DELIVER

GREAT PRODUCTS *that* CUSTOMERS LOVE

The Guide to Product Management for Innovators, Leaders, and Entrepreneurs

Valerio Zanini

5D VISION

5D Vision Publishing

Deliver Great Products That Customers Love

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Library of Congress Control Number: 2018906202

ISBN (Hardcover): 978-0-9989854-1-1

ISBN (Paperback): 978-0-9989854-2-8

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Cover design by: Maxi-1989/99Designs

Cover image: 32 pixels/Shutterstock

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To my wife Deborah, for all your loving support and for always pushing me to become a better person

To my parents Roberto and Maria, for teaching me the value of hard work and for inspiring me to always try new things

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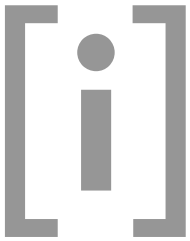
DELIVER

“To produce the promised, desired,
or expected results “

Merriam-Webster dictionary

"Deliver." *Merriam-Webster.com*. Merriam-Webster, n.d. Web. 9 Oct. 2018.



INTRODUCTION

I love building products. Ever since I was a little kid, I have enjoyed the thrill of solving a problem and building a solution. When I was eleven, with my first computer (a Commodore VIC-20), I developed a software to organize all my personal contacts. At the time, I was already feeling the pain of knowing more than ten people and struggling to organize their information. I dreamed that the software I had written could solve the same problem for other people. As soon as the program was ready, I created a brand, gave it a name, and even decided on a price. I was ready to launch it in the market: my neighborhood.

Just the thought of another person using my tool and finding it useful was exciting. I soon understood that my addressable market was limited as I could not find anyone else with the same computer in my circle of friends. So I kept dreaming of the next opportunity, and the program lived on just for my personal use.

Over the years, I have launched digital products in a variety of organizations, and I still feel the same butterflies and excitement on the eve of every new product's launch. As product managers, we spend months ideating on a new concept, building prototypes, developing the product, and finally getting ready for deployment. It's exhausting yet exciting. All the months of hard work finally converge into an actual "thing" — something tangible we are about to bring to life for the world to enjoy.

And yet this final delivery is only the beginning. The launch of a new product in the market may be the finish line of months of hard work, but it's the starting point of something else. As soon as your product is ready, you begin having real customers, getting their feedback, and learning of a thousand better ways to improve it or to make a new version of it. Suddenly, you enter a new circle of ideation, prototyping, and development. It's like riding on the Ferris wheel at an amusement park or, more often than not, on a roller coaster. As soon as you reach the end, you are set to start it all over again. This is the life of a product manager!

I have met many people who were new to product management or who were interested in making the transition to a new role, and who have asked me for advice. They wanted to learn what it is like to be a product manager and what tools they should use to be more effective. I had the opportunity, and the pleasure, to expose numerous people to new methodologies, organize hands-on exercises, and provide coaching on Design Thinking, Empathy Interviews, Product Journey Maps, and more.

When given the opportunity, I invited them to work with me or my team so they could experience what it is like to be a product manager. If they were really eager to learn more, I would suggest a list of great books they could read to gain a deeper knowledge of the job, and learn different methodologies. Unfortunately, the list was long because no single text offered a comprehensive view of the product manager's role. I could read in their eyes how daunting that mountain of reading was and how overwhelmed they felt at not knowing where to start.

I found it difficult to recommend a single title that would help them understand the role of the product manager and give them exposure to a variety of methodologies they could start implementing right away. There are great books on product management, on Agile, on various methodologies, but I didn't find one that could serve as both an intro for novices, and a reference for experts.

I have also met many entrepreneurs and CEOs who were struggling to build the right product. Some were building their products for the first time; others had already had a successful start and were forced to innovate by the pace of technology or changes in the market. Many had focused all their energy on developing their new product and preparing for its launch, and had lost track of who the real customer was.

Often, these young companies didn't have a strong product management culture in their organization and were striving to understand how to solve their challenges. Product development seemed to be either left to one area of the organization — marketing, sales, IT, etc. — or, at the other end of the spectrum, was still tightly controlled by the founders. It was not infused throughout the organization.

This is where this book comes from. It is for dreamers, for makers, and for entrepreneurs of all stripes, and is designed to inspire a culture of product management in your organization, and to help you understand how to build a great product. It explains why creating a customer-centric focus is important, and the shortfalls of companies that focus on deploying products without a proper understanding of who the real customer is. It references key methodologies that can be applied at any stage of product development, from Discovery to Delivery.

Launching a product is hard work, but it's a rewarding and exciting process. This book explains the key elements every team or organization should have to build great products, and useful methodologies that product managers can employ at each stage of the product development life cycle.

While it is not designed to be a detailed encyclopedia of techniques and all possible applications, my intent is to stimulate your passion for product management, give you enough tools to be able to start applying these techniques in your job, and then provide a reference to other materials you can use to learn more. There are great books on almost every topic you may wish to learn, so there is no value in reinventing the wheel. Instead, wherever useful or necessary, I point to other references that cover a specific topic in greater detail. I invite you to explore these additional resources and learn more about your favorite topic or methodology.

This book is for any person who is responsible for creating a new product or improving an existing one: not only product managers, but also entrepreneurs, founders and CEOs at new startups, user experience and interaction designers, consultants, project managers, and marketing managers. If you are a dreamer and a maker, this book is for you.

In **Part 1**, I discuss the role of the product manager and why it's essential to the success of a product.

Part 2 is dedicated to the Three Pillars of product success: customer focus, culture of agility, and team empowerment.

In **Part 3**, I present the 5D Vision of Product Management, a framework that helps product managers "see" a product through the five dimensions of Discover, Design, Develop, Deploy and Deliver.

DELIVER GREAT PRODUCTS THAT CUSTOMERS LOVE

[PART 1]

A GREAT PRODUCT

Saint Peter's Cathedral in Rome, Italy

[1]

HOW GREAT PRODUCTS ARE BUILT

The meeting with the customer did not go well. The prototype was not yet finished, and the customer wasn't able to grasp the qualities of the idea he was presenting. This project was already over budget, and there was no clear line of sight on its completion. By all measures, it was taking too long to put together, and the customer was getting anxious. He knew he was about to lose his job.

It was the end of 1546 A.D. and the project was the construction of Saint Peter's Cathedral in Rome. It had started 40 years prior, and there was no sign of progress. Several architects had come and gone, and the customer, Pope Paul III was facing increasing criticism over spiraling costs and the endless delays. What was intended to be the symbol of all Christianity was not moving any closer to completion, and the Pope had not yet seen a clear plan to finish it.

The most recent architect, Antonio il Giovane (Anthony the Young), had spent the previous seven years building a gigantic, wooden model that would show in full detail the grandiose plan he intended to pursue.[1] He wanted to have a full representation of the finished work to get the Pope's buy-in on every detail before beginning construction. He intended to fix every detail of the final construction and offer a plan to follow. This was standard practice for the times — no wonder cathedrals took 200 years to complete!

In the modern world, this would be called a Waterfall approach. Imagine spending seven years creating a very detailed prototype covering all the specifics of the planned project, from the broad vision to the specific requirements of every little feature. And once you finally complete it, you find out that it does not satisfy your customer's need.

What happened next is an example of agility and empowerment similar to the cultural shift taking hold today in companies around the world.

Tired of the delays, setbacks, and overall lack of progress, Pope Paul III fired the architect and called on Michelangelo for help. The Pope gave him full authority, empowering the new architect to make any decision on the design, prioritization of the work, and delivery of the project.

Michelangelo immediately discarded the wooden model built by his predecessor and threw away the existing plans. To remove some constraints and establish a more solid foundation for the building, he even tore down parts of the Cathedral that his predecessor had built. With the Pope's full authorization, he set off to design a new concept for the largest church in the world.

In just a few days, he built a clay model of his new concept and shared it with the Pope. The model was a basic, rough representation of the whole plan, intended for quick iteration. He received feedback that the design seemed a bit dark, and Michelangelo promptly modified the window designs to allow for more light to penetrate inside. He again showed the new model to the Pope, and this time his customer liked the general idea.

Compared to a single, fully detailed wooden model like the one his predecessor had built, Michelangelo's clay prototypes allowed for rapid iterations of building and receiving customer feedback. Because he did not waste time on every single detail, but rather built clay models for small portions of the cathedral at a time, Michelangelo was able to get the Pope's feedback very quickly and avoid lengthy changes when something didn't go well.

Today, we have only a handful of plans of St. Peter's from that time. It's not that they were destroyed over time, but rather that Michelangelo simply didn't bother making detailed plans. He conceived, planned, and built a small section of the church at a time. Instead of detailed plans, he used prototypes. He built clay and wooden models that were easy to put together and adjust quickly as needed. When he realized that something was not right, he was ready to tear it down and conceive a new idea. He had an overarching vision for the final cathedral, and he was getting there one step at a time.

Michelangelo worked on Saint Peter's for 17 years, until his death. In this time, he

made much more progress than all other architects that had preceded him during the prior 40 years. In doing so, he provided us with, perhaps, the first example of how to employ agility from ideation to execution. And he left behind what is still today one of the world's wonders.

Building the largest church in the world in the 16th century must have required a massive effort without the technology and machinery we have today. Yet, Michelangelo employed several techniques that resemble what today we call Agile, Lean, and iterative development. Rather than wasting time on a detailed, immutable, upfront plan, he built in increments, tested his assumptions, and then decided how best to continue. He pivoted when it was necessary.

In this way, Michelangelo was a great inspiration to today's product managers. He blended technical acumen with a strong sense of design and the capacity to empathize with his customers to understand their needs and build a great product.

Today's methodologies are changing the way product managers approach their work. Agile, Lean Startup, Design Thinking and others let us ideate, plan, and execute new products at a speed and with a confidence that was never possible before. Because these methodologies are condensing the learning cycle and are putting product managers closer to their customers, they can help deliver what customers really need and reduce the risk of building the wrong product.

VALIDATE AS SOON AS POSSIBLE

A developer approached me at a recent Agile conference where I was presenting a topic on building great products with small iterations, and he said, "*I wish I had known this a year ago….*" He had taken on a new project from a company that provided a full document of requirements upfront. They wanted to build a new system and do it all at once.

Since the requirements clearly explained what the customer wanted, he set off and worked at building the system for the following six months. By the time he was done, the company had gone bankrupt and he was never paid. "*If I had known how to build an MVP (Minimum Viable Product), I would have suggested that to my customer, and I would have built only a small piece of the whole system,*" he added.

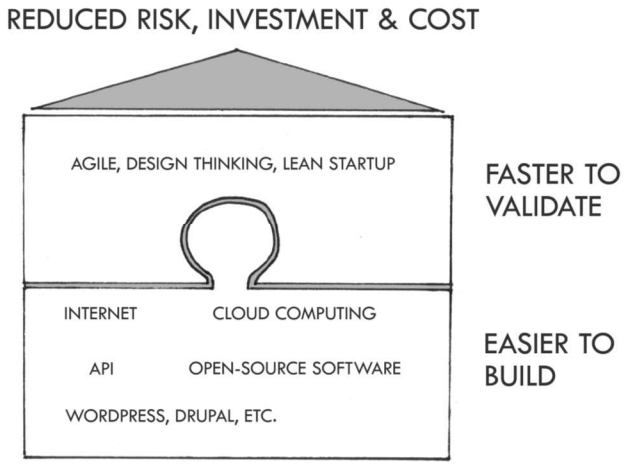
This approach to a new project is not different from what has been going on in the industry for a long time. Not even 10 or 15 years ago, and sometimes still today, the traditional way of building a product or a new business followed a combination of some of these steps:

- Ideate a solution and design a new product
- Write a detailed Product Requirements Document
- Find a budget or raise initial capital
- Hire a development team and build the whole system
- Launch the finished product in the market
- Evaluate how sales are going
- Pivot if necessary

Each of these steps was a big hurdle, and developing the system, in particular, was a big and expensive challenge. Often, the challenge is amplified when there is not a single stakeholder and requirements come from different stakeholders that can be (partly) opposite. Reaching agreement on those requirements without an MVP can be a lengthy process.

Without a working system to demonstrate, nor any customers, it was hard to raise capital. This approach also put all the risk at the end, waiting for market validation to know if you had built the right product, often after months of development and a large upfront investment.

The Internet, cloud computing, open-source software, widely available code libraries, and APIs have immensely reduced the effort needed to start a new online business. If before you needed to buy your own servers, install expensive software packages, and



write custom code for almost every function of your software, today you can do all this in a leaner and faster way. Not only is your upfront capital investment minimized, but so is the time to market. You can build a prototype of your idea in days instead of months, and quickly make it available to potential customers for

feedback and validation.

The technology innovations that made all this possible have transformed how companies approach new projects. But the combined impact of Agile, Lean Startup, and Design Thinking has really shifted the mindset on how to bring an idea to life and achieve market validation without a large upfront investment.

These methodologies have turned the approach upside down. Entrepreneurs now have many more opportunities to build an MVP and validate their ideas. The goal is to validate the business concept, learn from your customers if there is market-solution fit, and if necessary pivot as early as possible. All this without a significant upfront investment of time or money.

Ideally, you could share the concept of your system before you build anything, find early adopters, and get their feedback. Would they buy your product or service? Market validation is the most important step in building a product, and the earlier you can achieve it, the better.

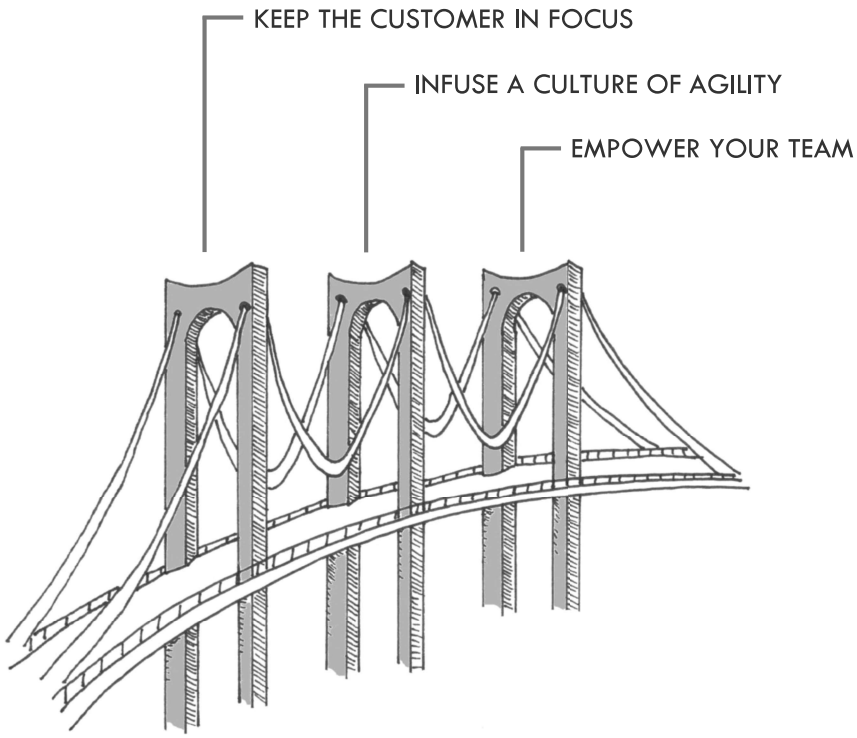
Uber made a partnership with a local black car rental company in San Francisco and tested the concept of reserving a car ride with an app. It had to build just a simple version of its app as the rides were provided by the partner company. The test was quick and simple, yet it allowed Uber to validate the customer demand for its service before investing in building its own network of drivers.

Groupon famously started with a WordPress blog that was edited once a day to describe the new offers available to customers. A FileMaker database running offline on one of the founders' computers kept track of the orders, which were serviced by hand one by one. It was quick to build and helped validate the business concept before committing to a larger investment and building the full web capability.

The goal of every team should be to find the fastest, cheapest, easiest way to test and validate a new idea and get to market-solution fit as quickly as possible. Once you know that you have found a rough diamond, then you can commit to building a team and investing in creating a shiny product.

Ideating, building, and validating your ideas without large upfront investments is a common theme throughout this book, and it's at the core of a culture of agility.

THE THREE PILLARS OF PRODUCT SUCCESS



The product's success is built upon the three pillars of customer focus, agility, and team empowerment

I have worked in a variety of organizations across different industries, helping my teams or my clients build successful products. From Cisco to Capital One, from my startup Goozex.com to clients I have advised, from private organizations to the military, I have found three common elements that successful teams must have to deliver great products. These elements are the three pillars of a strong customer focus, a culture of agility, and an empowered team.

I believe that these three pillars are what sustain every successful team in building great products. Organizations and teams that keep their customer needs in focus, foster a culture of agility, and empower their teams to make the right decisions, are more likely to set the conditions for great products to come alive.

KEEP THE CUSTOMER IN FOCUS

Maintaining a customer focus defines the product manager's attitude of seeking and incorporating the customer's input into his or her decisions at every step in the product development cycle. This should not be relegated to the Discovery phase, but rather should be an essential activity throughout the development and launch of a product.

Asking for customer feedback at every step allows the manager to identify needs and define the proper solution. Customers buy a solution to their needs in the form of a customer experience, and only by maintaining the focus on their needs you can build the right product.

INFUSE A CULTURE OF AGILITY

To compete in today's market, companies need to be nimble, fast, and able to adapt to changing conditions. Like the wooden model built by the architect prior to Michelangelo, which had taken over seven years to complete only to discover that the customer was no longer interested in that plan, companies cannot afford to spend a long time planning and building a product that is perfect in every single detail. By the time they are done, the market has likely either found something else, or has changed.

A timeless example of this is when Philips, a large electronics manufacturer based in the Netherlands, introduced a new video cassette recorder in the market. It was the Video 2000 and it came right in the middle of the "videotape format war" already taking place between VHS and Betamax.[2] From a technical point of view, Video 2000 offered superior quality and a few innovative features. However, Philips' competitors JVC and Sony (makers of the VHS and Betamax formats respectively) had been in the market already for at least five years. Despite a less advanced system, VHS had 70% of market share for domestic video recorders worldwide. Nobody wanted to buy the Video 2000 system for which there were no movies available. Philips had simply taken too long to build its system and it was too late.

Companies need to keep the cost of change, and the associated risk, as low as possible, while building the best solution to the customer's needs. Agile allows you to break product development in small iterations and to incorporate customer feedback at each step. But adopting Agile methods is not enough if the underlying culture does not support a culture of agility. By building an ethos of transparency, inspection, and adaptation, companies can use short development cycles and adjust their plans quickly to match the customer needs. Agility needs to span all phases of development, from ideation to launch. Cross-functional teams can build products in

small increments, proceeding from idea to launch in a matter of weeks rather than months and learning from their customers quickly. They can adapt based on the learning, and prepare for the next iteration.

Employing agility across the full product development cycle allows companies to develop their 5D Vision, which is a foundation for a culture of agility.

EMPOWER YOUR TEAM

Empowerment is about trusting your employees to make the right decisions. Leaders need to act as servant leaders toward their teams. By delegating decision-making authority and giving employees the context and resources to make decisions, leaders foster an environment where better solutions are created, and team morale is increased. Empowerment is at all levels in the product organization, from the leaders to the developers, to the customers.

Part 2 of this book is dedicated to the three pillars of product success.

THE 5D VISION OF A PRODUCT

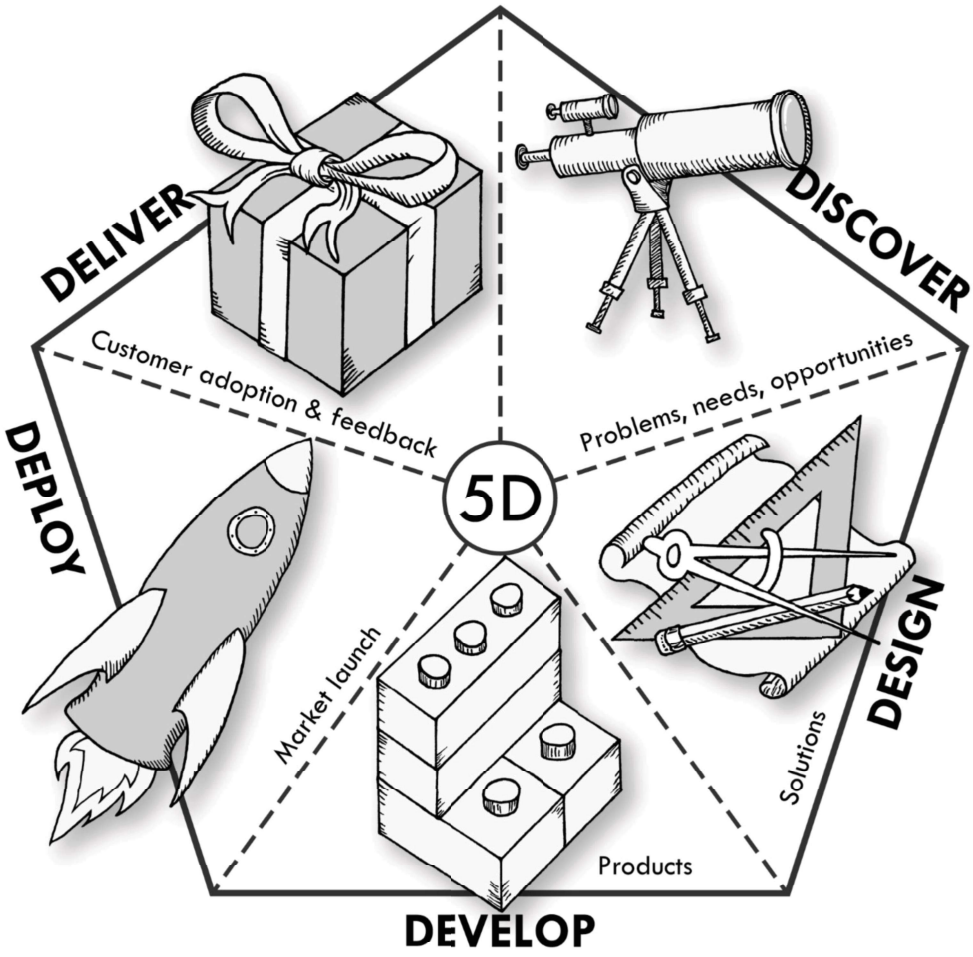
Sometimes product development goes through several phases each managed by different areas of the organization and in sequential steps. Even if the work within a single area uses Agile (in IT, for example), the overall product development process is still waterfall.

Companies cannot afford to manage projects as a sequential list of phases. Product development should be managed as a cross-dimensional project to break the silos between each phase and reduce the risk of dependencies.

Product managers should not work on one dimension at a time, move on to the next one when ready, and hope that everything flows nicely. They should employ a 5-Dimensional vision of their product. This requires looking at a product from the 5 dimensions of:

Discover, Design, Develop, Deploy, Deliver

This book describes a framework called the 5D Vision of Product Management. It helps product managers broaden their practice beyond the traditional Software Development Life Cycle, and look at a product as a set of attributes that deliver a great customer experience. By focusing on each of the five dimensions of the 5D Vision, product managers can plan and execute great products that customers love.



The 5 Dimensions of Product Management: Discover, Design, Develop, Deploy, Deliver

Part 3 of this book is dedicated to the 5D Vision of Product Management.

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NOTES