Essay 3

Product Management: Cooperation and Individual Vision

Michael Plasmeier

I have received an offer from Oracle to be a Product Strategy Manager, after I graduate from MIT. Last summer, I was a Product Manager intern for a mobile app for the Disney Cruise Line. My freshman summer, I was an Innovation Management intern for Deutsche Bahn, the German railroad. All of these jobs were in product management, which the job responsible for coordinating teams and producing successful products. They are at the heart of the product development process. The spirit that I encountered producing products in these roles was similar to the spirit that the Data General team felt in The Soul of the New Machine as they went through the product development process. Product development requires that one works very closely and intently together as a team to shape the product. But at the same time, as the product manager you need a personal vision for the product. The product must be a fit for the marketplace, as the marketplace is the ultimate arbiter of a product. I’ve enjoyed the experiences that I’ve had so far and I look forward to becoming more involved in the product development processes as my career goes on.

# Team Effort

Building a successful product is a team effort. It requires an entire company in order to do it well. We saw in The Soul of the New Machine that engineering is a team effort. No one person can do everything themselves.

Product Managers take this concept one step further. It is the product manager’s job to liaise between all of the teams involved on a product (engineer, marketing, legal, and sales) and make sure that everyone is on the same page. A product manager knows what members of each functional area to bring in at what point in time.

For example, when I was at Disney, I served as the hub of communication on the project to build a new mobile app for Disney Cruise Line. I would estimate that about 20 people were involved to a significant amount on the project. Two of them were engineers who were actually building the app. The others either represented the cruise line, were visual designers, ran the company-wide database, worked on IT for the cruise line, or did a myriad of other tasks. In addition, I worked with representatives from legal, privacy, and security who contributed when necessary. Every member of the team had had a specialty which they contributed to the project.

I joked to the other interns that my job was basically meetings and emails. This was not too far from the truth, as I had sent 912 emails and I attended 231 meetings in 3 months while at Disney. This is about 4 meetings a day, or a bit under 50% of my time. I also spent a lot time establishing contacts at Disney. I walked away with about 100 contacts form people that I met and talked to.

Working at a firm like The Walt Disney Company requires cooperation. The scope and scale of what any multinational corporation accomplishes could never be accomplished by one person. Instead, people are required to work together. People are especially required at the interfaces between areas, disciplines, and regions. This forms a large multi-dimensional matrix of coordination which one must work through to get anything done. However, there is much to be learned from the specialists in each area.

Teams should also provide a diversity of options. People on a team are often from different backgrounds, so by definition they will have different viewpoints. Good teams recognize this and seek to utilize the different viewpoints that they have. I’ve seen this on many MIT projects, especially on Sloan projects. For example, in my Airline Industry class, one student had more experience from management consulting, so he helped in building the supply and demand models. I had more experience deigning experiences, so I did the brand design for the project.

Groups also let individuals bounce ideas off of each other. It’s often a good idea to get a different viewpoint on an idea which you would not usually think of. Often I take an idea I am very excited about to one of my colleagues on Baker Exec who immediately points out all of the flaws in my idea that I had not thought of. Ultimately this diversity of ideas helps build a better outcome.

People often deride design-by-committee, but it can really work quite well. Everyone brings in their own viewpoint to the decision making. I saw it this summer at Disney. Each person would bring their own viewpoint in. For example, the engineer might suggest a particular way to structure the system, but the security expert would point out the issues that the engineer might not have thought of because he doesn’t have as much experience in security than the security expert.

From what I heard from the other interns at Disney, this type of detailed decision making is common at other departments of Disney. One intern spoke about a two hour meeting to discuss the speaker placement at a new retail location under design by Walt Disney Imagineering. The sound expert wanted it in one place, while the visual designer of the store wanted it elsewhere, while the lighting designer wanted that space for the lights, and the construction expert let them all know that the design was not feasible to be built since it was against building codes.

# Personal Vision

A product manager needs to set the vision for a product. A strong vision is necessary to make sure that the product remains focused on its goal, namely that it remains what the customer wants, is user-friendly, and is built on time and on budget.

Steve Jobs, perhaps the ultimate product manager, has a strong product vision at Apple. He had a grand vision of where the product should go. He knows where the tradeoff should be, for example, between features and the weight of a product. He’ll take things out in order to hit a particular weight target. But he must still work with a team to know what is feasible and what customers want.

When I was at Deutsche Bahn, the German-nationally-owned railway, I built a prototype map platform which brought together different silos of information. It was a cool prototype. But my project didn’t convincing address any concrete, realistic use cases.

My efforts at Disney were much more of a team effort. In the two years between Deutsche Bahn and Disney, I completed the majority of my management courses. In these courses, especially 15.279 Managerial Communications, I learned about the importance of teamwork and how work actually gets done in a corporation. I also learned more from my experience in management consulting at Altman Vilandrie. As such, I approached my role at Disney very differently than I did at Deutsche Bahn and I avoided making the same mistakes.

## Consistent Vision: Making Tradeoffs

A product manager is needed to make sure that the vision remains consistent. Design by committee commonly falls apart when all goals cannot be fully achieved. One person who knows just enough about each section is required in order to be able to make tradeoffs. How does one decide which goals should be traded off? One might not want to reduce all goals by 20%. Instead, you might need to make the tough decision to strike one goal completely. This is very hard for a committee to do because, say, four people need to “gang up” and throw the fifth person out of the meeting and let them know that their goal can’t be accommodated.

Often, instead, one person is needed who has enough knowledge of each viewpoint that they are able to make tradeoffs between those viewpoints.

I made these tradeoffs when I was at Disney working on the mobile app. Often the team would think of a cool feature to add. However, this might cause the app to be developed late or require some operational change on the ship. I knew what each department required so I could chime in quickly if the feature change would cause trouble with the other group. For example, the designers wanted fancier images, but those would require a large number of database and operational changes, which we didn’t have time for, so I suggested ways to work within the structure of what we already had.

## Deciding on your own

You rarely make decisions completely on your own. You are often beholdenent to others. Even if you are an entrepreneur, you often have partners or investors which you must listen to. For example, companies have a Board of Directors which review decisions every three months. As an entrepreneur you need to retain the trust of your board.

In addition, you can’t do everything on your own. You must delegate authority to your lieutenants. You must trust them to implement your vision. For example, at Baker House I can’t pick which decorations to have for the Baker Formal. I don’t have time for that. Instead, I must trust my social chairs to make that decision. Steve Jobs can’t review every decision at Apple. At some point he needs to pick competent managers, train them in his vision, and then trust them.

## Externally Visible?

Sometimes this person may be externally visible. For example, Joe Rohde, who led the design of Animal Kingdom and Aulani for Disney. Joe has achieved quite public name recognition for those projects which he led. Thus much of the creative vision of the projects is attributed to Joe. This often provides benefits for public relations as there is one clear public persona of the project. However, for the reasons listed above this person must still rely on a team to get the project done and to allow the individuals on their team the creativity to be flexible with the little details that they themselves don’t have the bandwidth to get to.

# Marketplace

A product must meet the needs of the marketplace. Like Howard Roark from The Fountainhead, one must produce successful products in order to stay in business. However, unlike Roark, most are not willing to work in a quarry in order to stay afloat between finding projects. In addition, I think that one should actually be judged by the marketplace, because the marketplace pushes one to develop good products.

Even if you have a strong personal vision, your vision must be towards building products while could be sold in the marketplace, not building something for yourself. Steve Jobs also did not build products that only he could use; instead, he built products which he thought would be successful in the marketplace. Hollywood movie directors are ultimately judged by how their movie does in the marketplace. Winning critical awards is less important than winning in the marketplace. This is good. Building something you like is easy; building something which a large proportion of other people like is more challenging.

The marketplace pushes you. You might not want to do things one way, but do to external factors (such as availability of funding or competition) that might be your only option. In some ways, working within limitations focuses your effort and provides the context for your work. A competitor may have released a product that is better than yours, so you must react, like DEC’s VAX in the Soul of the New Machine. Or you are racing to finish your work before a competitor, like Crick and Watson in the Double Helix racing against Pauling at CalTech. This might not be ideal, but it is the context in which a product manager must work.

# Tying it Together

Product Management is the combination of team effort, individual vision, and marketplace pressure. No one element of these three can be removed. A product requires more work and expertise than any one person can provide. Different individuals provide different insights since they come from different backgrounds. Indeed, it is the product manager that often coordinates these efforts. But some individual vision is also required to ensure that tradeoffs maintain the goals of the product. Finally, buildings products is about the marketplace. The marketplace is the ultimate judge of a product. Building sometime for others is harder than building it for yourself.

## Extending to Engineering

These same maxims can be extended to engineering in general. The team at Data General was made up of a number of engineers who worked together long hours to get the Eagle to work and be ready to be sold as a product. But at the same time, choices had to be made. Edson de Castro had to pick the high level requirements for the product. He needed a vision for what was needed in the marketplace. Tom West had to pick who would work on what. The senior engineers who designed the features had to make decisions on how they designed the features, but still make them so that they were compatible with the work of the other teams. The context that Data General worked in was one defined by DEC’s VAX. They had to do something in response.

## Extending to Science

We can also see this same combination of group effort and individual vision, as well as the larger context in which one works, in James Watson’s account in The Double Helix. Watson and Crick did not work on their own; instead they worked together as a team with other scientists. Their work would have not been completed, without a personal vision for a solution. It is also clear from Watson’s account that they felt pressure from competition from other scientists to publish their discoveries first. This is the context in which they operated. Thus we can extend the same findings to the work of science.