

Christopher Blade Kotelly

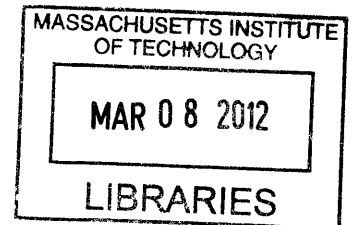B.S. Engineering-Psychology

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Abstract

High tech startups can be exciting places to work. Unlike many large corporate environments, startups offer new challenges almost every day, innovation is a sine qua non, and the rewards can be colossal both from financial and intellectual perspectives. People in startups can make their own rules, and change them at will. It's not uncommon for startups to change significantly as each new hire is added, since the impact of a single person in a small organization is significant. However, if a startup doesn't pay attention to the elements that do make many large corporations successful, they risk falling into traps that can result in failure.

This paper shows the problems facing a particular startup that had grown quickly because of the brilliance of the ideas behind their technology and the founder, and offers suggested remedies.

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Being at MIT has truly been a life-changing experience.

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1.0   Chapter 1

1.01   Introduction

Making good software is complex. And being able to grow a software company from scratch is particularly difficult to do well since there are enormous challenges that face an inexperienced entrepreneur.[1] There's more to creating successful company than simply producing a great piece of technology. In fact sometimes the quality of the technology matters less than the quality of the sales and marketing.[2] About half of all new companies fail in the first five years[3], and only about 10% of software companies succeed. [4] There is no limit to the things can go wrong with a software startup. Poor marketing and sales execution, mismatches between the technology and the target market, poor understanding of the end user and the inability to create a compelling user experience, and bad internal communication are just the tip of the iceberg.

In this paper, we'll examine a particular software startup, three years into their growth, and see the challenges they face – both the ones they are aware of and the ones they were blind to – and explore a solution that the company implemented.

1.02   Overview

AdTarget, a small software company located in L.A. County has been operational for slightly over 3 years. With just over 80 employees mostly residing in L.A., some in New York City, and having raised more than 25 million in capital, its founder, Alex Myers, originally from a prestigious school back east, is facing an inflection point in the company history. Alex has seen the little company grow from a 1-man operation into a company that's taking in $7m a year, poised on the brink of breaking even.   Alex, along with the help of the board, has hired Henry

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[1] Cusumano, The Business of Software: What Every Manager, Programmer, and Entrepreneur Must Know to Thrive and Survive in Good Times and Bad, New York: Free Press 2004, p7

[2] Roberts, Entrepreneurs in High Technology, 1991, New York: Oxford University Press Inc.

[3]Shane, S., 5:00 PM Failure Is a Constant in Entrepreneurship, New York: New York Times, July 15, 2009

[4] Nesheim, J. L., High Tech Start Up, Revised and Updated: The Complete Handbook For Creating Successful New High Tech Companies: New York, Free Press 2000, p2

Hicks to be the CEO – a man with a prestigious past of starting and running software startups in the valley.

Henry and Alex have been working together for over a year now and tensions have been increasing between the two of them. For a while, sales were increasing steadily even during a tough economic crunch, but recently sales started slowing down. Existing customers were starting to churn and drop the monthly subscription for the service, and the product team was furiously trying to release new features to entice the market to switch to the AdTarget service from the competitors. The board was bullish for the team to push the numbers back up, and for a while the team was able to keep the ship sailing, but Alex and Henry saw problems around the corner and were working together as best they could to turn the company around.

During the summer of 2010, the AdTarget used a new tactic to attempt to solve their problem, by taking on a strategic approach to identify problematic areas to determining if there were some issues more core to the business than they had considered before. They analyzed how they prioritized and designed features into the product, how they sold and marketed their product, how they communicated internally, how the teams were organized, how they stacked against the competitors and through this process they made significant changes and created a 1-year roadmap that would serve to get the company back in a competitive position. This paper outlines the research conducted of the current situation of AdTarget, conclusions drawn from the research, as well as the suggested solutions to the problems that AdTarget implemented as a result of the research in order to save the company from bankruptcy.

1.03   The History of AdTarget

Alex, being exceptionally bright, was day trading during the dot-com bubble and using his student loan money. He amassed more than $1.2M, and was able to use that money to help his family financially as well as pay off his loans. Unfortunately, as it happened to many, that $1.2M shrank during the dot-com bust, and he was left with $400K. This was, however, enough to start his consulting practice, and eventually aid in funding AdTarget.

In 2007, Alex was working as a internet-marketing consultant, helping companies drive customers to their products and services by increasing the relevancy of their display advertisements using innovative demographic-targeting algorithms. Display advertisements include banner ads that one might see on the top of a web-page, except for many years companies would just buy inventory on a specific site but over the past few years innovative ways have emerged to track users by tracking them using cookies stored on their browser in order to build a user profile that can predict their interest and even their demographics. These

techniques are significantly better than simply buying a single media-purchase on one specific website – because they can target and choose not just the websites that display the ad, but also which visitors are presented the ad. And when it's done right, click-through rates and conversion rates increase dramatically.

It struck Alex that display advertising was incredibly inefficient and there were significant gains to be had by allowing advertisers to allocate the marketing dollars more precisely to the audiences. At the time, he didn't believe that companies realized (and says that most companies still don't) how much of a differentiator good display advertising can make for a company when it's done well. Alex commented, "We'd grow their revenues 10% *each month* by continuously improving the targeting and messaging to different audience segments. I was stuck by how effective the medium was if you did it well, and how hard it was to do well. Most of the time, the advertisers didn't offer audience segmentation tools, and if they did, there's lots of manual grunt work involved in figuring out what was working or not." Alex say that typically a marketing person would be responsible for imagining all the messaging that might resonate for a particular product or service, and then use the same messaging in the company's ads, and landing pages on a website. When Alex realized how labor intensive this process was, he believed that there was a great opportunity to use automation to help in the process.

In 2007 Alex sent a business plans to 40 venture capitalists, seven of them responded, from which he got one meeting, and ultimately no commitment. All of the VCs were uninterested for various reasons – either Alex had no team, no working software (Alex only had sample screens of the user-interface) or the VC simply thought that it was too early to invest until Alex had acquired commitment from potential customers.

Undeterred, Alex started to address the objections. Since he had been consulting, he was able to afford to hire a few contractors: two engineers and a sales & marketing person, to help him develop the technology and acquire customers. AdTarget started in October of 2007 and by February they had built a working prototype and started testing it on a few publisher and advertising clients he had signed up to make sure it was working properly.

Early customers were referrals from marketing connections and advertisers that he already knew well. Alex believed that he had addressed the objections raised by the VCs and having filed two provisional patent applications, he literally hit "reply" to all the VCs rejection emails to provide an update. This time, three VCs responded positively for a meeting, and 2 ended up making offers for a series-A round of funding. In retrospect, Alex believes that having done what the VCs asked for went a long way to getting that round of funding. Alex knew he could show the VCs that he was "someone who can listen and get something done." And it was clear

to Alex and the VCs that Alex wasn't skilled enough to run the company, so AdTarget hired Henry Hicks as CEO in September 2008.

AdTarget had a full product launch in January of 2009 but saw early on there were going to be problems selling it. Alex had overestimated the competence of the marketers that needed their product. Alex had conjectured that 70% of marketers didn't know much about ways to effectively target display-media, but predicted that the product would certainly appeal to the remaining 30%. However, Alex found that "it appeared to be closer to 97%" of marketers who didn't understand the basics of display-media and how these campaigns worked. He was frustrated that so few marketers were able to understand the concepts and began to discover how the usability of the product was far more important than he initially conjectured.

2.0   Chapter 2: The Current Situation

2.01   About The AdTarget Product

AdTarget makes a software product that helps marketing people and ad-agencies place advertisements on webpages through a network of publishers.

AdTarget uses a proprietary formula for how to display the ads that appear on websites and a somewhat straightforward way for companies to pay to appear in that space. This enabled any mom-and-pop operation can easily start to place ads on hundreds of sites throughout the network of AdTarget customers and derive value from it.

However, Google also has a competing network called the Google Display Network that leverages their technology called AdSense. This technology targets ads according to the topic of the web page. For example, if a user is reading an article on Dog Training, AdSense displays ads which can be simply text, or include still or animated images relevant to dog-training. Because Google makes it so easy to use, many small operations simply choose to opt into the Google network.

What's unusual about Google's AdSense approach is that a given company doesn't simply pay more than a competing company in order to show up high on that list – since that would skew the ads to only large companies like Target, Sears, etc. who have large marketing budgets and could afford to outbid any small company. The Google AdSense approach lets any company indicate many things about their ad, such as the specific words that webpages should contain in order to display that ad, the amount that a company is willing to pay Google each time a user clicks on the ad, their daily budget for ads, when the ad should appear, and several other

factors that a company can choose – or not choose – to use. And while there are many techniques that a customer can use to structure a single ad - or entire ad campaign - Google makes heavy use of words that a customer supplies in order to determine when a certain ads shows up.

Keywords are specific words and phrases that enable a company to specifically target their audience by topic as opposed to by targeting them more traditional demographics (such as gender, age, etc.) The phrases can be as broad as "Dog Training" or as specific as "association for training and development". A single display ad can contain several key-words in order for an ad campaign to be extremely targeted – thus ensuring fewer clicks from people who aren't part of the target audience and allowing the company to spend more wisely on their ads.

So instead of a small company trying to out bid a large company in order to get on the top of the list of ads, a small company can simply be very specific with the terms they use, and using the Google AdSense tool they can even see how common any given search phrase is so they can differentiate themselves by avoiding common topics.

And while Google doesn't publish all the details of how they rank various ads, several companies in the display-ad space have found ways to enhance the ability for a company to be more effective when constructing ads and ad campaigns for Google.

Google provides some limited tools for effective targeting and advertising on the Google network, but they limit the user's understanding about where the advertisements show up, and the ability for the user's to analyze the effectiveness of the ads and how the user's should bid for each time a user clicks on an ad (also called Pay-Per-Click pricing, or PPC).

Other companies provide tools and their own network of websites, (of which AdTarget is one of these companies) to help marketing departments stay one step ahead of competitors who are managing a complex ad campaign. Companies who charge for access to the network and the display advertising tools have features that go beyond the simple (and free) tools that Google provides in order to help marketing departments make better decisions about how to structure every aspect of their campaign, allowing them to manage these display advertising campaigns on the web. The tools often have well thought out user interfaces, allow a single person ways to view all their various as campaigns in robust ways, analytics and reporting tools to understand how successful any given ad is, and methods for improving the quality of the display ad. In addition, these companies provide insight into how much a company should bid for certain ad placements. That is, placing an ad on CNN.com is more expensive than on

www.grayhounddogtrainingexperts.com, by being able to better manage where and when the display ads appear and understand balance between the costs and the results, a marketing person can control costs and target viewers more effectively.

And as Google makes changes to their AdSense ranking algorithm, these companies follow quickly with new features and modifications to existing features to keep their customers' ads on even more relevant user sessions. This way, these companies can offer more value to their customers, but the challenge is that whenever Google upgrades their AdSense targeting capabilities it chips away at the core value proposition of the other ad networks since they don't have the depth and breadth of Google's network of partner websites on which to publish ads.

AdTarget is one of these companies and they have fierce competition from companies that are much larger, have been around longer. AdTarget sells access to their network of websites on which AdTarget's customers can place ads, as well as access to tools that helps customers target and analyze their display ad campaigns. The AdTarget solution sells for $1000/month plus fees for each time a viewer clicks on an ad that AdTarget has placed. The fee that the advertiser (such as a company like HomeDepot or an agency that handles ad placements on behalf of HomeDepot) pays is split between the site that displays the ad (also called the publisher) and AdTarget.

AdTarget targets small to medium sized businesses. In contrast, AdTarget's competitors are often addressing larger companies such as Target or Wal-Mart. One competitive differentiation is that each network splits the fees differently. This is important because if an advertiser (say, Nike.com) is willing to spend $10 per click, and AdTarget take a smaller percentage of the fee than another ad network, the publisher (such as CNN.com) will be more likely to display an ad from AdTarget than that of a competing network who charges more. Specifically, if AdTarget were to split the fee where 90% goes to CNN.com, and 10% goes to AdTarget, and a competitor only gives 50% to CNN.com and keeps the other 50%, CNN stands to make more money by displaying AdTarget ads. Additionally, since AdTarget's technology is more advanced, it tends to generate higher click through rates for more relevant audiences which is a win-win for both the advertiser and publisher. The publisher sees more users clicking on ads and that generates more revenue, and the advertiser gets higher quality traffic to their site.

A slight difference in the companies in this space (more of which is discussed in the section on the competitive landscape) is that AdTarget has a solution that focuses on helping customers segment and target audiences, while other companies focus on helping customers perform better campaign-management and reporting. Most of the companies in the space do both to

some extent, but this area of focus is an important differentiation both in terms of how AdTarget goes to market, and how we examine the options that AdTarget has going forward.

2.02 The Product Evolution and Technology

The first version of the product was centered around an ad-server technology that would place a bit of javascript code on a publishers website that would then send information back to AdTarget servers to aggregate information about users activities on the web and information about other sites they've visited in the AdTarget network of publishers (in order to understand specific users' interest). However, customers found the AdTarget tool difficult to use and since it didn't integrate with AdSense, they were forced to use two tools to maintain their display ad campaigns, which didn't fit into the users' workflow.

When customers stared using the AdTarget product, there was no support for importing existing AdSense account information, which meant that the setup process was lengthy and complicated. Once a user started using the AdTarget product, a user that was leveraging AdSense would have to make changes to two networks independently, which doubled the time spent managing theses campaigns for a typical marketer.

In addition, AdTarget had a special tool that performed audience profiling and segmentation that analyzed a tremendous amount of data in order to provide advertisers a very detailed picture of the most successful customer-profiles, and the evolution of those profiles over time. Unfortunately a downfall of this technology is that a typical customer profile doesn't change rapidly, and after the AdTarget solution is deployed most of the value would be gleaned in the first 90 days of use. Once an advertiser was armed with this new information, they could simply apply this new knowledge to Google's AdSense solution and avoid from having to manage two tools. Another challenge is that the page up Network was smaller than the competitors and their suite of tools that helped the advertiser was complex to use

AdTarget started working on tighter integration with AdSense such that a user would not have to manage two separate tools. However, the API only supported common features and Google charged high fees for access to the API, which limited the appeal to AdTargets customers since AdTarget would pass those costs to their customers. The API could have been the start of creating a platform solution that would enable others to use their core-technology, but in creating a limited API, customers found little utility it.

The back-end of the product was designed to be scalable and easy to code,, which was a combination of the C++ and Perl programming languages, and an open source database,

MySQL. This obviated the need to purchase licenses as they scaled up. Initially they had looked into deploying the solution on a cloud, but in 2007, cloud technology wasn't as reliable as AdTarget wanted, and they chose a more traditional approach by using a local service provider that rented racks of servers literally located in a cage designated for AdTarget. However, there were problems, for example, during the summer of 2010 someone tripped over a power line and the servers were off line for the weekend. This didn't stress Alex, however, since he believes that the usage of the tool is infrequent and only occurs during regular business hours. He noted that even Google shuts down AdSense for four hours on the weekends for maintenance.

3.0   Chapter 3: The Problems That Were Killing The Company

The problems that AdTarget faces aren't unique to startup companies. To have a successful company, both from a financial perspective, a customer perspective, as well as an employee morale and retention perspective, all companies need to ensure that: product and pricing is aligned to the target market, the marketing team effectively targets and acquires customers as well as performing useful competitive intelligence, sales needs to be incentivized to perform the right behavior, internal processes need to be streamlined and clearly defined, and roles and responsibilities must leverage internal talent effectively… as well as a thousand other elements.

At AdTarget, a few key areas that stood out; these included executive misalignment and poor communication between members of Sr. management and between the multiple offices, usability issues with the core product and lack of product features, the absence of a product roadmap, marketing's inability to articulate a compelling value proposition and provide useful sales tools, sales' low morale and poor incentives, and ultimately a high level of customer churn (approximately 12%-15% per month.) Surprisingly, given all these issues, the company was still not suffering as one might expect – there were indeed a bunch of smart technologists at AdTarget that was the thing that helped keep things on track. However, the double-edged nature of smart technologists – particularly when they are founders – is that they often have a blind spot toward the value of marketing and sales activities as well as rudimentary project management skills as was the case at AdTarget.

3.01   Problems with Organization

The CEO, Henry, was a very driven individual with a large intense personality. He said what was on his mind, and though he did not enjoy confrontation, he wouldn't abstain from it, either. Henry had identified some of the leadership, communication and product issues that AdTarget was facing when he first started working there, however his charge from the board was to

increase the sales revenue and keep churn in check and he focused he efforts on that task. When he came on board, he was also tasked to raise considerable capitol from new investors during a very challenging economic period. He was successful, but as a result of being externally focused he hadn't laid the groundwork for a successful working relationship with his direct and extended teams. Henry didn't feel that the board fully appreciated the issues he had with his staff, and he worked very hard on the sales and marketing fronts – spending much of his time in meetings with Elis Roberts, the VP of Sales and Marketing.

Elis Roberts was a smart, intense businessman who focused heavily on his staff and engendered loyalty from them by appearing to be strong advocates for their needs. He was numbers focused as well, and would use the sales figures and website traffic information to drive his thoughts about the product when talking with Alex. Ellis made all the decisions about what happened with marketing and sales; from website changes, to sales compensation plans, promotions, hiring and firing and consumer research. And since he led a large portion of the organization which allowed her to control much of the tone of the office as well as the behavior of much of the staff.

Meanwhile, Alex was working hard with the CEO and VP of sales and marketing because Alex saw there were problems but didn't know what to do to solve them and this frustrated Alex. Alex's job had now become VP of Product and he was responsible for getting the product to work well and for adding new features. He did so with a very small design and usability team, and with his sizable engineering team. Gerhart Meyer, was the head of the engineering and located 3000 miles away from the L.A. Headquarters in New York City where he had a small office in SOHO. Gerhart and Alex were childhood friends, but Gerhart wanted to live in New York to be closer to his family. So as the company grew, Gerhart hired several people in New York, but then also hired others in places that included Dublin, Madrid and Dusseldorf. This would pose a problem when the team needed to work differently than they had while the company was in the early growth phase. Even though Gerhart would make periodic trips to L.A. his team was distributed and he would let them decide for themselves who would take on which tasks from the backlog.

Gerhart didn't have a project manager involved to keep schedules on track, ensure that the engineers were assigned tasks that used their skills effectively, and aid with communication. Research showed that the distance between the highly distributed engineering team, and the rest of the company, created classic problems for communication due to time-zone constraints, lack of alignment of the engineering team around the vision of new product features, and lack of communication to the engineering team about corporate issues. In this

role, Gerhart is the only person providing information to his team, and since he is the single point of communication his team's effectiveness is limited by Gerhart's ability to communicate[5].

In addition, Gerhart hadn't implemented a quality assurance testing component to the delivery of code and research into the robustness of the code revealed several problems which caused unexpected delays in launching new features.

Research of the team dynamic revealed that no executive trusted the other, and this caused considerable turf war issues. For example, Henry, the CEO, didn't know that the staff was quiet and heads-down when he was in general cubical area, yet social and upbeat when he was either in his office or away – mainly because Elis was well liked by the staff and it was clear that Elis and Henry had problem with each other. Henry would generally discount the validity of Elis's arguments, even though Elis would provide lots of data to support his ideas. Alex and Henry did find a certain level of alignment with regard to big picture issues, but Alex didn't trust that Henry was going to be able to solve the larger problems facing AdTarget before they ran out of the money Henry had recently raised just 8 months prior.

The Key Problem Areas and Recommended Solutions:

- Poor communication in the executive team
  Creating and articulating a clear product development approach can resolve part of this problem. However exceptionally strong leadership will be needed to regain the loss of trust amongst the team members.

- Lack of strategic vision and alignment
  By taking a step-back, the team can be less tactical and start working on strategic initiatives. A small amount of effort in this area will help all the teams work toward the same goal.

- High churn and poor product usability
  Skilled user-experience designers can help make changes, from quick hits that can help new users to learn to use the technology more easily, and longer-term initiatives that would help create an application that was sticker for users and demonstrated more value.

- Lack of best-practices in product execution

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[5] Allen, T. J., Managing the Flow of Technology. Technology Transfer and the Dissemination of Technological Information Within the R&D Organization. Cambridge: MIT Press 1984

There are several resources that can help the team execute more effectively, including reference books about running effective product development organizations, and skilled professional product and project managers that could either consult temporarily or be added as full-time staff.

The reason it's critical to understand these issues is because this is the very core of why the company was unable to produce a product that worked effectively for the market. Because of a lack of trust, the way that features were added to the product was exceptionally complex – since everyone had to weigh in with their approvals, and the communication was mainly focused on executives and not on the marketing research people, designers and engineers who had to execute the work. This is described in detail in Chapter 5: The Internal Processes

3.02   Problems With The Product

The AdTarget product had lots of features, the core of which focused on the ability for the tool to identify audience segments and categorize them into different display ad campaigns.

AdTarget wanted to ensure that they product was easy to use for their existing customers and would perform usability tests. However, an experienced human-factors engineer did not conduct these tests, and the fidelity of the results of the test would generally serve to suggest that the features they were testing were well designed. Since they had more than close to 1000 customers, they believed that they were able to draw on a set of users that were indicative of the population at large. AdTarget did not conduct tests with potential customers so they had no data to suggest that the current product wasn't meeting the needs of a larger audience.

An expert review of the AdTarget tool concluded that while the tool could perform many other tasks in addition to the core offering, the hierarchy of information did not help a user clearly understand how to effectively use the tool, i.e., which parts of the tool the user should use primarily and which parts supported those core features. The expert review also concluded that there were a set of features in the current product that their customers used heavily, however a customer would still have to use tools from Google to complete their daily (or weekly) tasks and this reduced the perceived effectiveness of AdTarget's tool since the tool did not sufficiently envelope the functions of Google's tools.[6] The review also indicated that the tool was very complex for new users – and suggested that the usability tests that were run with users that were too experienced in order to gain good knowledge about how make changes to the existing tool to better serve new users.

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[6] Eisemann et al, "Strategies for Two sided markets", Harvard Business Review, 2006

In fact, sales people knew this to be true and would often not tell prospects about the details of the product and when they could, would not show the tool to the prospect at all unless the prospect asked to see it. However the sales team did not communicate this to the product team.

3.03   Problems with Sales and Marketing

Members of the internal sales team (who would generally call prospects back once they registered on the AdTarget site) did not communicate the issues they were encountering with selling the product. In fact, under direct examination by Alex, sales people would not tell Alex that they weren't comfortable selling the product and did not request that significant changes should be implemented. The sales team was under extreme pressure (from the board, as communicated to the CEO and the VP of sales) to deliver their numbers or face possible termination, so they did not want to disrupt anything in the product funnel.

So while there wasn't a strong roadmap, features kept trickling out of the engineering team – and the sales people believed that these features would help make new sales. When the sales people made their numbers, they were lauded by the organization, however the sales person who sold consistently well confided with the researcher that he would try to avoid showing the product in action and focus on the results that the product could help the customer derive. In practice, many customers did not see those results, or if they did see good results they didn't believe that they would see continuous improvement by using the tool frequently since the tool contained little analytics or suggestions to inform the customer that continued use would help them save more money and increase effectiveness. And sales people didn't sell using this concept.

The result was an increasing level of churn from both sales to the wrong kind of customer (those who really didn't need the power of the tool) and because customers found that the tool was too hard to use and would abandon using it. Churn was increasing from 10%, to 12% and even hit 15% one month. The company had a very complex sales compensation policy that incentivized the wrong goals, and encouraged gaming the system. Many times, the sales team would close the wrong type of customer and the customer would cancel their subscriptions soon thereafter.

Of note, the customers who liked the tool the most were the ones who had met or spoken to Alex during the sales cycle. Alex ensured that he communicated the core value proposition to those customers – since it was his product after all – but Alex had never been engaged with the sales team to help the team become more effective in communicating the value

proposition. This wasn't all the fault of the founder or the sales team. Marketing hadn't provided the necessary apparatuses and tools for the sales team to use.

Marketing was staffed with inexperienced marketing people who were smart tactically but not strategically. Marketing worked hard to get a lot of inbound marketing leads in order to reduce costly advertising costs – and by using their own tool they were able to keep their own ad spend low, and increase their website traffic tremendously. An online resource that provides website traffic for various sites, shows that AdTarget consistently had 300% more hits to their website than the closest competitor. Even during one of the worst performing sales periods, AdTarget achieved roughly 500,000 hits to their site, which was more than 700% more hits than the closest competitor. This suggests that they were either casting too wide a net and marketing to the wrong audience, or unable to close customers who were indeed the right target population.

However, in an attempt to lure people to purchase their tool, they gave free access to their customer profiling technology. This was an attempt by the marketing department to engage prospects since the competitors did not offer this technology in as a robust fashion. Unfortunately the free website tools were easier to use than the AdTarget platform, and extremely focused on a specific high-value task. The free tools offered the user to generate a audience demographic report without restriction, and while the tools didn't perform all the tasks that the AdTarget platform did, a casual user could literally use the tool forever without paying for it and derive the key value of the paid platform.

They were literally giving away their core value proposition.

3.04   Problems from the Founder's Perspective

Now that 3 years had passed, the company was considerably bigger, and the first hires that had been working closely were now set in a matrix of a larger organization. They each maintained control of their area of expertise, Alex leading the product team and Gerhart leading the engineering team. With Gerhart across the country in New York and with his lack of prior experience, Alex was clearly driving the company day-to-day.

Alex saw three issues facing the company. Firstly, the product was not constructed in a customer centric way, secondly, marketing and sales were not being effective and lastly, there was a lack of momentum in sales and in employee morale.

Alex commented, "We haven't had the first round of [large scale] success. We're not failing but we're not succeeding. We've got problems with management, dysfunction [in the team],

product issues, and the cost of customer acquisition is too high." Alex knew that the product could be improved and a new version that leveraged the core strength of the platform that was constructed with a strong focus of having a great end-user experience could go a long way. But Alex wondered "would a better user interface increase the sales by three-times? Would it be twice as sticky?" Alex acknowledged that there was a "mismatch between the advanced product capabilities and the low-end {small and medium business] market we're going after".

Alex also knew that there was misalignment in the management team, making it particularly hard to determine what the next product release should look like. Elis would push for specific features ensuring that if he was able to get them he could increase sales, however Alex or Henry would often disagree. Alex felt that the team was "perpetually paralyzed" and that the "it takes too long to set a course and when we do we can't stick to it." Alex also knew that a "strong leader would be able to align around a common vision."

Lack of good leadership was a theme that emerged from the research that was conducted. When questioned, Alex's thought about the issues and concluded that "a lack of [significant] success leads the rank and file to question the competence of the leadership - which intern results in a crisis of confidence [in the company], which turns into apathy if they don't believe their hard work will make a difference."

Alex also started to understand that he lacked specific skills that were necessary for a founder – who was the one that had driven the vision of the company for years – such as a stronger ability to communicate to the employees. "I raised [those] issues a year ago, but because of my lack of my ability to communicate, infighting, and distractions - like fund raising - I wasn't able to communicate the fundamental mismatch between the product we have and the market we're going after."

3.05   The Current Situation

As of the time of the research, AdTarget had a cash burn-rate that enabled them to exist for about another 18 months before they would have to close up shop or seek additional investment unless they could find a way to turn things around.

Members of all the teams and the board knew there were problems, but no single person had a vision for how the company needed to evolve - and the clock was ticking.

With board pressures for numbers, sales and marketing was placing all of their efforts on tactical solutions and no effort on strategic efforts that may have future benefits but could distract from the month-to-month bottom line. The product organization knew the product

wasn't as user-friendly as they'd like but did not see that as a key problem and did not have a roadmap for how the product would develop in the future in order to gain competitive advantage, the engineering organization was plugging along and working on the set of tasks they had been assigned but they weren't highly integrated in the product design process, and the founder, Alex, the CEO, Henry, the VP of sales, marketing and Services, Elis didn't know how to attack each problem areas, they didn't know how to make the numbers in order to survive, lacked product vision and leadership.

4.0   Chapter 4 - the Market

4.01   The Customers: Interviews with two representative customers
There are basically two types of people who use the AdTarget product: users who know a lot about the AdSense and are responsible for managing the campaigns on a day to day basis in addition to their other work, and those who are more hands-off and really would prefer a solution that they didn't have to constantly manage. Rearden represents a more hands-off user, while Marcelle is indicative of the overworked marketing manager who has deep knowledge of AdSense.

Rearden – CEO of a mid-sized business

Rearden is the CEO of an Internet business he started in 1995 that serves the financial services industry. He's a terse man, with a strong personality, and while he's not a developer he does manage all the technical people in the organization. He uses the AdTarget tool, and is self-described as being "data centric". He likes that he could see a 50% improvement with the success of his display-ad campaigns, enabling him to get more leads for the same cost. He uses AdTarget as part of a set of tools (including Google's AdSense tool) because he knows that AdTarget only gives him "part of the picture".

Rearden uses AdTarget to manage more than 10 display-ad campaigns, and uses the AdTarget product daily, totaling about a few hours a month. He's used AdTarget's professional services group on occasion and believes that they helped get his company up and running quickly.

Rearden believed that he's getting good value from the product but admitted that he didn't know how much it was costing his organization, yet still believed that he was getting significant value even though he thinks that the tool is too hard to use and it takes too much time to figure it out. As a result he performs the same tasks all the time and uses the tool in very specific ways.

When asked why he bought the product it was because he met Alex at a conference he was impressed with both Alex and the product.

Marcelle – Marketing manager at a mid-sized business

Marcelle works for a company sells digital cameras and used to be able to afford to use an external agency to manage all their paid advertising since 2002, but decided it would be less expensive to bring the competency in house and hired Marcelle.

Marcelle knew that she wasn't highly technical and need a tool to help her with display ad campaign management. She found out about the AdTarget tool at a trade show, and knew it might be hard to get running, so she engaged the AdTarget professional services group when she started the contract and she thought the consulting provided a significant amount of value.

Since Marcelle needs to justify every dollar spent in her organization, she wanted to ensure that she could get good value from the AdTarget tool, and at $1000/month (plus fees), she thought it was a safe bet. However, the beginning of the engagement was challenging. "It took 90 days to go through everything and [for AdTarget] to fine tune [the display ad campaigns]". She wasn't sure that the AdTarget product was actually providing significant gains – since Marcelle wasn't able to easily track all the positive effects of the tool. After three months she hadn't lowered the cost of customer acquisition, but was hoping that situation would change and was very optimistic about it.

Marcelle believed that the AdTarget services organization was the biggest value, since it helped her avoid having to learn the complexities of the tool and spend more time understanding the intricacies of her other work.

As it turns out, the AdTarget tool did have an impact on her display-ad campaigns – she had lowered her spend with Google by half, and was getting more relevant traffic to the website. However her conversion rate has stayed the same so in effect she's only getting half the conversions from display advertising.

However, the biggest impact was in understanding our customer demographics and profiles which allowed us to be more efficient in other areas of marketing, including social media, print and other media. Marcelle states that the tool is "ok", but the people in AdTarget's customer support are where the significant value lay.

She would like a better integration between Google's AdSense and the AdTarget tool so she doesn't have to switch between them and so she can leverage the history from all the work

done in AdSense (instead of having to start from scratch in AdTarget by constructing all new ad campaigns.)

Marcelle also wants the user interface to help her out more – to teach her more about the options and to guide her though the process of using the tool more effectively. She really wishes that there were more analytics built in to help her show her manager the effect of the tool and make justifying the monthly spend on the tool more easily. Right now Marcelle is happy with the tool, but knows that in 6 months, she'll need to re-justify the effectiveness and re-sell the tool to her management team or face having to terminate the AdTarget contract.

4.02   Internal Staff: Interview with the Top Sales Person at AdTarget

Will, the top selling sales person has been at AdTarget for over a year and is consistently the highest closing sales person each month. As a result of his success, he's been promoted to the role of sales director. His role had been (and continues to be) one where he calls people back who request information from the website, or cold-calls prospects based on a list of companies generated by the marketing department.

Will talked about some of his challenges with selling the product as being centered around the complexity of how the product worked – not the core functionality. For each call, he would conduct research so that he knew as much as he could about the way that the prospect made use of display-ad marketing, and come up with a set customer demographic segments and campaigns based on their needs to show how AdTarget could better serve their needs. However, he would try as much as he could to *not* show the AdTarget tool. This was a little surprising, since the AdTarget tool was web-based, had a scripted demo that many of the other sales people used, and whenever Will made a sales call, he would screen share a slide show with the prospect: it would be easy to show the tool as well. But Will said he knows "the tool is kinda hard to use" and commented "it's better if I don't show them."

Will was also concerned with the chatter he heard about a new version of the tool that was being talked about in the product team.

As part of the research engagement, a vision of a new tool was created using expert user-interface consultation and the product team. The set of images that were produced were quickly socialized with the executives, the board and finally the company during and all-hands meeting.

Will had been part of this meeting and saw how a new tool might look and function. The presentation was given with the explicit caveat that the images were exploratory ideas and the

purpose was to generate feedback from the whole company. The concept appeared to be well received – particularly by Will, who was vocal in that meeting about the value of a new tool that would be more user-friendly. However, behind closed doors, Will was having conversations with Elis who was causing fear and uncertainty for Will about the new product direction. Elis voiced that it would distract the development team and it would make it harder for Will to sell effectively – while during that same meeting said the opposite. This caused anxiety for Will and for his reports, since Will openly shared his concern with them but not with the product team. The productivity of this team was low.

4.03 External: Interview Kavitha-Employee in Google's AdSense group

Kavitha works for Google on the team responsible for AdSense, and described some elements of Google's approach to working in this space. Google likes that other companies are working in the space to help further develop the ecosystem but they don't partner with those companies in order to help them make better tools. In fact, they often change the API (Application Programming Interface, that all the companies use to interface with Google's AdSense data) every few months – sometimes with minor changes and sometimes with major revisions. None of which are published beforehand in order to give these other companies time to properly integrate.

Comments made by Google's technology evangelist seemed to indicate that the future of AdSense would be broadened to support audience segmentation based on users behaviors – not just the topic of the web pages - which was a key area of differentiation for AdTarget.

4.04 Conclusions From The Interviews

In each customer interview, we find that the customers purchased the tool because of a personal experience they had with the founder and because they saw the value that the tool could deliver. Across a few other customer interviews this same story emerged and each time the customer had a positive experience with the tool it was because of either a personal experience with the founder or with the customer services team. Never did a customer say that the sales team executed well in terms of providing all the information they needed and that the user experience was easy enough for them to get started on their own. This issue can explain the issue of high churn and lack of customer use of the product.

It was discovered that even AdTarget's own sales people were afraid to show the tool during the sales cycle, yet are afraid that a new tool will cause more disruption for them. This paradox is also echoed in the behavior of Elis and is causing massive misalignment and frustration between the management layers of the organization.

Lastly, Google may to cause problems for a company like AdTarget if they radically change their targeting algorithms that encroach on AdTarget's differentiation – since the core value proposition of AdTarget would diminish significantly.

4.05 Competitive landscape

AdTarget isn't only facing challenges from within the company, and from the uncertainty that Google presents, but also faces a sea of competitors that occupy the same space.

There are a variety of competitors, all of whom break into two segments: high-end (and commensurately high cost) solutions, and SMB solutions (and appropriately scaled back cost) in display-advertising.

Competitive Landscape Morphological Analysis (figure 1)

	Audience Profiling	Campaign Management	Google AdSense Integration	Alerts	Dashboard	Analytics	Reporting	3rd Party Ad Network Integration
Competitor 1	•	•	•		•		•	•
Competitor 2		•	•	•	•		•	•
Competitor 3		•	•				•	
Google	•	•	•	•	•	•	•	
PageUp	•		•			• (limited)		

Figure 1

4.06 Indicative Competitors

Competitors 1 and 2 represent two major types of solutions in the display-advertising space. This morphological matrix shows the major features that each competitor offers.

Competitor 1 is a very high-end solution, and they engage in a high-touch sales call before a prospect can see much of the product. They offer no free tools on their website, but are a large and well known player in the industry. Many advertising agencies use this platform to support their clients, which enables Competitor 1 to not have to sell directly to advertisers and marketing organizations. In fact, this appears to be the bulk of the use of the platform.

Competitor 2 represents a different kind of solution, aimed for a manager inside a company who wants to use the platform themselves–and less for agencies. The user interface is very elegant and Competitor 2 recently signed a contract with a large distribution agreement to offer the platform to small businesses the company supports.

Competitor 3 is more focused on the reporting aspect of display-advertising to provide insights to their customers about the performance of advertising on the Google Display Network.

4.06.1 Competitor 1
Competitor 1 is a non-US based company that supports advertisers and companies that include a large pharmacy-chain, large-media outlet and job-posting site and purports to manage more than $1B of ad-spend through their site, of which $10B of sales is directed as a result of customers clicking through display ads managed by the platform. Competitor 1 touts that their platform helps users find relevant placements, perform bid-optimization, ad campaign optimization, geo-location targeting, powerful dashboarding that helps executives gain quick insight into their ad campaign and sophisticated reporting that allows marketing managers the ability to sift through all their data and create robust reports for their manager. Competitor 1 also has a support team that can help the full range of customers.

An expert review of a demo of the tool presented by Competitor 1 shows that the platform makes many aspects of the typical use case straightforward for the user. They do offer significantly robust reporting and campaign management and display ad creation, but their audience segmentations tools are not as robust as the one AdTarget has developed. Specifically, the user has to know what audience they want to target a priory since Competitor 1's platform does not have an audience recommendation engine. Competitor 1 does a better job integrating with Google's AdSense, as well as other 3rd party networks, but the usability of certain aspects of their product (such as campaign management) is significantly lower in contrast to the rest of the product.

4.06.2 Competitor 2
Competitor 2 is a few year old US-based software company that, similarly to Competitor 1, and helps marketing managers place and construct display ads for the Google Display Network

and other 3rd party networks. They offer expert help from their customer solutions team, and the platform offers a similar suite to that of the other players in the space; campaign management, a display-ad creation tool, demographic targeting, reporting and even provides campaign recommendations based on their patented technology.

The usability of this tool is extremely high – the expert analysis of the platform showed that the interface is extremely clear, even for a novice user, and the reporting was easy to use and very clear for use in executive briefings.

4.07   Conclusions From The Competitive Analysis

If AdTarget wants to compete with these other platforms they need to add in more robust reporting capabilities, alerting that will drive a user to engage with the product more frequently, campaign management, as well as support for 3rd party networks.

5.0   Chapter 5 - The Internal Processes

This is an analysis of the process by which new features are added to the product. The current situation is problematic for all the teams, and they knew that, but the root causes weren't clear. Outlined here is a description of the process, the interactions that occur between the various people and groups, and an analysis of the activities that are taking place. In chapter 8we'll show the proposed countermeasures that AdTarget can employ to treat the problems.

5.01   The Complexity

The current approach is causing lots of problems - the team isn't working cohesively, there is lots of time spent arguing and as some employees make suggestions, other members of the team misinterpret the suggestions and often run with their interpretation instead of gaining clear consensus. This causes a lot of late re-working of concepts or even of implemented features.

The sources of many of the problems come from a lack of defined process. In addition, the AdTarget organization has limited experience interpreting customer needs: one executive simply forwards emails from customers that say something to the effect of: "I'm not going to use your product anymore because it doesn't have X-feature", to

which the executive responds by demanding that the feature be added to the product. And even when Alex attempts to reconcile the opinion expressed by the customer with some other, known issues, there are no agreed-upon methods for Alex to convey the ideas and as a result people don't understand how Alex is helping to address the issues.

In meetings, each group has a different understanding of the objective of the meetings. In one meeting, an individual thought the objective of the meeting was to verify that the feature set proposed by the product team is what customers asked for, while another person believed that they were receiving a roadmap/project plan. This of course created confusion and discord during the meeting.

The feature-creation process breaks down into 3 main stages:

1) Vision Creation: In this state features are suggested, and employees ideate and create various types of documents to express their ideas, ranging from PowerPoint descriptions, to collaged mockups, MS-Word documents, and hi-fidelity visuals produced by an in-house graphic designer.

2) Execution: In this stage team members execute on creating final art, technical artifacts (code), and accurate final-art visuals.

3) Reviews: Various members of the team often review concepts to ensure that the expression of the ideas are being accurately captured by others in the team, or, in the current condition, to change direction based on what the reviewers see.

5.02   The Current State of Main Information Exchanges

In the table below (figure 2), we can see how each step of the process moves along particular paths (for example, we see how vision-creation occurs in the first few steps) or jumps between the other types of activities (the ping-ponging between reviewing, executing and vision creation in steps 13-16.)

Note that there are many review cycles and rework cycles that cause initial design concepts to be modified significantly and a loss of time due to reworking the initial

concepts. It's important to observe that the process lacks clearly defined process, and that there is a significant loss of time because of the lack of alignment between the key stakeholders, and a lack of communication early in the process between the people who are executing and the people who requested the features initially.

Each cell shows the **step number**, as well as the **action** in that step.
(figure 2)

1 Vision Creation	1 Execution	1 Reviews
1. Initiates request		
2. Informs CEO of need		
3. Vetting meeting to get initial alignment		
4. Convinces founder		
5. Vision creation of initial need (small team, so this happens concurrently)	5. Vision Creation and first pass of initial concept (small team, so this happens concurrently)	
6 Mockups created		
		7 Draft concept reviewed
		8. Concepts reviewed by CEO
		9. CEO asks for verification from founder
		10. VP Sales and marketing asks sales and client services to interpret ideas and provide input
		11. Modified request hits CEO and Founder

1	Vision Creation	1	Execution	1	Reviews
					12. Modified design features requested
			13. Detailed mockups are created		
					14. Input is provided to modify design or confirm direction
			15. New design concepts rendered		
16. Technical input to modify concept					
					17. Modified visual concept created
					18. VP S&M reviews concept with engineering lead
					19. CEO reviews concept with engineering lead
20. Product roadmap established/modified					
			21. Engineering project plan created		
					22. Briefing about new design to large team of CS and Sales
					23. Technical QA
			24. New website content requested		
			25. New images for website created		

5.03   Output For Each Stage Of The Process

Since there is no established output for each stage - anyone can produce any artifact (emails, word-docs, images, art, whiteboard drawings, spoken words, etc.) to convey his or her ideas. While flexibility is often a good thing, at the moment this is a significant issue since the teams misinterpret the objective of any given artifact. For example, a detailed drawing of a new user-interface that was meant to show a possible way to solve a particular problem and was designed to draw discussion of the concept, was be interpreted by others (in this case, the sales and marketing teams) as an agreed upon final version of the design (because the fidelity was very high in the drawing). As a result, the feedback was incomplete and scuttlebutt surfaced that indicated that the sales and marketing teams didn't like some elements of the design but thought they should not make comments.

5.04   Pathways: The Flow of Information

Since there's no defined and documented process for creating new features, employees only have a tacit understanding of what they're supposed to do. Mostly they rely on their experiences from working in other companies where the pathways were established. Since there is no established methodology it's as likely that a coder will start to code up a feature when a request comes in, as it is for a user interface designer to create concept for how the feature will work.   In addition, review cycles are done on an ad-hoc basis and anyone can interfere with the process by making changes, last minute.

5.05   Current Condition

In figure 3, we see a diagram of how each actor (individual or group) in the company communicates with each other actor. (Step numbers in the illustration refer to the steps in the table above.)

What is shown below is a heavy reliance of interactions between the CEO, founder and VP of sales and marketing. However, there are no direct connections between the designers and the people requesting the changes - so the designers are relegated to

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play a game of telephone with the executives acting as intermediaries. This squelches creativity and can cause misunderstandings and rework.
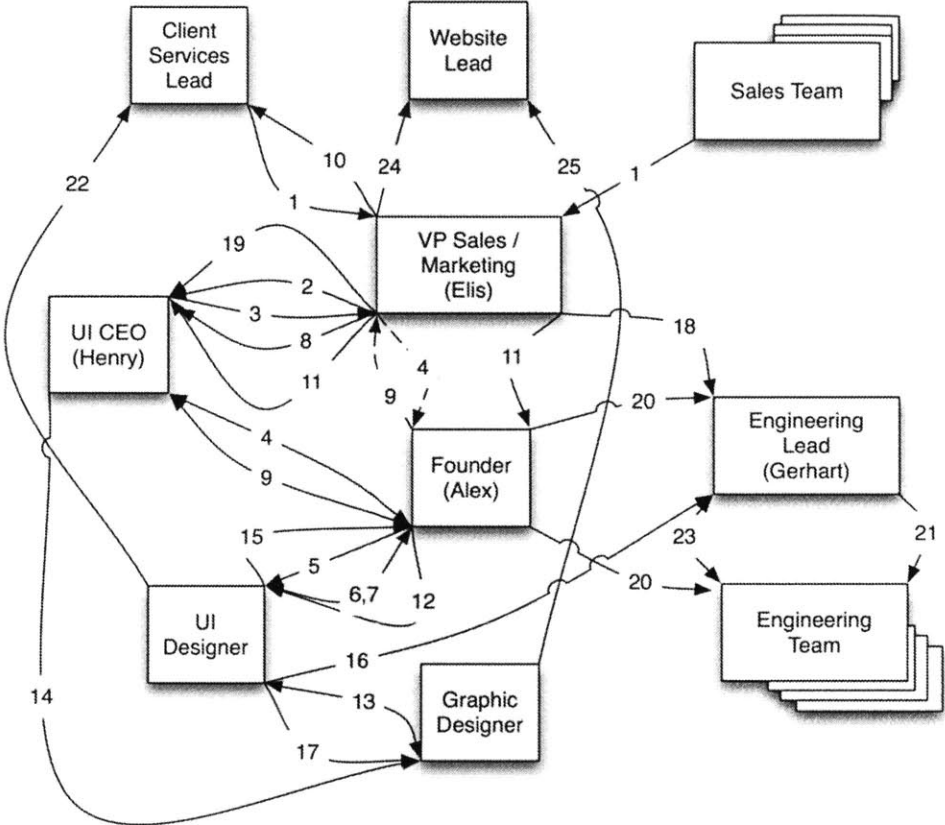
Figure 3

5.06 Design Structure Matrix showing interdependencies of the Current Condition

In the Design Structure Matrix, Figure 4, we see a representation of how each actor is dependent on any other actor in any of 3 relationships -- with the actor that is *sending* information on the left, and the actor that is *receiving* information on the top. That is, we see at the top left of the table, the Client Services person *creates vision with* the VP of sales and marketing, illustrated by the green dot at that intersection. And we can see a yellow dot between the VP of sales and Marketing that overlaps with the Client Services person and the sales Team, indicating that they're reviewing deliverables together.

What we can deduce from this graphic is that there is a diffusion of the processes of vision creation, and lots of review cycles, indicating that there is a lot of back-and-forth in the process, instead of a clean set of handoffs between the various actors. In addition, note that the VP of sales and marketing *executes with* the Web Site Lead, but there are no review cycles: the web-person makes edits, but does not engage the rest of the team (in particular the UI designer).

Figure 4
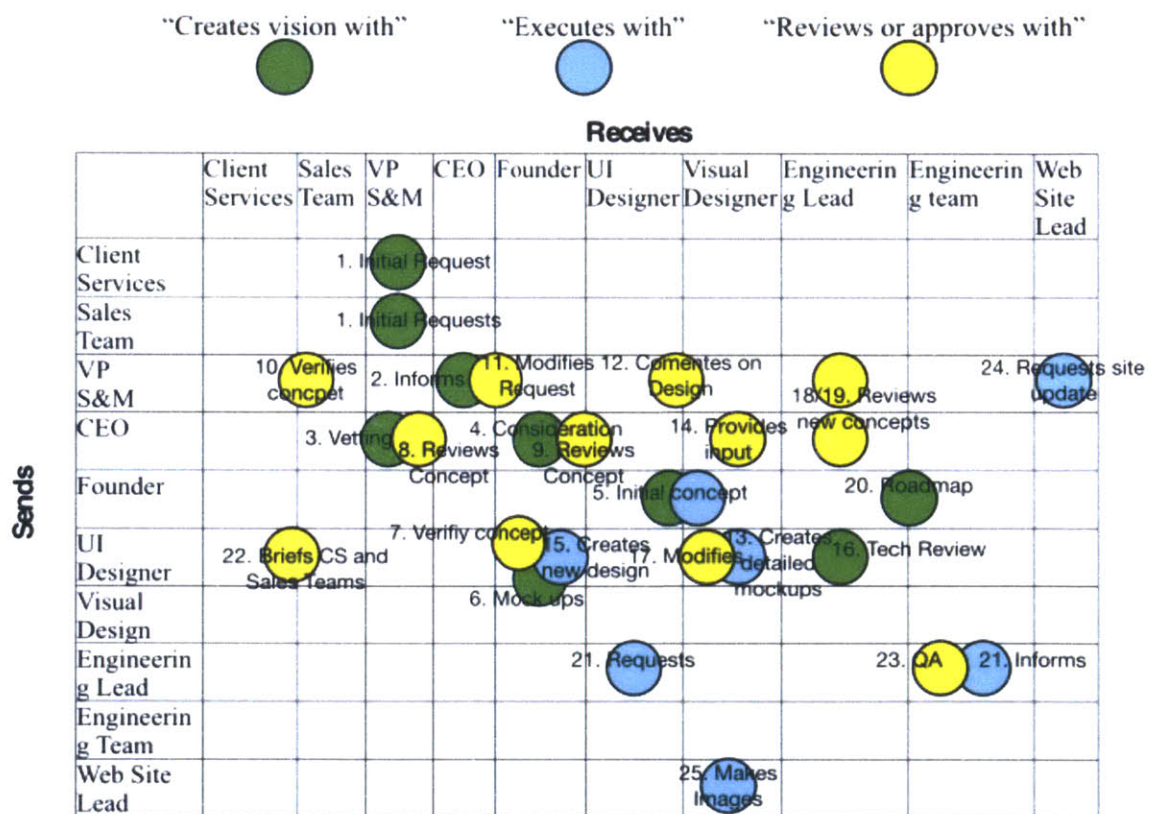
5.07   Workflow over time, Current condition

Here in figures 5, 6, and 7 are the same steps as they move through time. A series of steps that start to move up and to the right indicate that there is unnecessary re-work and churning.

Figure 5

Time / Sequence / Step - Current State

Role	1	2	3	4	5	6	7	8	9	10
Client Services	Initiates Request									
Sales Team	Initiates Request									
VP S&M		Informs CEO of need								Interprets idea and vets with sales / CS
CEO			CEO Holds meeting to vet concept	CEO gets Founder to align to need				Reviews concept	Meeting with UI Designer	
Founder				Create initial design with UI designer		Verification of design viability				
UI Designer					Creates feature Mockup					
Visual Design Engineering Lead										
Engineering Team										
Web Site Lead										

Figure 6

Time / Sequence / Step - Current State

Role	11	12	13	14	15	16	17	18	19	20
Client Services										
Sales Team										
VP S&M	Modifies request to CEO	Feedback to designers						Reviews new concepts		
CEO				Provides feedback/input					Reviews new concepts	
Founder										Creates te

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Figure 7 (top diagram)

Role			
UI Designer	Creates Detailed Mockups	Creates new concepts	Reviews visual designs
Visual Design		Creates visual designs	
Engineering Lead		Technical review of concept	
Engineering Team			
Web Site Lead			

Figure 7

Time / Sequence / Step - Current State

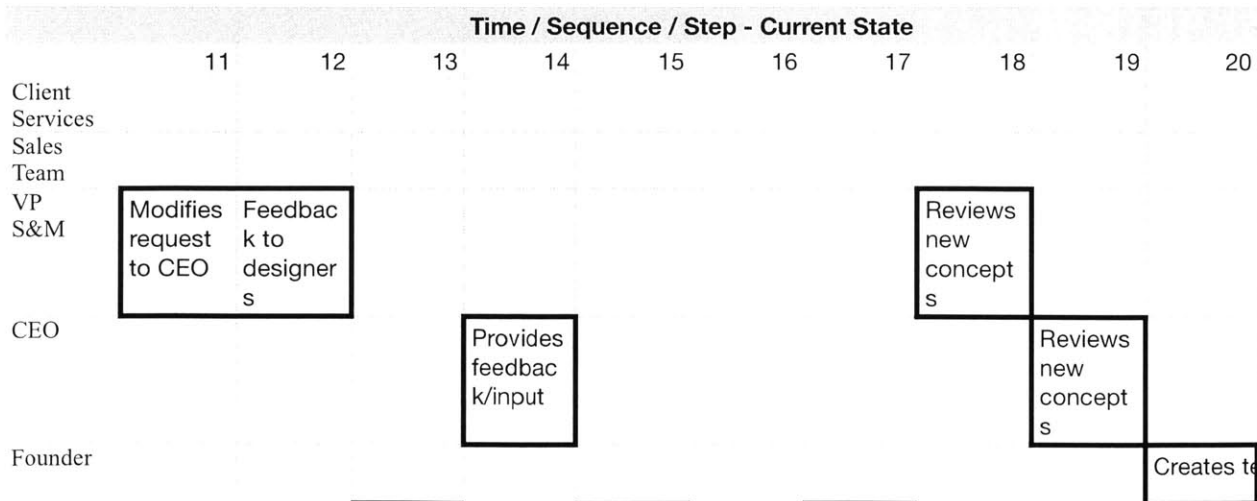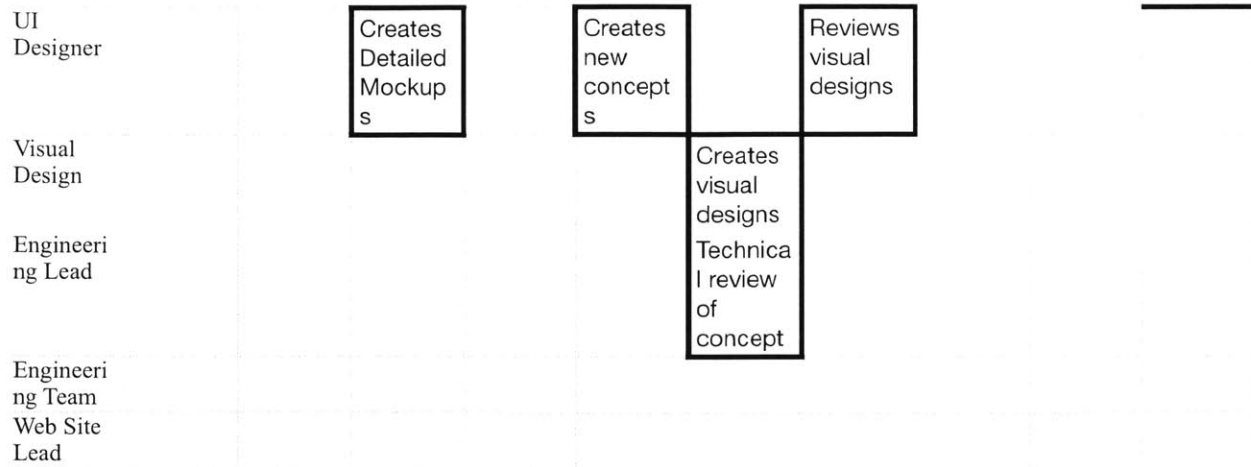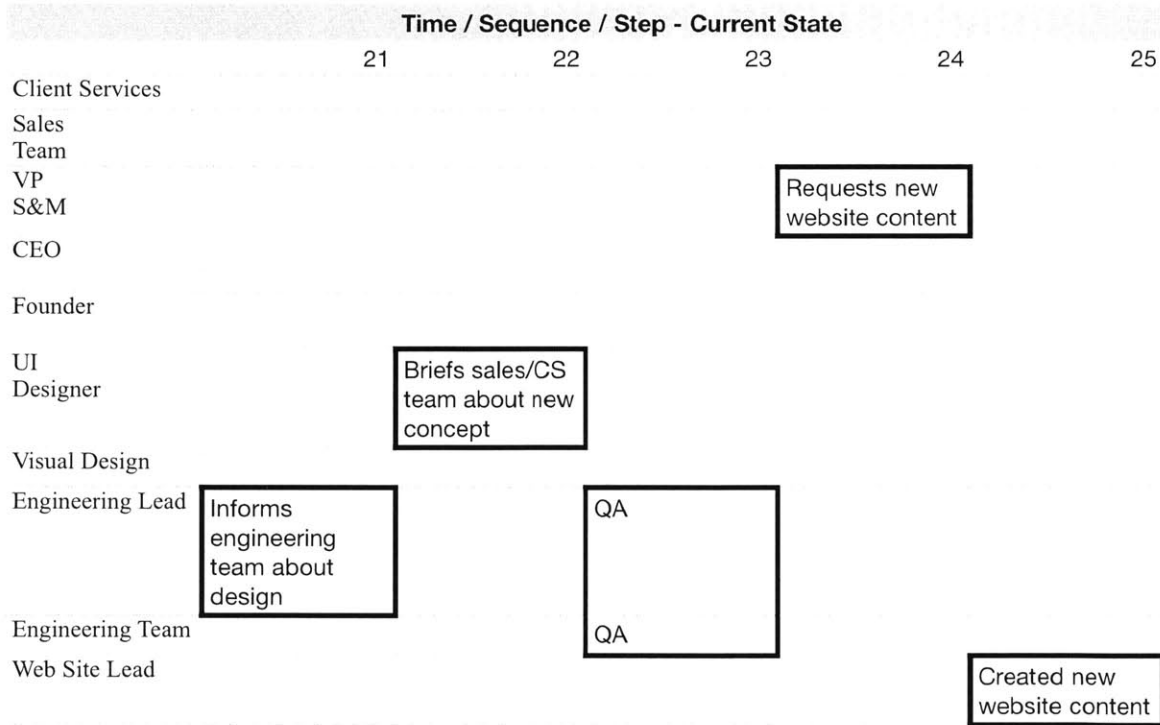|	21	22	23	24	25
Client Services					
Sales Team					
VP S&M			Requests new website content		
CEO					
Founder					
UI Designer	Briefs sales/CS team about new concept				
Visual Design					
Engineering Lead	Informs engineering team about design		QA		
Engineering Team			QA		
Web Site Lead				Created new website content	

5.08   Root Cause Analysis

The root causes of the problem break into 3 main areas of churning misalignment and a long period of time to produce the end result. See Figure 8

Figure 8

Symptom	Cause				
	Output	Pathway	Connection	Method	Knowledge Building

Symptom	Cause				
Churning about the way the feature should be rendered		The CEO, VP of Sales and Marketing and the Founder are heavily involved in ad-hoc review cycles			Lack of clarity in the mind of the UI designers about the needs of the sales/services people need
Team feels misaligned and argues				No clear method for how the team adds new features	All knowledge is passed through channels, not directly from observers
Slow process	No established outputs for each stage - all outputs are ad hoc		Lack of mutual understanding about the objectives of review meetings		

From Research to Conclusions

6.0   Chapter 6 – A Proposed Solution, Overview

6.01   Creating a new vision

When preliminary findings of the research were presented to the executive team at AdTarget, the team was prepared to take action to combat the issues that were killing the company. The results of the research activities helped to make the problem real for the AdTarget team – not that the team wouldn't acknowledge there were problems – but it helped validate suspicions and inform where the problems lay. For example, when Alex saw the complex diagram of the activities the team performs in the feature-creation process he quickly said "Yes! That *is* what we do!" and agreed that it was baroque and problematic. When the team saw quotations from the customer interviews that indicated it was Alex who more successful at selling than the sales people, they understood the challenges facing them with regard to producing better marketing and sales materials, and when the team saw the competitive analysis they were able to see where they were positioned and became armed with data that helped them to see both where they stacked up relative to their competitors, and where they should focus their energy.

The next major step in the process would be creating a vision and a plan that would inform a 12-month product roadmap. This vision would include suggestions for usability improvements, new-feature additions, evaluations of the technology stack, ideas to smooth processes issues and ideas about how to address the lack of team co-location. The 12-month roadmap would include prioritized plan of the features to be rolled out, along with a rationale for the strategic approach underlying the roadmap. Part of this process would include executive and management team brainstorming, additional meeting with the management teams and discussions with other companies about being a possible acquisition target.

At the time of the roadmap creation process, AdTarget was experiencing 12% churn/month. Customers were saying that the benefits AdTarget provided rapidly diminished after 90 days, and the product didn't have the features they wanted most. Customers also said they didn't have the time to use it. In addition, some customers were switching to competitor's products or to an agency to handle their display advertising needs. The AdTarget team believed that the tool could provide lots of benefits – particularly after 90 days, but they acknowledged that the tool wasn't sticky in its current form, and it wasn't obvious how a typical customer would gain value from it each time they used it after the initial setup. The team, and in particular Alex, saw how poor the user-experience was after seeing the expert review of the user-interface. They knew that all of this would mean a significant investment would need to take place if they were to roll out a new version that the market would adopt. But money was tight as in any startup.

6.02   Getting to The Product Roadmap

The product roadmap would address these key issues, 1) how to close the feature gap to achieve parity between the AdTarget platform and the competitors' platforms 2) determining a set features to add the platform that would make it sticky for users in order to reduce churn, 3) and ways to enhance the user experience. However, it's important to note that the process for creating this new vision was deliberately non-linear.

While the information in this paper is presented in a format that might indicate that all the research was completed before starting to think about possible solutions, a conscious choice was made to use data as they became available to help inform a *preliminary* vision. And since the team didn't wait to finish gathering all the data before ideating possible solutions, there was an iterative nature to the *research* as well. Early in the process, the AdTarget team imagined a possible end-state for a new version of the product, without regards to implementation, budget, or resources. This was a liberating experience that allowed the team to think-big. The team created a few written stories describing how a typical user might engage with an

idealized version of the product and then produced screen shots reflecting that new user-experience. This allowed the other teams to see something tangible that could inspire discussions and allow for reactions to the new ideas. This process also shaped and added to the research as well. In fact, the research scope increased (i.e., more questions were asked during the customer interviews, and more companies were considered in the competitive landscape analysis) because of the early ideation sessions. The iterative nature of this reduced the uncertainty that the research would be useful to the team and provide value to the company.

Several important and unexpected events occurred because of this approach.

Firstly, when early versions of the vision were presented, they had a polarizing effect on the company. Some groups were excited to see a product they thought would be easy to sell and which they believed would be more competitive in the market. Other groups were concerned that the new product might create a lot of work from a sales, marketing and customer-support perspective, and others had doubts that the proposed idea would indeed solve problems at all. This knowledge helped to surface and address issues quickly before the product direction was finalized.

Secondly, the preliminary vision allowed the CEO, and the founder Alex, more time to evaluate members of the management teams to determine if there existed the right kind of leadership in the organization to execute a radical change. And lastly, the preliminary-vision helped reveal the need for skills that the team had not significantly invested in prior to the exercise, such as the need for a formal product-marketing role, a senior user-interface design role, and management-skill training for key team members including the founder, Alex.

At the end of the research phase, there was of course a full reduction of all the research, and a formal brainstorming session that helped to inform the final output and galvanize the product roadmap. A SWOT (Strengths, Weaknesses, Opportunities & Threats) analysis was conducted against the main competitors. The major competitors were either well funded, had best-in-class user interfaces and marketing communication materials, or were extremely focused on their niche, however many competitors also shared similar problems with each other - often around their high price and the lack of depth of their technology stack. Unusually for a competitive landscape, one company was an extreme outlier: Google, who offered services that both defined and could single-handedly disrupt or destroy the ecosystem. Google doesn't believe that they should work with other companies in this space as partners (they consider companies like Page Up to be consumers of information and therefore, customers) and of course offer their own tools for free. This wrinkle requires any company in this space to find a

way to go beyond what Google is doing from an end user value-delivery perspective, added value by integrating with other relevant corporate systems, developing patentable technology or focusing on a specialized niche. This competitive analysis set the stage for a brainstorming session with the executive and management teams.

The brainstorming session focused on everything from generating big ideas that might affect all aspects of the company, to specifics around thought-leadership and sales. The results were bucketed in to a few high-priority areas: 1) Differentiation (specifically, how to achieve the right kind of differentiation) 2) improved ROI, how to make it easier for AdTarget customers to achieve it and understand the value of the platform 3) adding Game Dynamics to the user-experience, and how to leverage techniques that had been successful in B2C applications (such as SCVNGR and FourSquare) in which users earn badges, etc. 4) Pricing, specifically methods to price in other ways that might make it more attractive to a variety of companies and allow AdTarget to earn more from larger entities, and agencies.

7.0   Chapter 7: Details of the New Product-Roadmap

Many changes would be needed at AdTarget to turn the company around, but the driving component that would lead the charge would be found in the new product-roadmap that would include significant investment and a full year to implement.

7.01   Differentiation, Features and User Interface

Sometimes high levels of differentiation between products are very good, they allow a consumer to see differences clearly. However, if products have too little differentiation, and they don't overlap enough, functionally, the products won't be seen as directly competitive. For example, while AdTarget's product does help people manage their Google Display Network account, it doesn't envelope enough of the functionality of what a typical user performs with Google's tools, so users almost always need to learn and use two separate tools, so we'd say that the functionality of the AdTarget product is perhaps *too* differentiated in that way.

Specifically, it was determined that the AdTarget product didn't provide strong enough reporting capabilities that could be used for an executive dashboard or could generate graphs that could be placed in a PowerPoint presentation. In addition to presenting information, these reporting capabilities could allow users to understand the value they were receiving from the AdTarget tool. However, this effort would be fairly significant in terms of scope and integration to the existing product and was expected to span more than six months to complete. In addition to adding robust reporting capabilities, differentiation between the AdTarget platform

and their competitors' offerings had to lower in another areas such as supporting 3rd party ad networks including popular social-media ad platforms.

AdTarget had been solely focused on expanding their own network and integrating with Google's Display Network – which makes sense, as Google is the dominant player in on-line display ads, however, other 3rd party networks and other social ad platforms could take advantage of the AdTarget technology and this would further reduce the differentiation between AdTarget and the competitors, most of which support ad networks in addition to Google's.

While *reducing* some differentiation is beneficial, increasing differentiation in other ways is crucial as well. Improving the usability of the product would be necessary in order to allow users the ability to understand how to use the application more effectively and to aid in the sales process. The team worked with a visual designer to create a version of the product that looked easier to use, and employed images, icons and text in a more contemporary manner. The idea was to make the product appear to look like and work like a typical consumer product, and not like a typical (and often poorly designed) B2B tool. The rationale here is that the buyers of this product are going to be the ones who have to use it, and can choose whichever product they want to use on a day-to-day basis unlike, say, a large SAP ERP system, in which there will be a small group who makes a purchasing decision that effects hundreds or thousands of others who *must* use the product no matter how poor the user interface is.

In addition to improving the user experience, there are other features that could help to significantly differentiate the product from their competitors. For example, the tool could have a feature that provided automated alerts to users so, instead of requiring a user to log in every few days just to see if there was something the user could do to improve their account, the system could alert users and they could simply respond to an email. This would help increase the stickiness of the tool, and if users can see why using the tool consistently would provide good value it could help reduce churn. Showing return on investment (ROI) is only one part of the equation, however. It's important to show that value both to prospects as well.

7.02   Improving the Awareness of Return On Investment

By reviewing competitor's websites and websites for other similar companies who aren't necessarily competitors, it was clear that there were some online tools that AdTarget could implement to help close the sales cycle. Firstly they needed to stop providing unlimited use of their free online audience profiling tool. Competitors would allow people to use online tools, but would limit the result set in order to both show the value of a tool yet not provide all the

value for free. Secondly, AdTarget could produce a lightweight ROI calculator that would allow prospects to plug in some numbers and see how the tool could pay for itself quickly based on some rules of thumb gleaned from previous customer experiences.

Thirdly, AdTarget can also implement a tool that would provide a review of a prospect's Google Display Network account in order to highlight opportunities for account optimization. If this tool is implemented correctly, it will only provide limited help to a prospect and entice the prospect to engage with a sales person, or in the best scenario allow for a frictionless-sale in which the prospect just swipes a credit card and never talks to a sales person, thus lowering the cost of customer acquisition.

7.03   Game Dynamics

Game Dynamics in this context is a term that refers to using elements associated with gaming, in non-game environments. A popular piece of software for mobile devices calls FourSquare which allows a person to go to a location, and using GPS and search, find the name of a place (e.g., a restaurant, a particular building on a school campus, etc.) and then virtually check-in to that place. In essence, alerting the user's friends that the user is currently in that location. If users check in often enough, they earn points and badges (e.g., they can become the Four Square Mayer of Flour Bakery, Cambridge MA). While the points and badges are meaningless, they appear to motivate users who compete to maintain their standings.

The idea to use game dynamics inside a business tool came from discussions with the founder Alex. The notion is to provide rewards in the form of points, and badges, for interacting with the AdTarget platform. Some specifics include having a user earn points for each action they take, trying a new feature or simply for reviewing their account. Then when a user earns enough points, the user could publish status information to their LinkedIn page, or other social network and be a self described *Marketing-Guru, Display-Ad-Wizard* or other boastful title.

7.04   Pricing & Sales Tools

The pricing model that AdTarget used was a flat monthly fee that wouldn't vary based on the size of the organization they were selling to or the amount of money the company spent on advertising. Competitors regularly would scale their pricing based on ad spend, and as a result, there was incentive for their sales people to work harder to close larger accounts. However, for small accounts, a small percentage of ad spend alone wouldn't generate enough revenue so a decision was made to create a graduated pricing model that would support small

and medium sized companies with a flat re-occurring monthly fee, while charging large companies (and agencies) a percent of the ad spend that the tool supported.

AdTarget also knew that any initial 1:1 training of a new customer helped to keep the customers loyal, and the optional AdTarget client onboarding program had been very successful – even though it was a loss leader. The recommendation was to require some sort of personal training for all new customers of a certain size, instead of making it optional. This would be particularly important during the next six months while the new tool was being developed in order to retain new customers.

7.05   User Interface & Platform Technology

In addition to an overhaul of the user-interface to improve both the usability of the product as well as the attractiveness to prospects, there were also considerations for making changes to the technology stack. The interface has been built using simple HTML technology. While easy to implement, it didn't provide an elegant user-interface. Many sites have been recently migrating to use HTML5, a new quasi-standard that has been adopted by the majority of web browsers.

Also, at the time AdTarget was first rolling out, there were not many good cloud-service providers, but now there are several strong providers including Microsoft, Rackspace and Amazon who competitively offer a scalable and low cost solution and by using a cloud provider it would add robustness to the product so the system wouldn't go down if someone tripped over a power cord.

8.0   Chapter 8 Process: Root cause analysis, and suggested solution

Even before the end of the analysis of the feature creation process, it was clear that the process needed to be changed. The current process was complicated and since it had never been documented it was being conducted poorly. The countermeasures need to include both hiring of some new talent to take care of some of the basic management issues, formalizing the communication and handoffs between various groups, and enforcing stricter guidelines for the development of new features.

There were some obvious fixes that would include streamlining the process so that requirements would be gathered using marketing resources, as well as information gleaned from customer interactions and vetted, before a design phase began. Other process improvements should allow for an iterative design and implementation process with set times

for feedback and strong project management to keep things on schedule. Theses would be easy to implement, there are several resources and experienced practitioners who know how to quickly put these into place, and fortunately the executive team was onboard with hiring a strong product/project manager. But before they had this new hire identified, the AdTarget team worked to implement, quickly, a few changes to the product based on the refinement of the preliminary vision sketches. Alex wanted to clear away the general process issues and personally act as the product manager, working with engineering and user-interface designers. With the larger process issues out of the way, new and unexpected problems surfaced. Since the development team needed to quickly implement the new features, and since Alex was very close to the whole process again, Alex was able to see the two key problems: 1) the user-interface designs (images handed to the engineering team) didn't match the implementation, and `2) the new code was extremely buggy—buggier than ever before.

There was a new realization that not only was the engineering team potentially unable to follow specifications, but they were conducting their own quality assurance testing in an unacceptable way and not alerting Alex to any issues with the code. Because of this small effort – hiring a QA tester and working with the team to identify problems with the staff became top priorities. The important take-away is that it was now easy to uncover these problems once there was an intense focus on just one part of the process. In addition, there was a strong concern that the distributed nature of the engineering organization was causing both communication problems and delays and there was a conscious decision to move all or most of the organization to headquarters.

8.01   Design Structure Matrix Showing the Countermeasures / Treatments of an Improved Process

Three primary countermeasures would help thwart the major problems in the current process. Constructing and communicating a clear design and implementation process, allowing designers to talk directly to the people who conceived of or asked for a new feature, and implementing phase gates in the process that will enable the teams to work more efficiently by clarifying when review cycles occur. Figure 9 shows how they break down:

Figure 9

Objective	Approach				
	Output	Pathway	Connection	Method	Knowledge Building

Linear flow of process	Define deliverables and methodology	Allow for designers to interact with end-users instead of relying only on levels of interpretation	Define handoffs		Create database with documented process along with deliverables from each phase
Managed process				Enable someone to own this process and refine it continuously	
Better alignment of roles			Create deliverables that allow people to express themselves appropriately within their core competency (that is, don't have the VP of sales producing visual designs)		Determine which people can approve feature requests and designs

8.02 Target Condition of Sequence and Steps

Figure 10 shows a far simpler process that requires the various actors to align around the creation of a new process, the expression of the artifacts and review cycles and relies on the expertise of the members of the organization to produce exceptionally high quality artifacts.

Figure 10

Time / Sequence / Step - Future State

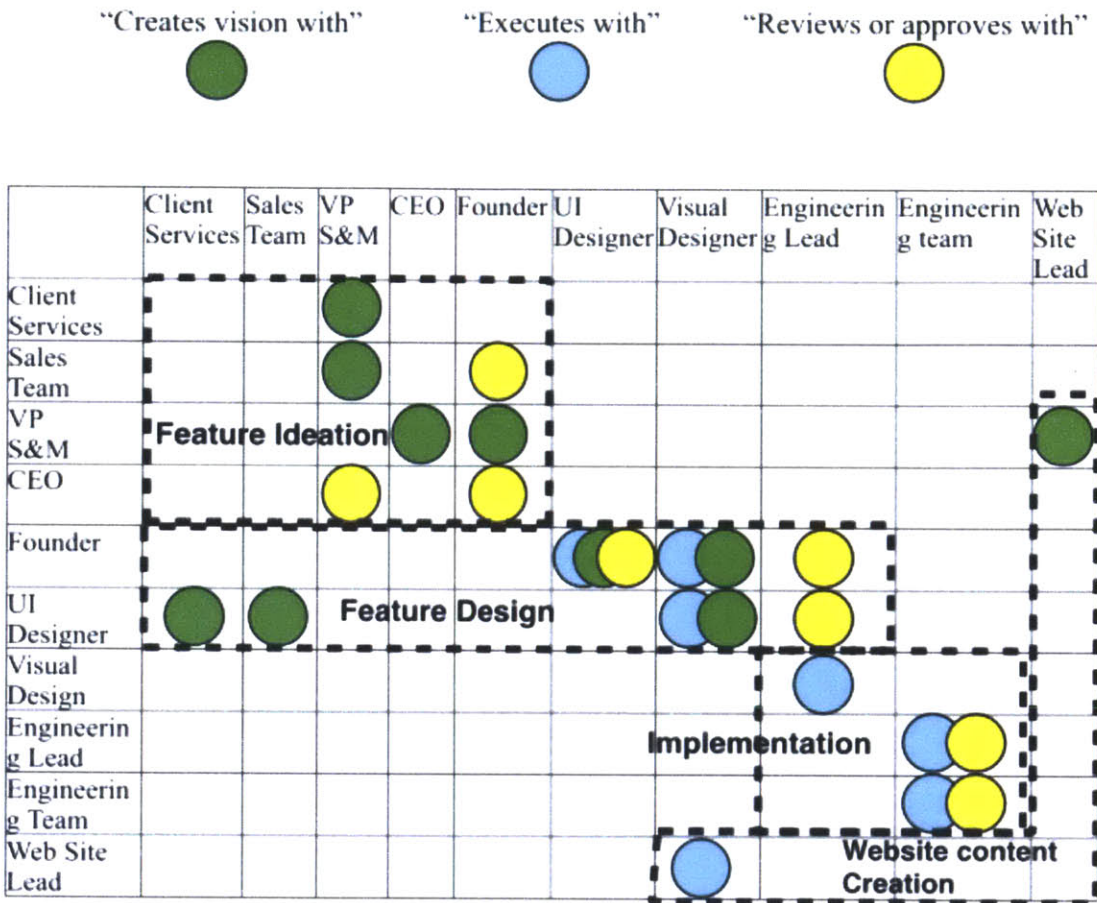|	1	2	3	4	5
Client Services	Initiates Request				
Sales Team					
VP S&M		Determine market objectives and scope of feature			
CEO					
Founder			Design the feature, iterate on the look and technical implementation aspects		
UI Designer Visual Design					
Engineering Lead				Implement and QA feature	
Engineering Team					
Web Site Lead					Create content based on design

8.03   Design Structure Matrix showing interdependencies of the Future Condition

This new matrix, Figure 11, shows how each phase can be segmented so that rework is removed from the default process, and so that teams work in tight alignment and employ clear handoffs.

Figure 11

"Creates vision with"   "Executes with"   "Reviews or approves with"

	Client Services	Sales Team	VP S&M	CEO	Founder	UI Designer	Visual Designer	Engineering Lead	Engineering team	Web Site Lead
Client Services			● (green)							
Sales Team			● (green)		● (yellow)					
VP S&M	*Feature Ideation*			● (green)	● (green)					● (green)
CEO			● (yellow)		● (yellow)					
Founder						● (blue/green)	● (blue/green)	● (yellow)		
UI Designer	● (green)	● (green)	**Feature Design**				● (blue/green)	● (yellow)		
Visual Design								● (blue)		
Engineering Lead					**Implementation**				● (blue/yellow)	
Engineering Team									● (blue/yellow)	
Web Site Lead						● (blue)	**Website content Creation**			

8.04   Implementing the Process

This new process isn't simply constructed in order for the software company to have less friction when designing new features; it also serves to help produce better features since it will allow for less time to be wasted internally and more iterations to occur. Additionally, this revised process would also help by reducing misinterpretations has caused the team to slightly, or sometimes radically, make costly mistakes. Rolling out a new process can cause some problems – particularly when it's not just a slight modification but rather a wholesale change. It's also important to note that any new process needs to be tested and refined in stages before fully deploying it if AdTarget is to get maximum benefit.

9.0 Chapter 9: Strategic Business Analysis

Let's assume that AdTarget is successful in getting themselves on course by implementing significant changes to the product that create a sticky, high impact user-experience and they're able to reduce the cost of sales and their customer churn. Let's also assume that they can bring on the right people in key roles, improve the internal communication, change the processes that they use to design and implement product features, and that other companies aren't developing competitive features. Still there lies the question about whether AdTarget can survive on its own, or should try another tack.

AdTarget has a few choices: stay a lone entity and improve the product continuously, partner with other companies in order to sell alongside other technologies, or sell out to a larger entity that could leverage the AdTarget technology.

If they stay a lone entity, they need to work extremely hard to conceive of new features and test various pricing models in order to have sustained growth. This is very hard to do, since their technology is extremely targeted at supporting a focused ad network. Quick hits for success that could be implemented in just a couple of months include taking the current product and making it extremely easy-to-use, and launching compelling marketing campaigns that highlight unique features. This would reduce the average sales time per customer, and reduce the number of sales people needed to support each sale. In addition, other areas of focus can include tools that help companies analyze competitors' display network coverage (so-called *spy tools*), address emerging advertising spaces including mobile ad-placement and constructing a consulting organization that would leverage AdTarget technology to deliver world-class services to help agencies expand their offerings and help large companies continuously improve their ad placements in a variety of digital media. Additionally, by making cuts in staff across the organization, and by using contract help or by replacing certain employees with more experienced practitioners, they can both cut costs and increase the quality of the product.

If they partner with another small or mid-sized company offering cloud-based e-marketing solutions (such as email marketing, content management and web analytics) to similar companies as the ones the AdTarget targets, AdTarget could focus on improving the core product and reduce or eliminate sales and marketing completely, leveraging a more established and sophisticated sales and marketing team and a more seasoned development team. This would enable AdTarget to focus on core technology and expanding the offerings as suggested above, with only the burden of managing a partner program – and if they continued direct sales, managing channel conflict as well.

But ultimately, does it make sense for a small company to continuously innovate new features (whether alone or partnered) in order to thwart known enemies, while also attempting to follow the leader (Google) who keeps changing the rules like an *enfant terrible*? Is it possible for a company like AdTarget to generate enough income in safer harbors by supporting 3rd party ad networks, to survive if the search-goliath copies AdTarget's core IP on which the AdTarget business is predicated?

In a more traditional market, Google might see companies like AdTarget as a partner that enhances the advertising ecosystem. But this view isn't in Google's best interest – they don't need anyone's help, because they control the market. However, they don't control every aspect of the market.

Some companies do survive that are in the adjacent market of web-analytics, precisely *because* Google's system is so closed. Since Google uses arbitrary and unpublished rules to set prices for ads, if a company uses Google Analytics to track site usage and traffic, Google owns those data and can use the data to set display ad prices as they choose. Companies that include CNN, the GAP, Avis, ADT, Ford and many others use high-end web analytics platforms for their analytics, partly in order to keep Google from knowing the site traffic information. Such companies can survive because they injected themselves in part of the ecosystem in which Google's one-stop-shop can be potentially destructive to larger websites revenue models. AdTarget, however, does not have this safe positioning and needs to determine if there is a significant role that their technology can play if they can address other ad markets or other aspect of the market they focus on.

Not unlike a local hardware store that goes under because a Home Depot moves into town, AdTarget may face the same issues as Google makes changes and other companies try to imitate AdTarget's features. However, if AdTarget were to be integrated into a company that was safe from Google because of their strategic positioning, e.g., a web analytics company, they might be in a significantly better position.

AdTarget is agile and able to change course quickly, but it may not be big enough to weather a storm should something change radically in the display advertisement technology landscape.

10.0   Conclusion

In the short life of the AdTarget startup, Alex has seen first hand just how critical effective organizational leadership, clear product vision & product execution, highly defined & aligned

corporate strategy, and intuitive user-experience design, are. So why were there problems to begin with?

Obviously Alex was well aware that these concepts are important to any organization and that AdTarget would need to leverage best practices in each of those areas in order to be successful. But as the company grew, the focus was on tactical initiatives: making the numbers and developing the product. There was a paucity of time to be able to consider strategic initiatives and no massive failure moment to require a critical reexamination of the business model, product and internal processes.

But unlike many founders, Alex had a willingness to engage in a research project that would look at the company holistically, was prepared to get to the bottom of the issues hurting the company and make necessary changes.

Reflecting about the core concepts of leadership, vision, strategy and design, Alex said, "realistically, one of the things that helped me come to this conclusion was our lack of big success coupled with seeing the challenges we were facing. Getting an outside perspective and then viewing the results objectively – without prejudice – helped me realize just how critical all those things were."

AdTarget has been able to make lots of changes very rapidly, even during the time of this research, and there's no reason to believe that they can't continue to change the company culture and the organizational structure in order to improve the quality of the product, internal communication, and be able to innovate on pricing models and partnerships.

At the moment, they've started to implement the proposed changes and are in a significantly better position than just a few months ago. They now have a far better understanding of the problems facing the company and it's a race against the clock to execute and resolve the issues they've uncovered. From his vantage point, Alex is very hopeful and optimistic that AdTarget can rise to the challenge.