

Strategize: Product Strategy and Product Roadmap Practices for the Digital Age

Roman Pichler

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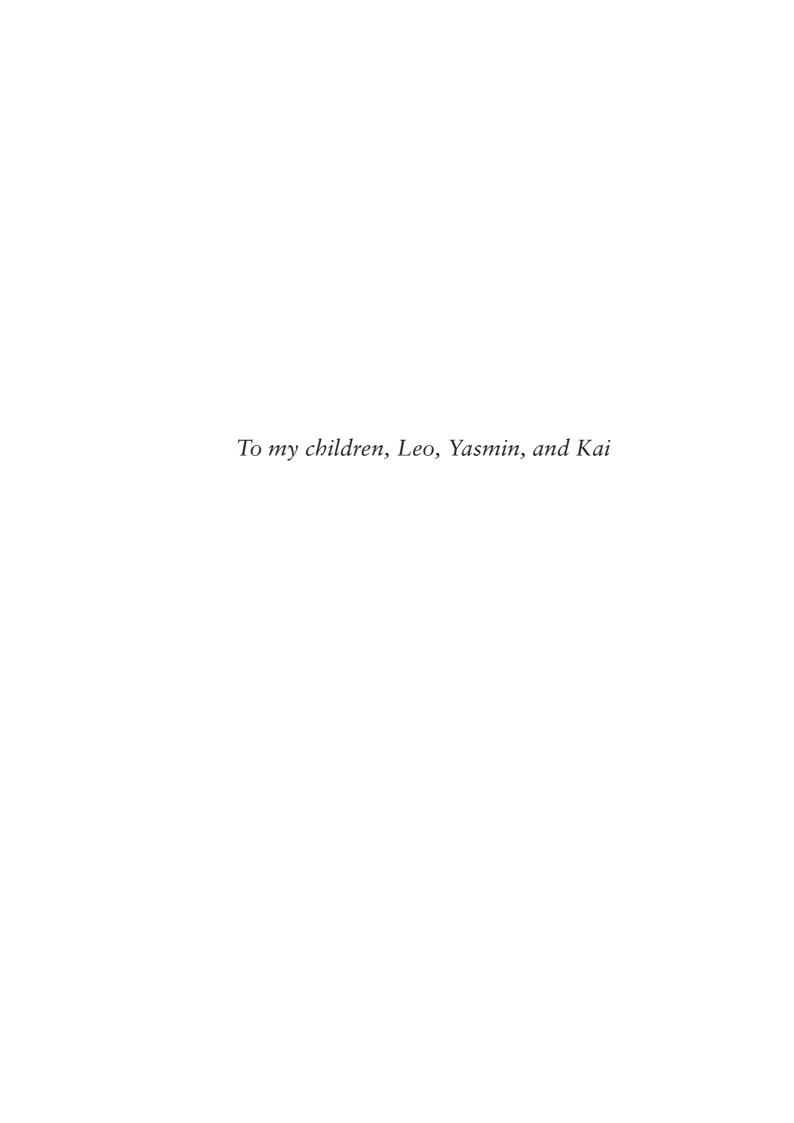


TABLE OF CONTENTS

Acknowledgments	9
Preface	11
The Big Picture: Vision, Strategy, Roadmap, and Backlog	11
A Brief Guide to This Book	13
Part 1: Product Strategy	15
Strategy Foundations	16
Understand What a Product Strategy Is	16
Think Big and Describe Your Vision	18
Find Out How Vision, Strategy, and Tactics Relate	20
Let the Business Strategy Guide the Product Strategy	21
Be Clear on Your Innovation Strategy	22
Take Advantage of the Product Life Cycle Model	28
Capture Your Strategy with the Product Vision Board	37
Complement Your Strategy with a Business Model	39
Choose the Right Key Performance Indicators (KPIs)	42
for Your Product	
Track the Product Performance with a Product Scorecard	
Complement KPIs with Operational Metrics	
Engage the Stakeholders	50
Review and Update the Product Strategy	53
Strategy Development	56
Segment the Market	56
Pick the Right Segment	59

6 • • • Contents

Use Personas to Describe the Customers and Users	62
Find an Itch That's Worth Scratching	65
Clearly State the Value Your Product Creates	66
Make Your Product Stand Out	68
Eliminate Features	72
Offer a Great Customer Experience	74
Build Variants and Unbundle Your Product	77
(Re-) Position Your Product	84
Strategy Validation	86
Iteratively Test and Correct Your Strategy	
Determine the Necessary Validation Effort	88
Involve the Right People	89
Use Data to Make Decisions	91
Turn Failure into Opportunity	92
Get Out of the Building	94
Identify the Biggest Risk	95
Choose the Right Validation Techniques	98
Directly Observe Customers and Users	99
Carry Out Problem Interviews	100
Create Minimum Viable Products	101
Build Spikes to Assess Technical Feasibility	102
Pivot, Persevere, or Stop	103
Use Agile Techniques to Manage the Validation Work	104
Part 2: Product Roadmap	109
Roadmap Foundations	110
Why You Need a Product Roadmap	110
Be Clear on the Different Types and	
Formats of Product Roadmaps	
Choose the Right Roadmapping Approach	
Understand Who Benefits from Your Roadmap Involve the Stakeholders	
HIVOIVE THE MAKEHORIEIS	117

Get the Relationship between the Roadmap and the Product Backlog Right	120
Avoid These Common Roadmapping Mistakes	
Roadmap Development	125
Make Your Product Roadmap SMART	125
Take Advantage of Release Goals	
Capture Your Roadmap with the GO Template	128
Determine the Right Release Contents	129
Get the Features on Your Roadmap Right	131
Identify the Success Factors	132
Determine the Window of Opportunity	137
Take Dependencies into Account	143
Make Your Roadmap Measurable	146
Roadmap Changes	148
Track the Progress	148
Review and Change the Roadmap	150
Portfolio Roadmaps	155
Why You Should Use a Portfolio Roadmap	
Plan Your Portfolio with the GO Portfolio Roadmap	156
Address These Portfolio Challenges	157
Epilogue	159
About the Author	161
References	163
Index	167

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PREFACE

A journey of a thousand miles begins with a single step.

Lao Tzu

Developing a successful product is not down to luck, a stroke of genius, or just trying hard enough. While these factors are undoubtedly helpful, product success starts with making the right strategic decisions. The challenge for product managers, product owners, and other product people is that we are often so preoccupied with the tactics—be it dealing with an urgent sales request or writing new user stories to keep the development team busy—that we sometimes no longer see the wood for the trees. In the worst case, we take our product down the wrong path and end up in the wrong forest; we've perfectly executed the wrong strategy and are left with a product that underperforms or even bombs. This book will help you play a proactive game, make the right strategic decisions, and use them to guide the tactical work. It explains how to create a winning product strategy and an actionable product roadmap using a wide range of proven techniques and tools.

The Big Picture: Vision, Strategy, Roadmap, and Backlog

When you look up the meaning of the term *strategy*, you will probably find it defined as a plan of action to achieve a long-term goal. While this definition makes sense, developing a successful strategy for a product involves two steps: finding the right overall strategy

and deciding how best to implement it. To help you focus on each step and deal with its specific challenges, I discuss them separately in this book and distinguish between a *product strategy* and a *product roadmap*. The product strategy describes how the long-term goal is attained; it includes the product's value proposition, market, key features, and business goals. The product roadmap shows how the product strategy is put into action by stating specific releases with dates, goals, and features. Figure 1 illustrates how the product strategy and roadmap relate, along with their connection to the vision and the product backlog.

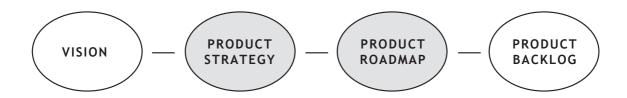


FIGURE 1: Product Strategy and Roadmap in Context

In Figure 1, the *vision* describes the ultimate reason for creating the product, the *product strategy* states how the vision will be realized, and the *product roadmap* states how the strategy will be implemented. The *product backlog* contains the details necessary to develop the product as outlined in the roadmap, such as epics, user stories, and other requirements. Note that the relationships between the elements in Figure 1 work in both directions: the product backlog can cause changes to the roadmap, for instance, which in turn may affect the strategy. For example, if the feedback from the customers and users indicates that the product does not adequately address their needs, or if the development progress is slow, then this may lead to product roadmap changes. Similarly, larger roadmap changes can cause product strategy adjustments. And if you cannot find a valid product strategy—a strategy that helps you realize the vision—then you may have to change the vision or look for a new one.

A Brief Guide to This Book

This book contains two parts. Part 1 covers product strategy practices, including determining a compelling value proposition, addressing the right segment, and selecting the right key performance indicators (KPIs). Part 2 discusses product roadmapping practices such as choosing the right roadmap format, using the right planning horizon, and reviewing the roadmap. Each practice is described in a section, and related sections are grouped into chapters. I have done my best to write the sections so that they can be read independently rather than requiring you to read the book from the beginning to the end. I have also tried to keep the sections as concise as possible, so you can read and digest them easily.

Most of the examples in this book are taken from the consumer space. The reason for this is simple: I have tried to use products that I hope you, the reader, have heard of. But the majority of practices also apply to business-to-business products. While virtually all examples are either digital products or products where software plays a key part, you can apply many of the practices to other products (although you may have to adjust them and ignore the software-specific advice).

I have written this book specifically for product executives, product managers, product owners, entrepreneurs, marketers, and others who create and manage products. You will notice, however, that I use the term *product manager* in the diagrams. My intention is not to exclude anyone who isn't called a product manager. Instead, I employ the term in a generic sense to refer to the person in charge of the product, no matter what the individual's actual job title is. While I am aware that product managers aren't always in charge of the product strategy, I believe that anyone who looks after a product and is accountable for its success should drive the creation of both the strategy and the roadmap.

PART 1: PRODUCT STRATEGY

Doing the right thing is more important than doing the thing right.

Peter Drucker

The first part of this book discusses concepts, techniques, and tools that will help you develop a winning product strategy. The practices are grouped into three chapters: strategy foundations, development, and validation. The foundation practices are key to achieving product success, no matter where your product is in its life cycle. The development practices help you create a new product and ensure the continued success of an existing one. They include techniques such as segmenting the market, working with personas, and bundling and unbundling the product, all of which are described in the pages ahead. The validation practices help you test strategy assumptions; they minimize the risk of choosing the wrong product strategy and help you create a strategy that is likely to be successful. While these practices are especially important for new products, they will also benefit an existing product whose strategy needs to change—for instance, to achieve product-market fit (PMF) or to revitalize the product to extend its life cycle.

STRATEGY FOUNDATIONS

As its name suggests, this chapter lays the foundations for the remainder of the product strategy part. It contains essential strategy concepts, techniques, and tools that will help readers who are new to the topic get up to speed; for seasoned strategy practitioners, they provide the opportunity to brush up their knowledge or close any gaps. Let's start by discussing what exactly a product strategy is.

Understand What a Product Strategy Is

What do searching on Google and booking a car on Uber have in common? Both are common technology experiences that require well-designed products that can handle varying loads, process complex interactions, and manage huge amounts of data. To achieve this, user stories have to be written, design sketches have to be created, and architecture and technology decisions have to be made. While attention to the details is necessary to create a successful product, it is easy to get lost in them. This is where the product strategy comes in: it helps you manage your product proactively by looking at the big picture.

A product strategy is a high-level plan that helps you realize your vision or overarching goal. It explains who the product is for, and why people would want to buy and use it; what the product is, and what makes it stands out; and what the business goals are, and why it is worthwhile for your company to invest in it. Figure 2 illustrates the elements of the product strategy.



FIGURE 2: The Elements of the Product Strategy

Let's take a look at the three aspects captured in Figure 2: the market and the needs, the key features and differentiators, and the business goals.

The *market* describes the target customers and users of your product: the people who are likely to buy and use it. The *needs* comprise the main problem your product solves or the primary benefit it provides. Think of a product like Google Search or Bing, which solves the problem of finding information on the Internet, compared with a product like Facebook, which provides the benefit of staying in touch with family and friends.

The *key features* and differentiators are those aspects of your product that are crucial to creating value for the customers and users and that entice people to choose it over competing offerings. Take, for example, the first iPhone and its key features of mobile Internet, an iPod-like digital-music player, and a touch screen; or the Google Chrome browser with its focus on speed, safety, and simplicity. As these two examples show, the point is not to list all product features in your strategy—that's done in the product backlog—but to focus on the three to five features that influence a person's decision to buy and use the product.¹

As these examples show, I view features as product capabilities. Features are broken into epics in the product backlog. You can also think of a feature as a group of epics or a theme.

The *business goals* capture how your product is going to benefit your company, and why it is worthwhile for the company to invest in the product. Is it going to generate revenue, help sell another product or service, reduce costs, or increase brand equity? Being clear on the business goals allows you to select the right key performance indicators (KPIs) to measure your product's performance. Take the iPhone and the Google Chrome browser mentioned earlier. While the iPhone generates the largest portion of Apple's revenue at the time of writing, the Chrome browser does not earn any money for Google. But it does allow the company to control the way people access the Internet, and it has reduced Google's dependency on third-party browsers such as Mozilla's Firefox and Microsoft's Internet Explorer.

Note that a product strategy is not a fixed plan or something you only create for a new product: it changes as your product grows and matures. As a consequence, you should review and adjust your product strategy on a regular basis—at least once a quarter as a rule of thumb.

Think Big and Describe Your Vision

Because the product strategy is a high-level plan that describes how you intend to realize your vision or overarching goal, it is helpful to begin by capturing that vision. The vision is the ultimate reason for creating your product; it describes the positive change the product should bring about.

Why the Vision Matters

Having a vision is important, as creating and managing a successful product requires a lot of time and energy. In order to be fully committed, you have to be convinced that what you are doing is right: life is too short to work on products you don't believe in. On the positive side, if you are enthusiastic about your product, then this will help you do a great job and inspire others. Say I want to create an app that helps people become aware of what, when, and how much they eat. My vision, then, could

be to help people live more healthily; the strategy would be to create an app that monitors their food intake in conjunction with a smart watch, fitness band, or smart food scales. Figure 3 illustrates this relationship.

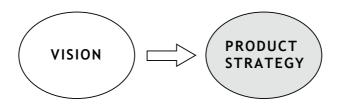


FIGURE 3: Vision and Product Strategy

Qualities of an Effective Vision

An effective vision has four qualities: it is big, shared, inspiring, and concise. A *big vision*, such as "help people eat healthily," increases the chances that people will buy into it compared to a narrow one, like "lose weight." What's more, it makes it easier to change the strategy (if necessary) while keeping the vision stable. Say that it turns out that my idea of developing a health app is ill conceived. With a big vision in place, I can explore alternatives, such as writing a book on healthy eating or offering mindfulness classes that teach people to become aware of their eating habits.

The beauty of a *shared vision* is that it motivates and unites people: it acts as the product's true north, facilitates collaboration, and provides continuity in an ever-changing world.² An *inspiring vision* resonates with the people working on the product, and it provides motivation and guidance even if the going gets tough.

A *concise vision*, finally, is easy to communicate and understand. To achieve this, I like to capture the vision as a slogan—a short, memorable phrase such as "help people eat healthily." A powerful exercise is to ask the key stakeholders to formulate their visions for the product and to share them with one another. Then look for common ground and use it to create a big, shared, inspiring, and concise vision.

² James Kouzes and Barry Posner (2012) describe a shared vision as one of five core leadership practices.

Find Out How Vision, Strategy, and Tactics Relate

As powerful as they are, the vision and the product strategy are not enough to create a successful product. What's missing are the tactics—the details required to develop a great product, including the user stories and the design sketches. Figure 4 shows how the vision guides the product strategy and how the strategy directs the tactics.

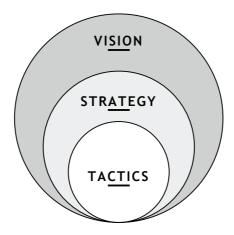


FIGURE 4: Vision, Strategy, and Tactics

Without a valid product strategy—a strategy that has been validated and does not contain any significant risks—you will struggle to discover the right product details; to create the right epics, user stories, story maps, scenarios, design sketches, and mock-ups; and to make the right architecture and technology decisions. If you are not clear on the path, then how can you take the right steps?

But it's not only the strategy that shapes the tactics. The latter also influences the former. As you collect data about how people respond to your product, you learn more about the customer needs and how best to address them. This may require smaller strategy updates, but it could also result in bigger changes, such as pivoting or sun-setting your product: significantly changing your strategy or phasing out the product, respectively. Think of YouTube, which pivoted from a video-dating to a video-sharing site; or take Google Buzz, a social networking, microblogging, and messaging tool, which was taken off the market a year after its introduction in 2010 due to its lack of success. Similarly, if

you struggle to find a valid strategy, then this could indicate that your vision is a hazy, unattainable dream that you should wake up from. Vision, strategy, and tactics hence influence one another. Table 1 provides an overview of the three concepts, together with sample artifacts.

Level Description Sample Artifacts Vision Describes the positive change the prod-Vision statement or slogan. uct should bring about, and answers why the product should exist. Guides the strategy. Strategy States the path for attaining the vision; Product strategy, product roadmap, captures how the vision should be realbusiness model. ized; directs the tactics. Describes the steps along the way, and **Tactics** Product backlog, epics, user stories, the details required to develop a sucstory maps, scenarios, interaction and cessful product. May lead to strategy workflow diagrams, design sketches, changes. mock-ups, architecture model.

TABLE 1: Vision, Strategy, and Tactics

Let the Business Strategy Guide the Product Strategy

A product is a means to an end. By benefiting its customers and users, it should create value for your company. It is therefore important that your product strategy supports the overall business strategy. A business strategy describes how your company wants to achieve its overall objectives. It determines, for instance, which new innovation initiatives your company invests in, which markets you target, which role organic growth and acquisitions play, and how your company sets itself apart from the competition. Take Apple and Samsung, two companies that have employed different business strategies in the same marketplace. At the time of writing, Apple releases a few high-end and highly priced products while Samsung focuses on capturing market share with a wide range of offerings. Some companies refer to their business strategy as the company mission. When I worked at Intel in the late 1990s, the company mission was to "be the preeminent building block supplier to the worldwide Internet economy."

³ Intel's mission statement of the year 2000.

To ensure that your product helps the company move in the right direction and that your strategy receives the necessary support from management and stakeholders, the business strategy has to direct the product strategy, as Figure 5 shows. Similarly, your overall company vision should influence the vision of your product.

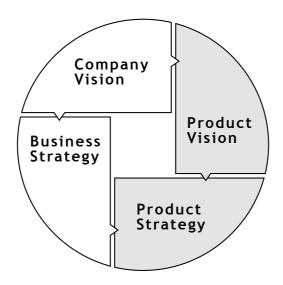


FIGURE 5: Business and Product Strategy

To put it a different way, the product vision should be in line with the overall company vision, and the product strategy should help implement the business strategy. If your business does not have an overall strategy, or if you are unaware of what it is, then delay formulating a product strategy until a business strategy becomes available—unless you work for a start-up, in which case your business and product strategy are likely to be identical.

Be Clear on Your Innovation Strategy

Products are value-creating vehicles. In order to generate value, a product has to offer something new; it has to innovate to a greater or lesser extent. Innovations range from small incremental steps, such as improving the user experience for an existing product, to big and bold ones—think of the original iPhone, the Nintendo Wii, or the Uber taxi service. It's im-

portant to understand which innovation strategy your product executes and which innovation type it represents, as this will shape the product strategy. A helpful way to classify innovations is the Innovation Ambition Matrix developed by Bansi Nagji and Geoff Tuff and shown in Figure 6.⁴

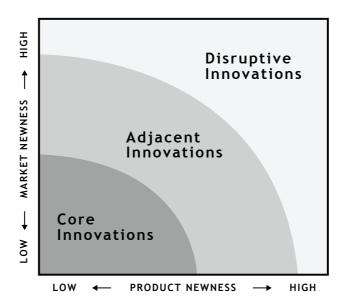


FIGURE 6: The Innovation Ambition Matrix

The matrix in Figure 6 considers the newness of the product on the horizontal axis and the newness of the market on the vertical axis. This allows us to distinguish three different innovation types: core, adjacent, and disruptive.⁵

⁴ Note that I use the term *disruptive* instead of *transformational*, which Nagji and Tuff (2012) employed. Some people use *incremental* instead of *core*, *evolutionary* for *adjacent*, and *revolutionary* or *breakthrough* for *disruptive*.

The Innovation Ambition Matrix is based on the Ansoff matrix, which explores the relationship between the product and the market; it distinguishes an existing product from a new product and an existing market from a new one. This gives rise to four growth strategies: market penetration, product development, market development, and diversification. *Market penetration* means incrementally enhancing an existing product to increase its market share. *Product development* involves creating a new product for an existing market—a market you already serve. *Market development* refers to entering a market that's new to your company with an existing product. *Diversification* implies developing a new product for a new market (Ansoff, 1957).

Core Innovations

Core innovations optimize existing products for established markets; they draw on the skills and assets your company already has in place, and they make incremental changes to current products. These initiatives are core to your business, as they generate today's revenues. Most of your company's products are likely to belong to this category (unless you work for a start-up). Examples of core innovations include Microsoft's Windows operating system and the Office suite. Both are major revenue sources for the company. The longer-term growth potential of core products is low, and so is the amount of risk and uncertainty present. Your ability to create a reliable financial forecast or business case is high due to your in-depth knowledge of the market and the product. Because core products leverage existing assets, a conservative attitude is appropriate. You should aim to protect the product, focus on operational excellence, avoid mistakes, optimize the existing business model, and use proven technologies—unless you decide to make a bigger change to your product, such as taking it to a new market, which would turn it into an adjacent innovation.

Adjacent Innovations

Adjacent innovations involve leveraging something your company does well into a new space—for example, taking an existing product to a market that's new to the company or creating a new product for an existing market. Examples of the former include Microsoft entering the server market with Windows NT in 1993 and Facebook moving into the online payment space with its Messenger application. Examples of the latter include the Apple TV and Google's Chrome browser. Both companies entered an existing market (TV set-top boxes and web browsers, respectively) with a new product. Adjacent innovations allow you to open up new revenue sources, but they require fresh insights

Facebook added a "send money" feature to its Messenger product in March 2015. For more information, see http://newsroom.fb.com/news/2015/03/send-money-to-friends-in-messenger/

into customer needs, demand trends, market structure, competitive dynamics, technologies, and other market variables. You may also have to acquire new skills, use new technologies, and adapt an existing business model. The amount of risk and uncertainty present is therefore considerably higher than in core innovations. It consequently requires more time to develop a valid product strategy, and it becomes difficult to create a reliable financial forecast. To succeed with adjacent innovation, you should adopt an inquisitive attitude, be willing to take informed risks, and have the ability to make mistakes and fail. You will benefit from having a dedicated, collocated product team that is loosely coupled to the rest of the organization and that applies agile and lean product development practices.

Disruptive Innovations

Core and adjacent innovations provide you with the benefit of leveraging existing skills and assets, both intellectual and material. This makes the challenge of innovating successfully manageable.7 Unfortunately, such innovations also share a significant disadvantage: they address an existing market, and their growth prospects are limited by your ability to grow the market and capture more market share that is, to attract more customers and users. In order to experience higher long-term growth, your company should invest in disruptive innovations. Apple, for instance, disrupted the mobile-phone market with the iPhone by offering a product with superior usability, as well as better design and better mobile Internet; Nintendo disrupted the games-console market with its Wii, which could be used without a traditional control or keyboard and was offered at a lower price; Amazon disrupted the retail book market with its online platform, making it easier and more convenient for consumers to shop, and offering greater choice and lower prices. While disruptive products often use disruptive technologies—for example, the touch screen in the case

⁷ C. M. Christensen (1997) refers to core and adjacent innovations as *sustaining*, as they address established markets and build on existing assets.

of the iPhone, and the Internet in the case of Amazon—a disruptive technology does not necessarily create a disruptive innovation. Instead, a disruptive innovation typically solves a customer problem in a better, more convenient, or cheaper way than existing alternatives. A disruptive product also creates a new market by addressing nonconsumption: it attracts people who did not take advantage of similar products. But as the disruptive product matures, it makes inroads into an established market, reconstructs market boundaries, and disrupts the market. Take the iPhone as an example. The incumbents, including Nokia and BlackBerry, did not perceive the original iPhone to be a threat; its business features, such as e-mail integration, were too weak. But as the iPhone improved and offered an increasing range of business and productivity apps, more and more people began to use the product, and the market share of Nokia and BlackBerry phones started to decline. The first iPhone also removed the traditional distinction between business and consumer segments, thereby changing the market boundaries.

While disruptive innovations are crucial for enabling future growth and securing the long-term prosperity of your business, most established companies struggle to leverage such innovations effectively. To achieve disruption and to do different things, a company has to do things differently and therefore disrupt itself—at least to a certain extent. It has to discontinue some of the practices that have helped it succeed in its established markets, acquire new skills, find new business models, and often embrace—and in some cases develop—new technologies, such as the touch screen for the iPhone and the motion controller for the Wii. The effort to create a valid product strategy is significantly higher than for adjacent innovations; it may take you several months to find a product that is beneficial, technically feasible, and economically viable.

Succeeding with disruptive innovations requires an entrepreneurial mind-set and the ability to experiment, to make mistakes, and to fail. You will benefit from using an *incubator*: a new, temporary business unit that provides the necessary autonomy to think outside the box, break with traditions, and to iterate and fail quickly. Having a small, collocated team with full-time members is a must, as is employing agile and lean product development practices. Be aware that creating a reliable financial forecast is impossible for disruptive innovations. Requiring a solid business case can prevent you from creating disruptive products. It's often better to use the risk of inaction—the danger of not investing in a disruptive product and therefore losing out on future revenue and profits.⁸

Summary

Table 2 summarizes the three innovation types; it shows that you should adopt different practices and manage products differently depending on their innovation types.

Note that over time, successful disruptive and adjacent products turn into core ones. A good example is the iPhone. While the first version was a disruptive innovation, it has become a major revenue source for Apple. But you can also move a core product into the adjacent space by taking it to a new market. Think of the iPhone 5C, which was aimed at a younger audience and emergent markets. The bottom line is: to grow organically, companies have to continually look for new growth opportunities and invest in adjacent and disruptive products—the products that generate tomorrow's cash.

⁸ Nagji and Tuff (2012) recommend that companies should invest at least 10 percent in disruptive innovations.

TABLE 2: The Three Innovation Types and Their Impact

Areas	Core Innovation	Adjacent Innovation	Disruptive Innovation
Product	Optimize an existing product for an established market.	Create a new product for an existing market, or take an existing product to a market that's new to the company.	Create both a new
Growth Potential and Risk	Low	Medium	High
Attitude	Conservative—protect existing assets, focus on operational excellence; avoid mistakes; optimize existing business models.	Inquisitive—take informed risks; look for new growth opportunities while leveraging existing skills, assets, and business models.	Entrepreneurial—create new assets, develop new skills, and find a valid business model. Mistakes and failure are unavoidable.
Organization	Business as usual; matrix organization.	Dedicated, collocated product team that is loosely coupled to the rest of the organization.	Incubator with a small, full-time product team that is autonomous and collocated.
Technologies	Proven technologies; changes usually result in incremental improvements.	be necessary to gain a	New, disruptive technologies are likely to be required.
Research and Validation Effort	Low (hours to days)	Medium (weeks)	High (months)
Reliable Financial Forecast	Possible	Difficult to create	Impossible to create

Take Advantage of the Product Life Cycle Model

The purpose of the product strategy is to maximize the chances of achieving product success: to ensure that your product grows and prospers. A helpful model to understand how products develop over time is the product life cycle. The idea behind the life cycle model is simple. Like a living being, a product is born or launched; it then develops, grows, and matures. At some point it declines, and eventually the product dies and is taken off the market, as Figure 7 shows.⁹

⁹ Theodore Levitt (1965) first described the product life cycle model in his article "Exploit the Product Life Cycle." You can find a comprehensive discussion of the product life cycle in Baker and Hart (2007).

The product life cycle model in Figure 7 presents five stages: development, introduction, growth, maturity, and decline. I have also added three important events in the life of a product: launch, when the product first becomes available; achieving product-market fit (PMF), when your product is ready to serve the mainstream market; and end of life, when you decide to discontinue your product. Of the five stages, growth and maturity are the most attractive ones, as they provide you with the biggest business benefits. For revenue-generating products, your product should become profitable around PMF, and it should offer the highest profit margin in maturity. You should therefore aim to get your product into the growth stage quickly, and to keep it there for as long as you can.

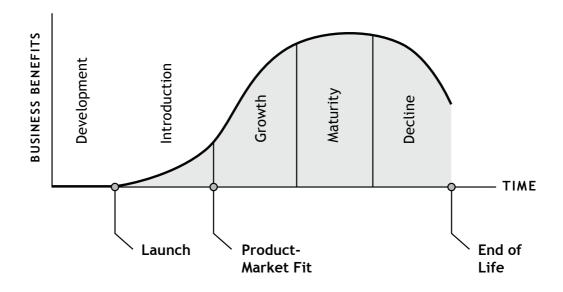


FIGURE 7: The Product Life Cycle Model

While the curve in Figure 7 is roughly bell-shaped, your product's actual trajectory may differ significantly: it may be steeper or flatter. This demonstrates that the life cycle model is not a predictive tool that forecasts the business benefits your product will generate. Instead, it is a sense-making model that helps you reflect on how your product is doing so you can make the right strategic decisions. In order to leverage the product life cycle model, you have to define the business benefits your product delivers and then track them over time. For revenue-generating products, for example, revenue is commonly used, but if your

product exists to sell another product or service, then the number of active users might be the appropriate metric to track.

As an example let's take a look at a sample product life cycle curve. Figure 8 illustrates the life cycle of the iPod family by showing iPod sales per year.

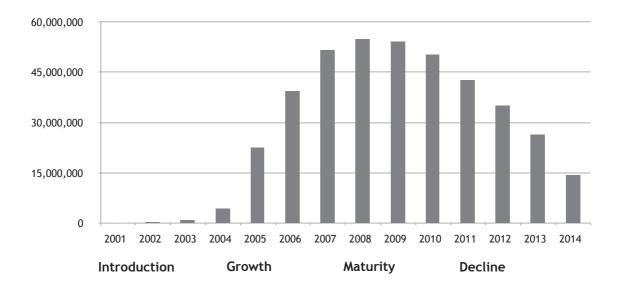


FIGURE 8: The Life Cycle of the iPod Family¹⁰

As Figure 8 shows, the iPod was launched in 2001 as Apple's first consumer music gadget. The company was a new entrant in the digital-music-player market, which at the time was dominated by products like the Nomad Jukebox from Creative Labs. In 2002, the iPod became Windows-compatible, and sales subsequently reached 600,000 units. In the following year, Apple launched iTunes, which helped sell more than 900,000 units in 2003 and nearly 4.5 million in 2004. The iPod had entered the growth stage and become the dominant digital-music player in the United States. To sustain growth, Apple enhanced the product and added new features, for instance, the ability to show photos and videos. The company also introduced new product variants,

¹⁰ The sources for the data shown in the graph include

[•] https://commons.wikimedia.org/wiki/File%3AIpod_sales_per_quarter.svg

[•] statista.com/statistics/276307/global-apple-ipod-sales-since-fiscal-year-2006/

[•] apple.com/pr/products/ipodhistory/.

such as the iPod Nano and iPod shuffle in 2005 and the iPod Touch in 2007. Additionally, Apple issued a number of limited iPod editions, including a black-and-red U2 special edition. Sales of the iPod reached their peak in 2008, which also marked the product's maturity stage. In 2009, iPod sales started to decline. As a consequence, Apple discontinued the original iPod, now called the iPod Classic, in 2014.

Development

Let's now look at the individual life cycle stages and how they influence the product strategy. Before the launch your primary goal is to find a valid product strategy—a strategy that results in a product that is beneficial, feasible, and economically viable.¹¹ In this period you are likely to carry out some research and validation work, and you may have to pivot—that is, to significantly change your strategy and choose a different path for attaining your vision. Take, for example, the idea mentioned earlier of creating a healthy-eating app. If it turns out that building an app is not a valid approach, I could pivot and choose to write a book on healthy eating instead.

Don't make the mistake of trying to launch the perfect product. No product is impeccable from day one. Even iconic products like the iPhone had a comparatively humble start. Think of all the things the very first iPhone could not do: no videos, no copy and paste, and no third-party apps—just to name just a few. The trick is therefore to launch a *good-enough* product, a product that does a good job of meeting the primary customer need, and to subsequently adapt and enhance it. How good your initial product has to be is closely linked with its innovation type. The initial version of a disruptive product can be comparatively basic, like the original iPhone. An adjacent product, however, faces higher customer expectations, as it addresses an established market where the customers have viable alternatives to choose from. Take the Google Chrome browser as an example. When the product was launched in 2008, the company entered an existing market with a

¹¹ Ries (2011) calls such a strategy a validated strategy.

number of established products, including Internet Explorer, Firefox, Opera, and Safari. In order to succeed, Google had to offer a product that was faster, more secure, and simpler to use than the competing browsers. The company also heavily advertised its product, for instance by using poster ads at train stations in London.

Introduction

After the launch your objective is to achieve PMF and to experience growth as quickly as possible. How long this is likely to take you and how much effort it will require, depends on your product's innovation type. Building an initial customer base and finding out if and how people use the product is particularly important for disruptive innovations. Take Twitter as an example. The company had to discover how people used the product to decide how to move it forward, as Twitter's cofounder Ev Williams explains: "With Twitter, it wasn't clear what it was... Twitter actually changed from what we thought it was in the beginning, which we described as status updates and a social utility. The insight we eventually came to was [that] Twitter was really more of an information network than it is a social network. That led to all kinds of design decisions, such as the inclusion of search and hash tags and the way retweets work" (Lapowsky 2013). Adjacent products, however, tend to require a shorter introduction stage, as they address an existing market and compete with established products. You can therefore usually learn about the customer and user needs and how best to address them during the research and validation work you do in the development stage.

With both disruptive and adjacent products, make sure you track the product performance and monitor how your product's business benefits develop. If they are flat or rise only slowly, then you should investigate why the uptake is poor. Consider changing your product, or even killing it. The former may entail enhancing or adding features, or it can require a more drastic change, such as pivoting or unbundling the product. Flickr, for example, changed from an online role-playing game to a photo-sharing website; YouTube evolved from a video-dating site to a video-sharing product (Love 2011). While killing your product

may sound rather drastic, it frees up resources and avoids investing time, money, and energy on a product that is not going to be successful. Take, for instance, Google Wave, a product that combined e-mail, instant messaging, and wikis. Due to its lack of success, Wave was discontinued at the introduction stage about a year after its launch in 2009. Remember that failure is part and parcel of the innovation process; there is no guarantee that your product will make it to the growth stage and become a success.

If you see a positive market response to your newly launched product, then don't make the mistake of overoptimizing your product for the early market. The initial customers and users of a new tech product are usually happy to put up with a few teething issues as long as they will gain an advantage from using it. To get into the mainstream market, you have to satisfy much higher expectations; you have to provide a product that works flawlessly and is easy to obtain, install, and update. As a consequence, the transition to the growth stage may not be a small, incremental step. Instead, your product may face a gap or chasm between the early and the mainstream market that you have to overcome (Moore 2006). Figure 9 shows the product life cycle with such a chasm between the introduction and the growth stage.

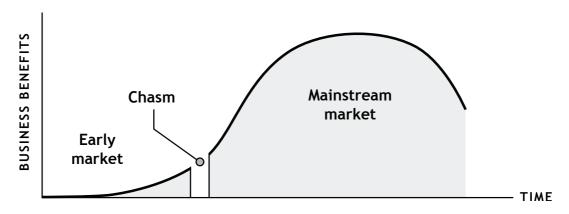


FIGURE 9: The Product Life Cycle with Chasm

Google has released most of Wave's source code to the Apache Software Foundation: https://en.wikipedia.org/wiki/Apache_Wave and http://incubator.apache.org/wave/about.html.

To bridge the chasm, you have to adapt and improve your product. This may include enhancing the user experience, adding or improving features, or refactoring the architecture to increase performance and stability.¹³ In addition, you may have to adjust the business model and revisit, for example, the cost of acquiring customers and the marketing and sales channels you use. The size of the chasm is influenced by your product's innovation type. While the initial version of a disruptive product can be simpler and more basic than an adjacent one, it tends to require more time and effort to achieve PMF and experience growth. An adjacent product usually faces a smaller gap between the introduction and the growth stage, as the initial expectations for the product are typically higher.

Growth

Once you start to experience significant growth, you have achieved PMF. You should now have a product that fits the market and does a good job of creating value for the mainstream customers and users and for your business.¹⁴ For a revenue-generating product, you should have reached the break-even point by now and should be benefiting from a positive cash flow. Your strategy now needs to focus on penetrating the market, sustaining the growth, and fending off competitors. Therefore, you have to find ways to attract more customers and users and clearly differentiate your product, since competitors may start to copy some of its features. At the same time, you have to manage the growth and deal with a product that serves an ever-growing audience, is becoming increasingly feature-rich, and requires more and more people to develop it. You may want to start unbundling your product and promote

An *architecture refactoring* is a larger refactoring exercise that addresses not only individual classes and methods, but also the overall structure of a software product. While class-level refactoring should be part of the normal development work, architecture refactoring often requires a dedicated effort, such as a whole sprint or even an entire release.

¹⁴ Downes and Nunes (2013) suggest that certain disruptions only have two customer groups: *trial users* and *the vast majority*. The former roughly correspond to the early market and the latter to the mainstream market.

features to products in their own right, or you could employ product variants. (I explain both techniques later in this part.)

Maturity, Life Cycle Extension, and Decline

As your product matures, growth will eventually start to stagnate. When this happens, you face an important strategic inflection point. One option is to accept your product's trajectory, let it continue to mature, and keep it at this stage for as long as possible by, for instance, defending its market share and reducing cost. Alternatively, you can move the product back into the growth stage thereby extending its life cycle, as Figure 10 shows.¹⁵

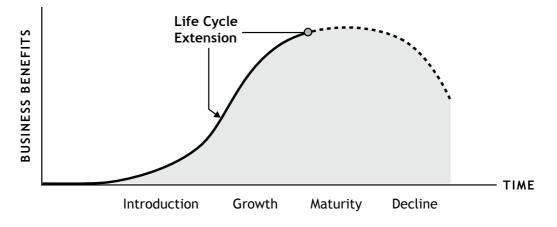


FIGURE 10: Extending the Product Life Cycle

A number of techniques can help you make an aging product attractive again including enhancing its capabilities and adding new features. Take the iPod Classic mentioned earlier. Apple made considerable changes to the product throughout its life cycle: it decreased its weight, extended the battery life, and added the ability to view photos and watch videos, to name just a few. Sometimes, though, the opposite strategy is more appropriate, and instead of adding you may want to remove features and declutter your product. Microsoft Word is another example. Microsoft has made significant efforts to simplify the application in recent years, thereby improving

¹⁵ Moon (2005) argues that the product life cycle does not have to be linear, and that rejuvenating the product can be a great option.

the user experience and making it easier for people to use the product. Another way to stimulate growth is to take your product to a new market or market segment, thereby turning it into an adjacent innovation. Apple, for example, introduced the iPhone 5C in 2013 to target a younger audience and emerging markets. Finally, you might consider bundling your product with other offerings to increase its attractiveness. For instance, mobile operators in the United Kingdom have started to offer free streaming subscriptions when customers purchase higher-priced contracts.

Despite your best efforts, your product will one day reach the decline stage. During this stage, you want to milk it for long as you can while minimizing the investment that goes into the product. As the profits it generates start dropping, you should consider discontinuing it—just as Apple did with the iPod Classic in 2014.

Summary

Table 3 summarizes how the life cycle stages shape the product strategy.

TABLE 3: The Product Life Cycle and the Product Strategy

Life Cycle Stage	Strategy	
Development	Develop a valid strategy: a strategy that results in a product that is beneficial, feasible, and economically viable.	
Introduction	Adapt and improve your product to achieve product-market fit (PMF). This may require incremental changes such as improving the customer experience, adding new features, and refactoring the architecture. But it may also make a more drastic change or pivot necessary. Aim to achieve the break-even point for a revenue-generating product by the end of this stage. Ensure that your business model is scalable.	
Growth	Sustain the growth by penetrating the market and fending off competitors. Keep your product attractive, and refine it. Manage the growth by unbundling your product or by creating variants, for instance. Ensure that your product is profitable (if it is meant to generate revenue).	
Maturity	As growth stagnates, extend the life cycle and revive growth by taking the product to a new market, for example, or bundling it with another product or service. Alternatively, milk your product by serving the late majority. Defend its market share and focus on profitability for revenue-generating products.	
Decline	Reduce cost to keep the product profitable for as long as possible, then start phasing it out.	

As Table 3 shows, the strategy for a new product should first help you get to launch, then to achieve PMF, and then to sustain the growth. Once the growth starts to stagnate, you have reached an important strategic inflection point: You either revitalize your product, for instance, by taking it to a new market, or you let it mature and eventually decline and die. As you have probably noticed, the strategic work does not end until you discontinue your product. You should therefore regularly assess your product's performance and adjust your strategy accordingly. Strategy and execution go hand in hand for digital products. They are two sides of the same coin.

Capture Your Strategy with the Product Vision Board

Even the best strategy is useless if you can't communicate it effectively. The Product Vision Board is a simple yet powerful tool that helps you with this. I have designed it to describe, communicate, test, correct, and refine the product strategy.

The Product Vision Board consists of the five sections shown in Figure 11. The top section captures the vision; the bottom four sections describe the product strategy.

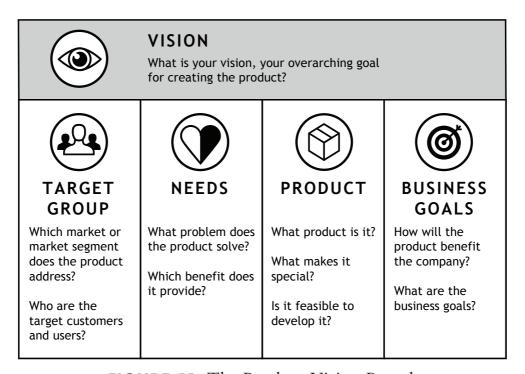


FIGURE 11: The Product Vision Board

The top section in Figure 11 is called Vision. It captures your overarching goal, which is expressed as a brief vision statement or slogan. The leftmost bottom section is called *Target Group*. It describes your market or market segment, the customers, and the users. The next section is called *Needs*, which states the value the product creates for your target group, the problem that the product solves, or the benefit it provides. The *Product* section captures the actual product; it explains what makes your product special and why it stands out. It also asks whether it is feasible for your organization to develop the product. The last section, titled Business Goals, captures the desired business benefits—the value the product should create for your company. Examples include opening up a new revenue source, achieving a profitability target, reducing cost, or being able to provide a service or sell another product. There is also an extended version of the Product Vision Board with additional sections to capture the business model, which I discuss below.

When you create your Product Vision Board, start with your vision, and then describe your strategy by filling in the bottom sections. You can use the Product Vision Board to describe the vision and strategy for a brand-new product or for an existing one. In the latter case, you may want to invite the stakeholders and ask them to create their personal Product Vision Boards. Then compare the results and see whether there is a shared vision and a shared product strategy; if not, determine where the main differences are and decide how to address them.

You can download the Product Vision Board template from my website, www.romanpichler.com, where you can also find more information about the tool. Alternatively, you may choose to re-create it using your favorite tool—be it an electronic spreadsheet or a white-board. A number of other tools are also available to capture the product strategy, of course, including the Lean Canvas (Maurya 2012) and the Business Model Canvas (Osterwalder and Pigneur 2010). Choose the one that works best for you.