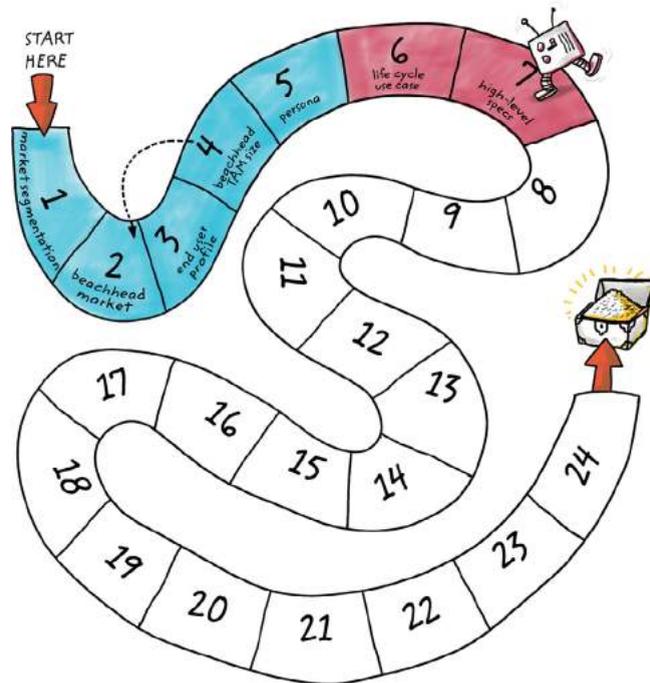


# STEP 7

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## High-Level Product Specification

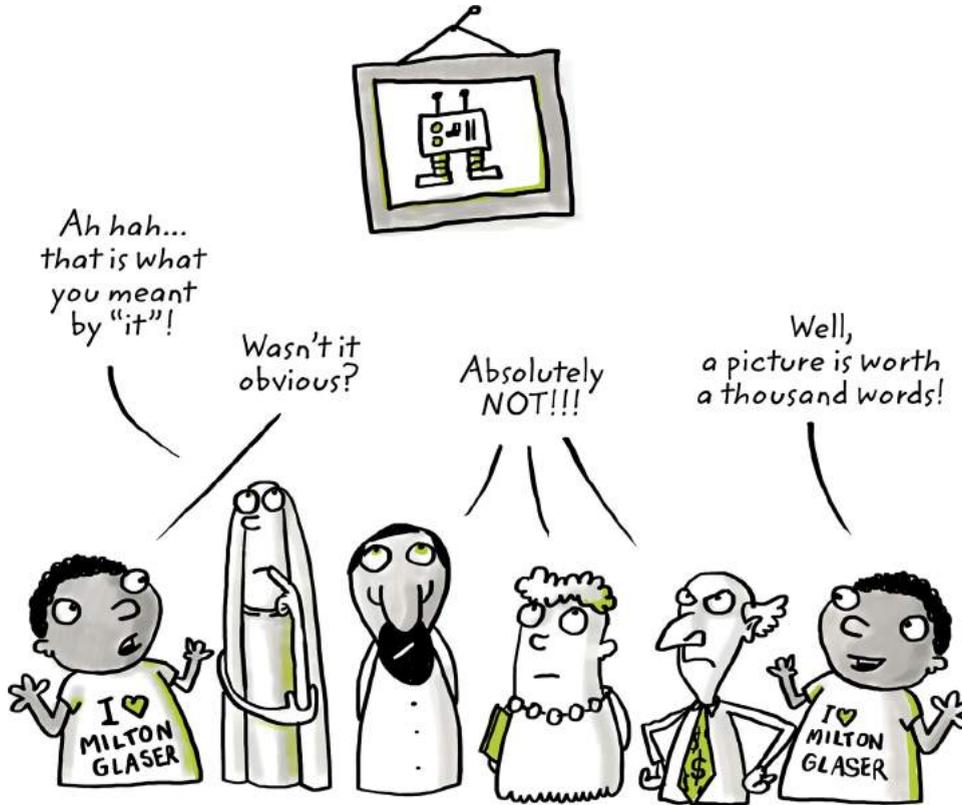
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## IN THIS STEP, YOU WILL:

- Create a visual representation of your product.
- Focus on the benefits of your product created by the features and not just the features.



*Defining the High-Level Product Specification at this time ensures that it is more focused on your target customer and also that everyone agrees on what "it" is.*

**W**e are already at Step 7 and only now beginning to outline what your product will look like. So far, you have tightly defined your customer, what they need, and how they will use what you want to sell them, even though the actual details of the product are still rather fuzzy. That all starts to change now. You will start by creating a general definition of the product. You will continue to learn more and to refine this product definition over the remaining 24 Steps.

Traditionalists would argue that this step is coming too late in the process, but if you start by defining the product rather than learning about your customer, your product will likely not connect with customer needs. Even if you believe you know what the product should be, always start with the customer needs and work your way back. This way, you are tailoring your product to the specific beachhead market where you will be able to gain market share, rather than trying to force a product on a market and watching your product get lost in the sea of a large, general market.

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## CREATING A HIGH-LEVEL PRODUCT SPECIFICATION

A High-Level Product Specification is, at its core, a drawing. It is a visual representation of what your product will be when it is finally developed based on what you know at this point of the process. It is something you draw without understanding all the underlying details, but which gains consensus within your team on where you are going.

It is amazing how much this exercise of drawing a picture of what your product will be forces convergence on a team and removes misunderstandings. It sounds like it should be easy to do, but more often than not entrepreneurs find it harder to do than they initially thought as issues and disagreements arise within the team. Now is the time to resolve any issues, because if you run into them after you have built out your new venture and there is not full alignment on the ultimate deliverable, the cost will be much higher and much time will be lost to inefficiencies.

If the product is software or a website, storyboards should be made showing the user's logical flow from one screen to another. If it is hardware, then diagrams are useful. The key here is that you have something concrete and specific enough that your team understands thoroughly. As you refine the product (with lots of iterations with the target customer), you will all have a common understanding of what the product is.

At this stage, the product does not have to be built and almost surely should not, because this will incur unnecessary costs and create something that your team is too attached to. Keep it high level and don't get distracted at this point. It will not only cost you more if you build at this stage but it will immediately get you distracted, and the team will start to focus on the wrong things, like the particulars of the technology.

This simple visual representation of your product can now also be shared with potential customers, immediately generating an unambiguous understanding of your product. You are not selling the product, but are merely iterating with customers so that you more thoroughly understand the strengths and weaknesses of your product spec. This is very important. There is still a lot left to learn before you are sure you have the right product and know how you will make it, price it, and distribute it.

This product specification will change over time and be refined, like many of the other steps in this book.

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## THEN, MAKE A PRODUCT BROCHURE

The process of identifying and outlining your High-Level Product Specification is further strengthened by describing the various features of your product, explaining how these features translate into function, and most importantly, describing the benefits your customer gains from each. Always be specific about what you are offering, and how each component of the offering benefits the customer. Why does your target customer need your product?

Some have suggested creating a short, one-page press release about your product at this point. While that can have similar benefits, I prefer the approach of making a brochure for your product. Target the brochure at your Persona, and draw on the work you have done in the Persona and Full Life Cycle Use Case steps (Steps 5 and 6) as well as the visual representation of the product that you have already created.

Building a brochure helps you to see your product from the customer's point of view and provides you with a concrete "straw man" to test with your customer (Figure 7.1). It forces you to see your new venture from your customer's vantage point, in their words. It also allows you to validate your ideas and learn if you are on the right track. Often, when entrepreneurs begin to write down features, they become too inwardly focused. Creating a brochure helps to avoid that pitfall.

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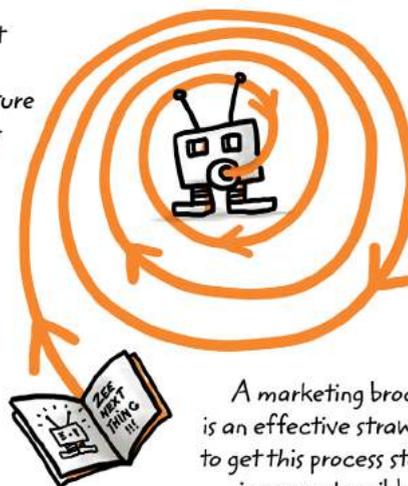
## EXAMPLES

### Altaeros Energies

The students behind Altaeros started with the idea of building a wind turbine in the sky, high enough to get consistent wind, and anchored to a platform in the ocean. Conceptually, it sounded simple, but when the team tried to explain it to other people in the class, the instructors and potential customers,

# Spiraling Innovation

The ultimate best product solution for your new venture is arrived at after many iterations with customers and your team.



A marketing brochure is an effective straw man to get this process started in a very tangible way.

*Figure 7.1 The spiraling process of innovation with a product can be significantly accelerated by making a brochure—but not getting too attached to it. It is a tool to focus the knowledge capture process.*

they encountered a lot of questions regarding what exactly this meant in terms of implementation. It was hard to have a meaningful conversation. Finally, the team built an image of what the product would be, and found that even within the team they had some disagreement on what the product would look like. Ultimately, they came up with the image you see in Figure 7.2. By the end of the process, the team had a common understanding of the product, and could easily use the product spec as a basis for more in-depth customer research.

## Baseball Buffet

I first described this baseball-themed website in Step 3, based on the idea that young males aged 25–34 making over \$75K were a very attractive demographic that could be captured for hours a day if they had a website focused on one of their primary passions—fantasy sports. The concept was a sound one

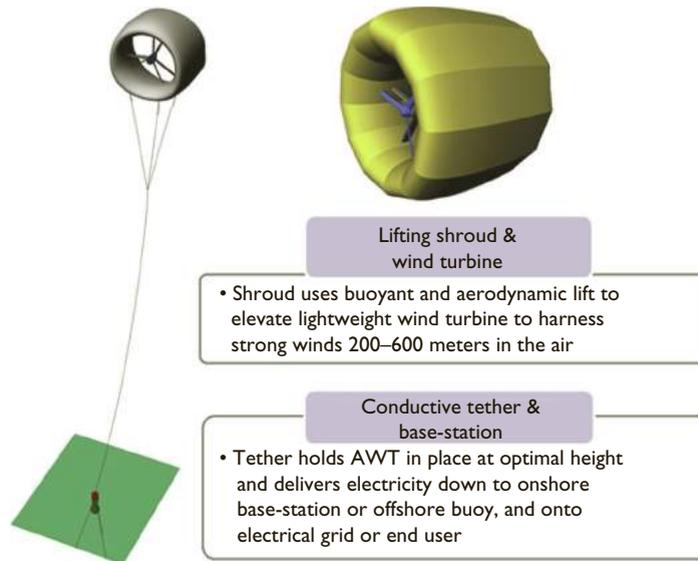


Figure 7.2 High-level product spec: Altaeros.

and attractive on many levels as a potential business. The team developed a clear Persona but had a weaker Full Life Cycle Use Case, so they created the High-Level Product Specification in part to provide clarity to the use case.

A screenshot from this team’s website is shown in Figure 7.3. The team aimed to create a single source for all baseball news of interest to a specific user. The “national plate,” as you can see, is just one of three tabs displayed on the homepage, which also has a “local plate” and a “personal plate.” The team developed renderings of the local plate and personal plate, and then used them to walk through their idea with potential customers, getting some very specific feedback on what the customers liked and did not like.

There was no underlying code at the time for these screens because this was not necessary to achieve their goal of clarifying their product offering. If they had spent the time and money to code a website, the coding would have been money spent unwisely, because the team did not yet have a clear definition of the product and had to be flexible to customer feedback. To put it in technical terms, there were still too many oscillations in the system and it had not yet reached a steady state where efficient development could take place.

**BASEBALL BUFFET**

What's Cooking! Gorman Thomas Fantasy Baseball League Only 6 Days Away. [More...](#)

Search Site

National Plate Local Plate Personal Plate

**Top Fan-Ranked News**

1. Red Sox/Matsuzaka negotiations at a standstill, deadline tonight
2. Remaining free agent list
3. Gil Meche - a \$55M man?
4. Jason Jennings dealt to Astros
5. Tommy Herr back in baseball as manager

[read more](#)

Show: 3 5 10

**Newest News**

1. Mike Wood not offered contract by Rangers (9:12 AM)
2. Non-tender free agents (8:04 AM)
3. No tender offer; Piniero now free agent (7:50 AM)

[read more](#)

**Baseball Almanac**

**Stats, Stats, Stats!**

1. All-time Leaders in RBI/AB Ratio
2. Bert Blyleven's Career Stats
3. Most Errors Season-to-Date

[read more](#)

**Petr Gams Dugout**

Today's Post:  
 Sent to Training Begins Tomorrow;  
 Royal's Season Already Coming to an end

All Posts  
 Ask Peter

**Top Pictures**

See all

**Blog Scan**

**Poll:** What To Do About a Starting Pitcher  
 Posted 49 minutes ago by MetsBlog

**Daisuke And Three More**  
 Posted 93 minutes ago by A Red Sox Fan In Pinstripe Territory

**Prez departs, returns**  
 Posted 95 minutes ago by Cincinnati Reds

[read more](#)

**Best Hats**

**Newest Hat:**  
 Laura from Dedham

**Popular:**  
 Yankees, Red Sox, Cubs

Overall | [View all hats](#)

**Discussion Board**

1. Is McGwire: Hall of Fame Bound?
2. Matsuzaka: Ichiro or Fat Toad II?
3. Gil Meche is the worst free agent signing ever. The Royals are pathetic.

[read more](#)

**Random Rants & Witty Wisecracks**

**Hot Topics:**  
 Arod  
 Matsuzaka  
 Theo Epstein

[read more](#)

**They Really Said That?!**

1. Joe Morgan
2. Tim Lincecum
3. Tino Martinez

[read more](#)

**Video Vault**

Check out the latest fan-submitted videos

Copyright © 2006 Baseball Buffet. All Rights Reserved. Site Design: Fresh Tilled Soil

Figure 7.3 Baseball buffet national plate.

My colleague, MIT lecturer Elaine Chen, would argue that the website's design had too much detail, and that people would get distracted by the actual pictures or colors, rather than focusing on the features, functions, and benefits of the product. Elaine would recommend using a wireframing tool like Balsamiq<sup>®</sup> Mockups in order to focus on the workflow, staying at the functional level rather than delving into minute details like this team did, because this can be distracting and counterproductive.

## SensAble Technologies

Our “digital clay” solution, which we called FreeForm, included both hardware (the physical PHANToM) and software. In the new digital clay molding bench, the hardware was not the critical item as we could imagine the hardware getting smaller and more stylish. We even felt that we could contract out production of this component if we wanted to. That was the relatively easy part. The hard part was going to be designing the software, so that is what we focused on.

As such, the goal was to produce a product that would have the ease of use of clay, but also the benefits of having digital files so that designs could be saved, modified, and sent electronically around the world, and upgrades and enhancements could be provided to users as well.

We started to develop the High-Level Product Specification as a set of PowerPoint slides in a less-precise way than the previous Baseball Buffet example. We showed the tools that designers used at the time and then we showed how that tool set would not only be replicated, but expanded with our digital clay molding bench (Figure 7.4).

There would also be drop-down menus that would allow the user to digitally select the materials, the tool, the end effector, and whether a template was to be used (Figure 7.5). This made it much easier for us to focus and test the viability of some concrete ideas with ourselves as well as potential customers.



Figure 7.4 SensAble replaces and expands current tool set.

**User Selections**

<b>Materials:</b>	<b>Tools:</b>	<b>End Effector:</b>
<input type="checkbox"/> Soft Clay	<input type="checkbox"/> Sculpt	 Point
<input type="checkbox"/> Medium Clay	<input type="checkbox"/> Hot Sword	<input checked="" type="radio"/> Ball
<input type="checkbox"/> Hard Clay	<input type="checkbox"/> Push/Pull	<input checked="" type="radio"/> Triangle
<input type="checkbox"/> Blue Foam	<input type="checkbox"/> Extrusion	<input checked="" type="radio"/> Square
<input type="checkbox"/> Ren	<input type="checkbox"/> Dremel	<input checked="" type="radio"/> Half Ellipse
<input type="checkbox"/> Metal	<input type="checkbox"/> Scribe	<input type="radio"/> Hook
<input type="checkbox"/> Other	<input type="checkbox"/> Other	<input checked="" type="radio"/> Other
		<b>Template:</b>
		<input type="checkbox"/> Yes
		<input type="checkbox"/> No

Figure 7.5 SensAble user selections.

Another screenshot showed a clay studio, with a hunk of clay in the center, and with drop-down menus above, to show designers the interface they would be using to mold their digital clay.

Our High-Level Product Specification allowed us to get good feedback on our product from our customers. Our final product looked much different, but the spec was still successful because we needed a starting point to test and iterate on. This easy-to-construct product description of the key parts of our solution did not take a lot of time, was a great exercise to construct, and was a wonderful communications tool when done.

### Example of a Brochure: Lifetime Supply

In this example, there were two entrepreneurial programmers, Max Kanter and Colin Sidoti, who were developing a plan for a new venture called “Lifetime Supply,” whereby its customers could get a lifetime supply of any of the products that they offer. The original idea was that a well-to-do young male, Ivan the Investment Banker, would not want to go shopping but knew he would need white athletic socks for the rest of his life and this product would not change. As such, the new venture would take a payment and provide Ivan this service in perpetuity.

Once they started to research this idea, it quickly became clear that making this a subscription business was a much better idea, where both sides had the option to renew annually and where the pricing could be adjusted. With some clever pricing and logistics expertise, this could be a real business. They were confident that they could build such a website and mobile app. It was important to be accessible from the mobile phone, because in their primary market research, they found that

convenience was a major attraction of this service. If customers could just reorder with one touch on their mobile phone, this concept would become much more valuable. So building a site and app was the easy part. What exactly to build and getting people to buy into their service was harder.

After some analysis and talking to many potential customers, they chose parents of college students as their beachhead market as they had both the financial means to buy the subscription and a strong interest in supporting and staying in touch with their children, especially when it came to areas like personal hygiene. They set out to describe their product to these key constituencies in as easy and efficient a manner with a brochure, which is shown in Figures 7.6 and 7.7.

Figure 7.6 shows the outside of brochure they produced.

Figure 7.7 shows the inside of the brochure, which is a tri-fold design.

You can see that the exercise of building this brochure forced the team to clarify many questions. What are the benefits to the student? What are the benefits to the parents? What are the products that Lifetime Supply will offer? How should we start to think about the pricing? By choosing to include pricing, though, the team has created a detail with the potential to distract both itself and potential customers. If customers disagree with the prices presented, they may be less likely to give feedback on the venture's main idea, which is providing supplies to college students on an all-you-can-use basis.

As you will notice, there are no pictures of the actual Lifetime Supply website or app. They had already created screenshots and storyboards for how people use the product, but details about each



Figure 7.6 Lifetime Supply brochure, outside.



Figure 7.7 Lifetime Supply brochure, inside. The original brochure also included logos for popular brands within each of the seven supply categories.

web page the user would see were not important in this brochure. In fact, the brochure may have been more helpful than the storyboards in determining exactly what the product would be. The final product offering for Lifetime Supply likely looks very different than what this brochure shows, because this brochure started a healthy process of iteration so that the team would arrive at the best product offering.

## SUMMARY

Visually laying out your product will allow your team and your potential customers to converge around an understanding of what the product is and how it benefits customers. Staying at a high level, without too many details or a physical prototype, allows for rapid revision without investing too much time and resources this early in the process of creating your new venture. Building a visual representation of the product will likely be harder than you think, but will get everyone on the same page, which will prove extremely valuable going forward. A brochure with features, function, and benefits to the customer further clarifies your product offering and is a great complement to the pictures you create.

