КАБІНЕТ МІНІСТРІВ УКРАЇНИ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ І ПРИРОДОКОРИСТУВАННЯ УКРАЇНИ

ФАКУЛЬТЕТ АГРАРНОГО МЕНЕДЖМЕНТУ

Кафедра маркетингу та міжнародної торгівлі

ОПОРНИЙ КОНСПЕКТ ЛЕКЦІЙ

з дисципліни «Marketing Product Policy with the Commodity Science» для студентів денної форми навчання спеціальності 075 «Маркетинг» Укладач:

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DISCIPLINE DESCRIPTION

The basic objectives of this course are to provide student with a broad introduction to marketing concepts, help to understand the factors that influence marketing decisions, and focus attention on the vital role of marketing in today's global economy. The specific objectives for student learning under this broad goal are understand:

- How to choose and justify which products to build
- How to plan for their profitable creation and deployment
- How to develop and launch them
- How to manage them once they enter the market
- How and when to gracefully retire them and replace them with new products
- How to use product portfolio management techniques to efficiently allocate investments across all of the products in an organization.

Student Learning Outcomes Upon completion of this course, students will be able to:

- 1. Use a vocabulary of marketing terms correctly.
- 2. Demonstrate the ability to critically evaluate a marketing program from consumer and marketing practitioner viewpoints, including consideration of ethical implications.
- 3. Communicate clearly, in an organized fashion, the concepts of marketing in both oral and written work.
- 4. Demonstrate an understanding of how marketing fits with the other business disciplines within an organization.

PROGRAM AND STRUCTURE OF THE DISCIPLINE: COURSE STRUCTURE

	KSE S	TRUC	IUKŁ	TT				
. .	Hours							
Topics	weeks	total	including					
			lectures		lab	indiv	indep	
1	2	3	4	5	6	7	8	
	S	emester	I					
Module 1 FOUNDATIONAL	ELEM	ENTS F	OR PRO	DDUCT	MANA	GEMEN	T	
Theme 1. What Is Product	1	7	2	2			3	
Management?	1	,	2	-			3	
Theme 2. The Product Master Plan	2	7	2	2			3	
Theme 3. Leadership: Creating	3	8	2	2			4	
Influence	3	O	2	L			7	
Theme 4. Cross-Functional Product	4	Q	3	3			2	
Teams: Getting Things Done	4	8	3	3			2	
Theme 5. Decision Making	5	7	2	2			3	
Theme 6. Finance for the Product	(0	4	4			0	
Manager: Keeping Score	6	8	4	4			0	
Total for module 1		45	15	15			15	
Module 2 MAKING T	HE MA	ARKET	YOUR P	PRIMAI	RY FOO	CUS		
Theme 7. The Playing Field and the								
Players: Analyzing the Industry and	7-8	11	4	4			3	
Competition								
Theme 8. Finding Markets to								
Conquer by Understanding	0.10	12	4				4	
Customer Needs and Market	9-10	12	4	4			4	
Segments								
Theme 9. Preparing to Set Your								
Mileposts: Forecasting for the	11-12	11	4	4			3	
Product Manager								
Theme 10. Strategic Product	12.14	-14 11	3	3				
Planning: The Inflection Point	13-14						5	
Total for module2		45	15	15			15	
Total for the Semester I		90	30	30			30	

	5	Semes	ter II		
Module 3 THE START OF PRODUC				S JOURNEY T PROCES	
Theme 11. The Concept Phase	1	6	2	2	6
Theme 12. Assessing Feasibility	2	6	2	2	6
Theme 13. Defining the Product	3	7	2	2	3
Theme 14. The Business Case	4	7	3	3	1
Theme 15. The Marketing Plan for the Product	5	6	2	2	2
Theme 16. Execution and Oversight during Product Development	6	7	2	2	3
Theme 17. Introducing the Product and Orchestrating the Launch	7	6	2	2	2
Total for module 3	45		15	15	15
POST-LAU				E JOURNE IANAGEMI	
Theme 18. Auditing Results after the Launch	7-8	11	4	4	3
Theme 19. Post-Launch Product Management: Running the Business	9-10	12	4	4	4
Theme 20. Life Cycle Product Portfolio Management	11-12	11	4	4	3
Theme 21. Discontinuing the Product	13-14	11	3	3	5
Total for module 4	45		15	15	15
Total for the semester II	90		30	30	30
Total for the course	180		60	60	60

MODULE 1 FOUNDATIONAL ELEMENTS FOR PRODUCT MANAGEMENT

Theme 1. WHAT IS PRODUCT MANAGEMENT?

- 1. What is a product?
- 2. What Is Management?
- 3. What Is Product Management?
- **4. How Does Product Management Transform a Product?**

Product Management is the pivot point of successful business. However, the job and its associated responsibilities are poorly understood and inconsistently applied. Before offering a remedy for this situation, it's appropriate to explain precisely what I mean by "Product Management."

Four questions must be answered to completely define Product Management:

- 1. What is a product?
- 2. What is management?
- 3. What is Product Management?
- 4. How does Product Management transform a product?

Products are bundles of attributes (features, functions, benefits, and uses) and can either be tangible, as in the case of physical goods; intangible as in the case of those associated with service benefits; or can be a combination of the two." Webster's online dictionary indicates, "A product is something that is produced."

These definitions don't lend themselves well to this discussion. A product is not always just a single product; there is usually a hierarchy of products and services within a firm. A product may be part of other products or product lines, packaged with a group of products, or included in a product portfolio.

Alternatively, products can be broken down into product elements, modules, or terms (as in a credit card). Products may be built upon product platforms or product architectures. In order to visualize this hierarchy, consider the model shown in Figure 1.1.

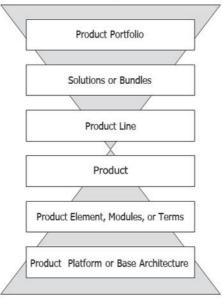


Figure 1.1. - Typical Hierarchy of Products or Services The first order of business, then, is a workable definition of

a product. A product is anything that is sold, tangible or intangible. Products are created by businesses to sell to other businesses (business-to-business, or B2B) or to consumers (business-to-consumer, or B2C). They can even be created by businesses that sell to other businesses, which ultimately sell to consumers (business-to-business-to-consumer, or B2B2C). Some

products are merely resold to end customers, and some are sold as parts of other products.

Think of how an automobile parts manufacturer sells parts to an automobile company. The auto company is actually an assembly business—in most cases, they don't even manufacture any of the parts. Auto companies sell to dealers (other businesses) who ultimately sell to consumers or other businesses.

Product Lines

Frequently, companies collect a number of related products into *product lines*. Very few companies carry isolated, one-off products. A product line, depicted in Figure 1.2, is a grouping of products focused on similar markets, or on solving a particular type of problem. Typically, products within a line serve similar markets or can be produced via similar methods.

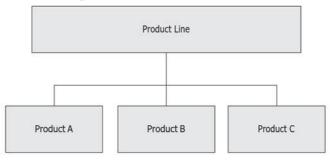


Figure 1.2 - Product Line Hierarchy

A product line, in effect, is a small product portfolio. For example, BMW Group has several different automobile product lines: The Mini brand, the Rolls-Royce brand, and the BMW automobile brand. The BMW Automobile Division has several cars in its product line. These product lines are depicted in Figure 1.3.

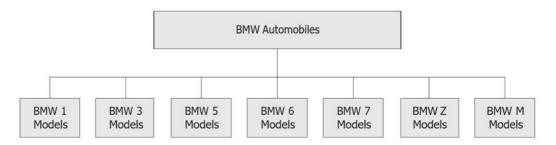


Figure 1.3. - BMW Automobile Product Lines

In some companies, especially larger organizations, several product lines may be grouped into a related collection called a product portfolio. The common attribute of a given portfolio might be the markets on which the products focus, the type of product, or even the specific source or manufacturing method used. A market example might be a medical device company that groups three product lines—hearing aids, reading glasses, and motorized wheelchairs—into a "seniors" portfolio. An example by type of product would be a toy manufacturer with a cycle portfolio, consisting of three product lines: tricycles, mountain bikes, and BMX bikes. Similarly, a cookware company might divide its portfolios by type of metal, having a cast-iron product portfolio, an aluminum portfolio, and so forth.

The choice of organizing principle for a product portfolio will vary widely from company to company. In rare instances, one product line may be assigned to two different portfolios at the same time. For example, a major computer equipment vendor has a secure server product that sits both in the security portfolio and the multiprocessing computing portfolio. Ideally, this would not be the case, but in some instances, this kind of dual assignment might make sense.

A product portfolio, then, is the set of all products or product lines, or other groupings (within a business unit or business division). Portfolios can be mixtures of existing products, which may be at various phases of their own life cycles, as well as incoming products (those anticipated, actually in development, or in the launch phases). In smaller organizations, your product or product line may in fact represent the entire portfolio. A visual example of this type of product portfolio is

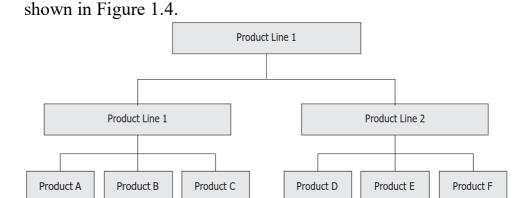


Figure 1.4. - Product Portfolio Structure

Management is Product model for business a organization. This model includes strategizing, conceiving, developing, introducing, managing, and marketing products. In essence, Product Management alters the genetics of the organization up and down, as well as across business functions. Such firms generally focus on the market first, and then concentrate on either the generalized needs of broad market segments or the explicit needs of target customer types. This kind of outside-in view of the marketplace will enhance the probability of producing better business results across the portfolio. Implicit in this view is the fact that the business benefits when products are treated like investments in a portfolio of businesses (products), allowing for a more granular approach to strategic and tactical product planning. With this approach, the products become the building blocks of the organization.

If Product Management is genetic, it influences all supporting structures—all business functions. Think of the human body: Product Management is in the genetic material; it's in the skeleton; it's in the circulatory system, the neural network, and of course, the command and control center (the brain). All actions of the body work together, holistically, toward a single goal: homeostasis, or balance. Therefore, everyone in the organization is in Product Management, in some way or another, and everyone needs to understand the roles, responsibilities, commitment, and deliverables that make the business (body) work properly.

In order to gain a comprehensive understanding of this definition, however, it's necessary to illustrate the way that Product Management transforms "good ideas" into successful products. The simplest way to achieve this is to use the Product Management Life Cycle Model, shown in Figure 1.8, and the three Areas of Work that bring products from idea to final sale. These three Areas of Work are New Product Planning, New Product Introduction, and Post-Launch Product Management (PLPM).

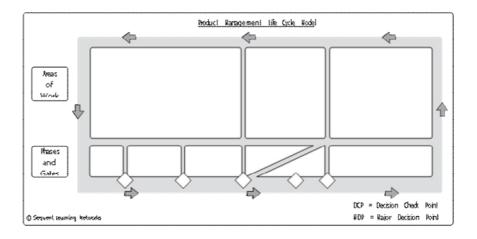


Figure 1.8 The Product Life Cycle Defines Three Areas of Work

There are times when certain actions or pieces become more important; times when other parts are dynamic; and even times when one or more elements of the product environment must absolutely be static and stable. The product manager simultaneously manages each of these pieces separately, yet also manages all of these pieces together, holistically, in harmony. And that is the ultimate definition of Product Management.

Theme 2 - THE PRODUCT MASTER PLAN

- 1. The purpose of a master plan
- 2. The Format of the Product Master Plan
- 3. The Value of a Product Master Plan
- 4. An Insurance Policy for Consistent Communication
- 5. The Basic Construction of the Product Master Plan
- 6. Major Documents Included in the Product Master Plan

When a state, municipal government, university, or other institution wants to establish a plan for facilities, human resources, equipment, thoroughfares, housing, or other elements of its infrastructure, "crisis mode" planning really cannot hold up. A grand vision for a new com- munity center, a major park, or a larger police force will not make it happen. What is needed is a complete strategy that covers near-term tactical plans plus longterm plans that often stretch decades into the future. Regardless of how well the strategy is conceived, every well-run municipality has a rigorous system or method to capture these plans and documents. This document repository and its archives serve as a plan of record for current and future activities. This collection of plans and information for a municipality, government, or institution is called the Master Plan. For the product manager, it is called the Product Master Plan. The content of the Product Master Plan serves as a mirror into the past, a bookmark for the product as it is currently situated, and as a roadmap to the future.

Many government development programs have a life span far beyond a single individual or administration, but the strategies may change with each election. So how do these projects and programs ever get completed? Obviously, long-range programs get completed because the previous administration not only did its homework, but also captured that homework in some binders for the next officials to inherit. That binder or set of binders with their contents is what makes up their Master Plan.

At the end of an implementation cycle (which could be a fiscal year), the Master Plan is updated, filed, and archived—not thrown away. It needs to be available so that future generations of employees, residents, students, or historians, or anyone for that matter, can look back to see how the organization, institution, or municipality evolved over time. They can use it as a learning mechanism or as a way to com- municate. They may even come

back to it to implement some phases or activities that were never completed, due to budget limitations, turnover, or unexpected changes in priorities.

The Product Master Plan is not a long deck of presentation slides. Most of the time, companies cannot produce these plans, or the documents they do produce are incomplete. Instead, we typically receive an incoherent, hundred-plus-page PowerPoint deck with six or seven totally incongruous slides from each department, all written in 9-point type with unlabeled, amorphous spaghetti diagrams titled "best in class" and "number one provider of ...".

There are no back-up data. The only consistently applied standard follows the current corporate presentation format standards. With the use of a slide deck, people usually fail to adequately track changes to rapidly evolving documents, nor do they create back-ups. When they leave their jobs, they clean out their files, clear off the shelves, return their laptops, and go on to their next assignment or another company. Every-thing they learned and any documentation they may have created all goes away with the person. A new person comes into the job, into a new cubicle or office, with little or nothing on the shelf and the unhappy prospect of spending six months or more just figuring out where things stand. A slide deck cannot really help the new product manager get up and running.

A product manager in a large pharmaceutical company once expressed the following (paraphrased) lament:

The Product Master Plan represents the right "must-have" platform to establish plans of record for a product organization and the cross-functional team driving product success.

An appropriate amount of documentation for the planning, development, and management of a product or product line is

critical to the product team's success. Notice the word appropriate. It is important because it helps to capture the product goals; helps establish or clarify roles and responsibilities; and serves as an archive for the product across the life cycle. A Product Master Plan is the perfect holding document— the meta-archive or master control plan for any product.

Without arguing whether information technology and document management systems are more effective (it depends on how you use them), it is simply too easy to make a few quick, spur-of-the-moment modifications to an electronic plan, forget to change the version number, or leave someone off the e-mail distribution list, and then end up with an absolute disaster because of a simple but poorly socialized change. A physical binder, with printed pages, is strongly recommended. The product manager should control it strictly as the definitive plan repository.

In addition, some of the key benefits of a Product Master Plan are as follows:

- It's the perfect communication platform among cross-functional product team members, because it serves as a standard way to capture their commitments, both to the team and to each other.
- It is a mechanism that enables effective decision making within the context of the Product Management Life Cycle Model, not just during the phases of New Product Planning.
- It is the ideal archive for major product-related documents, like strategies, Business Cases, Marketing Plans, financial documents, project plans, and so on.
- It is valuable in making sure that product strategies are consistently reviewed and reconsidered as product plans and opportunities evolve.

- It can be constantly updated so that any team member can quickly sort out the current state of the product, which is especially useful for existing products.
- It is a learning mechanism for new team members, or even a new product manager when your stellar results earn you a promotion.
- It is an ideal starting point when creating a brand new product.
- It is a great continuity tool. There is such a thing as accumulated wisdom that shouldn't be ignored. Families and tribes have practices, rules, and traditions that carry over from generation to generation, sometimes for centuries. Cultures have memes, and societies have laws, myths, legends, and other superstitions. All of these, however silly or apocryphal they may seem in the moment, transmit at least a little wisdom and a lot of continuity.

With enough care, the Product Master Plan can act as this "tribal knowledge" from one "generation" of products and product managers to the next.

It clarifies roles and responsibilities of all product team members across the entire product life cycle.

The value of the Product Master Plan cannot be overemphasized. The Product Master Plan can be, and should be, the nucleus of every-thing related to the product. It is so fundamental to capturing the work efforts of a product team that it usually serves as the actual glue of the cross-functional product team.

Document confusion is one of the key sources of inefficiency in organizations. While the documents mentioned in this book are named generically, each organization should create and maintain a consistent document vocabulary. Each company or industry may have a standard nomenclature for some of these

documents. Most of the documents held within the Product Master Plan are representative of the plans and activities being carried out by product managers or other cross-functional team members. There are some standard document names, including Business Case, Product Strategy, and Marketing Plan. Other documents may have a dozen variations. To achieve the goal of having a common set of documents you need to use each document's name consistently, making absolutely sure it is described adequately so that anyone can understand it.

A few documents bear special mention because they influence the job of Product Management so heavily:

- Strategic Plans. It is important to have a place to hold the strategic plans for the product within the Product Master Plan binder. Effective Product Management considers the importance of strategy for steering products even during turbulent market activity.
- Business Cases. All product investments don't just happen because someone comes up with a good idea. Many ideas emerge across the product's life. The Business Case serves as the document used to clarify and justify investments for new products, product enhancements, and new market expansion.
- Marketing Plans created for the product. There are myriad types of Marketing Plans. Some are done at the corporate level, some at the divisional level, and some at the product line level.
- Functional Support Plans. FSPs represent the commitments by each business function to the cross-functional product team. They also serve as a primary mechanism for communicating among functional organizations and the product team.
- Marketing FSP: The Marketing FSP represents the plan for inbound market data gathering and the support for

outbound marketing plans and programs for the product or products in the Product Master Plan. People in Marketing also provide descriptions of integrated marketing communication activities, sales kits, training, and other helpful material to the Sales team.

- Product Development FSP: This plan contains information that may be needed about technologies, platforms, designs, and specifications, so that the product can be produced or developed. Groups called IT, R&D, or Engineering typically provide this information.
- Finance FSP: The Finance FSP contains the commitments from the Finance department to the team. He or she typically works with product team members to consolidate the financial data. The data are based on product and market assumptions that ultimately appear in forecasts contained in Business Cases and budgets, and these ultimately make their way into financial statements. Those financial documents will ultimately track how well the product is performing versus the established plans.
- Sales FSP: The Sales FSP may be a collaborative effort between the product manager, the marketing manager, and the representative from the sales function. Product managers and marketers usually work together to create assumptions about market size, segments, targets, and other market and competitive challenges which is communicated to Sales.
- Supply Chain FSP: The supply chain activities usually include issues related to sourcing, inventory management, and logistics. In order for this function to adequately support the product team, they should have a solid understanding of the product(s) currently being planned or already in the marketplace.
- Customer service FSP: The customer service department provides support for responding to service requests or

complaints from customers, case management, and repair and return activities.

- Legal and regulatory FSP: There are important legal issues and regulatory issues for some industries that span the spectrum from product safety, packaging, labeling, marketing communications, and even corporate governance. This is important for domestic and international business.
- Operations FSP: How does a business support its entire infra- structure? From ordering, billing, fulfillment, marketing, selling, IT, human resources, and intellectual property management, there should be an overarching plan for how any product or service is supported by typical day-to-day business operations.
- Customer documentation: The documents that customers or trainers may need for operating, installing, administering, maintaining or using a product may include instruction manuals, online help guides, maintenance manuals, operations manuals, and the like.

Theme 3- LEADERSHIP: CREATING INFLUENCE

- 1. Leadership as a critical skill for product managers
- 2. Transformation
- 3. The Most Important Values
- 4. Leadership behaviors and mindset
- 5. Additional skills and subject matter expertise
- 6. Experiential development
- 7. Improving skills and experiences

There are many leadership concepts to be considered. There are those who distinguish leadership (as an act of influence or inspiration) from management (as an act of authority or direction). There are those who associate leadership with force of personality

and charisma, and alternatively, those who agree with Emerson's lament on leadership and identity .!

Every product manager should spend a fair amount of time studying and thinking about leadership. Most business curricula offer courses on motivation, leadership, and management. There are running debates on management versus leadership. This topic encompasses broad study, as demonstrated by the plethora of articles, books, and schools of thought on leadership. However, the assertions of academics, pundits, oracles, and advisors cannot trump reality, and should not discourage further reading, or inhibit career advancement.

The fundamental answer is pretty straightforward: leadership is an acquired skill. It's not a delegated power, an innate ability, or some black art that can be achieved by trial-and-error checklists. In short, job assignment doesn't imply leadership. Even some innate or "born" leaders (charismatic leaders) may inspire and influence, but unless they really understand how they're getting those results, they may falter or collapse at precisely the wrong moment. The person who knows that most elements of leadership are learnable (and who takes the time to learn them) will be able to thoughtfully address situations that many so-called natural leaders cannot handle.

Usually after a couple of tries, here's what they tend to learn:

- Stay calm (even if your insides are jumping around).
- Process the "people signals."
- Calmly determine what's really going on.
- Evaluate what has to be done or what can be done.
- Make a decision and act.
- Calm everyone else down.

When you're seen as the person who's seemingly doing the processing, considering the options, and making the decision, and

others see you're unfazed, they'll take the signals from you and feel like things are under control (even if you feel you just took air time on a roller coaster).

No matter where you stand within the leadership spectrum, find the will to learn and grow. For those who aren't naturals (many are not), product managers and their bosses need to find an experiential roadmap that will enrich their ability to lead and influence. Leading requires an alteration in the way information from different sources is processed and acted on, which is part of the transformation.

Leading also has many faces. Your face to the company differs from your face to the community or your face to your family. You are in control of a vehicle (you) with many different dials or gauges that allow you to throttle forward or backward, depending on the situations in the past and those in the future.

To discern how to transform yourself, no matter your location in the leadership continuum, you need a good map. A very useful leadership map is shown in Figure 4.2. It contains elements from a variety of sources, items that are worthwhile to consider and to discuss in detail. These items may be helpful in creating a personal strategy for your own transformational leadership journey.

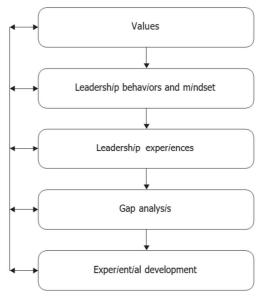


Figure 4.2 - Leadership Transformation Map

Values are an important element of your personal mission, your product's mission, and the mission of the organization within which you work. Everyone lives with an individual set of values. All companies operate with their own unique values. In short, values guide much of what you or companies do. Therefore, it is important to learn and understand the values and principles that form the fabric of the organization's mission and to integrate those values into what you do, how you act, and the face put forward to your team, your managers, and your customers.

Listed below are values that are vital to consider and develop— values that will inspire people to bind themselves to you:

■ Employ integrity in everything you do. This is a core value that means you adhere to ethical codes of business and personal conduct. Integrity earns respect from others through consistency, reliability, and honesty. Integrity leads to trust.

- Engender trust. Trust is important because it is easier to influence others when people have faith that you will do the right thing and are consistently sincere.
- Stand for something important. People will identify with you if they know what you represent and that you stand for something meaningful.
- Meet your commitments. Meeting commitments to people with whom you work and to your customers means you will always be considered responsible and trusted and you will be perceived as possessing integrity
- Help others. How you help others is important. Your willingness to help them learn more or work through problems will help them grow and optimize their capabilities. If you set an example and act as a role model or mentor you engender greater performance from others. This also sets the stage for greater levels of trust, which builds closer working, and possibly, personal relationships.
- Include others. When you include others in your vision for the product, in strategizing, in planning for the future, in leading the team, and in decision making, people are more likely to commit to your vision and work harmoniously with you to achieve it.

A number of internalized behaviors are common to more effective leaders. Learning and development of these leadership dimensions may be difficult, but with proper awareness and coaching, these behaviors can evolve. If you don't have all of these now, don't worry; there isn't a hard and fast rule for how and when you acquire them. However, by considering these, and understanding what they can mean to you and to your organization, you have a chance to continue on your evolutionary path.

Here is a list of these leadership characteristics that are important for product managers:

- 1. Continuous learning. Each and every experience you have as a product manager contributes to your repertoire of personal and professional resources.
- 2. Strategic thinking. Best in class product managers, like good CEOs, are always weighing and planning, trying to assess the current state of business and how to optimize their products in the market and beat the competition..
- 3. Vision. Leaders have vision. They dream of possibilities, of what could be. Others tend to pay attention when someone else's vision makes sense. This is because those who have a vision tend to inspire excitement about possibilities as well as a common purpose
- 4. Networking and bridge building. All great executives know a lot of people in a lot of places.
 - 5. The mensch factor.
- 6. Serving customers. Although not on traditional leadership radar scopes, product team leaders must be able to form working relationships with customers.
- 7. Facilitation and collaborative problem solving. Good leaders grasp and consider the situation, ask a lot of questions, and bring people together to solve problems.
- 8. Empowering others. One of the most overused and misunderstood expressions in corporate life is the word empowerment
- 9. Leading an organizational change. At some point in your career, you will have gained enough experience and credibility that you may be called upon to participate in, or lead, a major organizational change.

Within the Product Management realm, management, peers, and teams are constantly evaluating the product manager, either formally or informally, against these characteristics.

There are skills and experiences that you build throughout your career in specific fields, whether they're functional or could technical. These include computer programming, applications engineering, market research, manufacturing techniques, finance, etc. This is one of the reasons why in Product Management everyone comes from somewhere else, bringing with them their particular subject matter expertise.

Many companies have management development programs in which people work in a job within various business functions for a period of time. This helps them to understand how each part of the business works, and how it all fits together.

There are great benefits to this approach, mainly because you can see exactly how each and every department operates and interoperates. Because of these experiences, the product manager will be more likely to consider new things, new opportunities, or different ways of doing things.

One of the common themes of Product Management is the role that experiential development plays. Experiential development has tremendous value to both the individual and the organization. Experiences are the enablers of your career. They open up the doors for future opportunities—doors that aren't always easy to identify without a leadership transformation roadmap. When you understand the kinds of experiences on which you should be focusing, you are putting the lampposts on the road for yourself and others that you will influence.

Your growing self-awareness and experiential development sets the stage for you to be a role model to others. When others see "how it's done," they're more apt to follow, especially if they didn't know what they didn't know or were afraid to admit they didn't know. How do you know what to do? That's experience. As you keep "doing," you just start to know. Your mind is like a giant version of the central processing unit of a computer. You take inputs and signals, you process the data, and you draw conclusions. You learn to improve your inputs, process more efficiently, and improve your outcomes. This is why there is such a strong linkage between leadership and decision making and between leadership and the cross-functional product team—all foundational practices being discussed in this book. Figure 3.3 reinforces this extremely important point with a circular diagram.



There are two primary ways to improve your skills and experience. They are not treated individually, but symbiotically: instructional training and guided experiences on the job. Instructional training can include formal classes delivered by training companies (like mine) or universities. Experience-based methods link work activities and tasks to performance development (formalized goal setting with your management) under the guidance of a manager, coach, or mentor, either on your current job or in a job rotation or special assignment. Whatever path you take, you should have partners (your coaches and mentors) who guide you and challenge you.

Theme 4 - CROSS-FUNCTIONAL PRODUCT TEAMS: GETTING THINGS DONE

- 1. Cross-functional team definitions
- 2. Team membership
- 3. Product team responsibilities
- 4. Forms of cross-functional product team membership
- 5. Clarifying roles and responsibilities
- 6. The functional support plan
- 7. Team membership across the life cycle

Most people who work in companies have a good sense of what a team is, and the purpose of a cross-functional team. This is borne out in organizational assessments and benchmarking exercises carried out with my clients. They recognize that cross-functional teams are made up of members from various business functions, that those team members commit to one another, and work together to complete the designated project.

The purpose of a cross-functional product team is to manage all the elements needed to achieve the financial, market, and strategic objectives of the product, as a business. The cross-functional product team is made up of delegated representatives from their respective business functions. This team is the primary mechanism through which an organization initiates product strategies and plans. The team is responsible for making sure that plans are executed in a timely fashion. Finally, the product team is responsible for the profitability of the product in the marketplace. With these characteristics in mind, I want to reinforce the importance of thinking of the product as a "business."

Product teams usually take on one of these three different profiles:

- 1. A team that stays in place from initial idea until the product is launched;
- 2. A team that stays in place from the time a product is launched until it is discontinued or withdrawn from the market; or
- 3. A team that stays in place across the product's life cycle, from idea to discontinuation.

Although these definitions are typical of most organizations, the fact remains that many product managers are usually responsible for all phases of the product's life cycle, that is, from idea to discontinuation.

Organized like a board of directors for a product, a crossfunctional product team may focus on a single product, or it may be responsible for a product line or product portfolio. In its highest form, an executivelevel cross-functional portfolio group charters the product team. The resulting product team will have its best chance of achieving success if led by a higher-level, experienced product manager or product line leader. Team members should be delegated by the executives on the portfolio team as representatives from their function. Either way, the product team is the primary means of assuring the ultimate success of a product or product line.

When teams come together, they are forming. When forming, people on the team get to know one another and begin to understand their roles. In the second phase, storming, there may be some turbulence as new ideas surface and the team learns to deal with conflict. Norming implies that the team members are normalizing or stabilizing and becoming more productive. Respect for one another evolves as relationships become stronger, trust evolves, and the team adjusts to each member's style as they deliver on their commitments. Finally, performing teams act as well-oiled machines, working smoothly, efficiently, and productively.

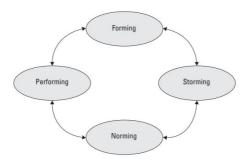


Figure 4.1 - The Phases of Team Development

Figure 4.1 shows these four phases of team development. As you can see in the figure, there are two-directional arrows between each of the nodes. This reflects what happens as teams move in and out of the phases as members come and go.

The actual team visual for a cross-functional product team is not new. The diagram exists in one form or another in many documented resources. In fact, you could say it applies to both product teams and project teams. Most likely, you've seen it before—it's a typical daisy wheel or pie chart. I prefer the pie chart visualization (see Figure 4.2), but product managers should choose the type of graphic that works best for them

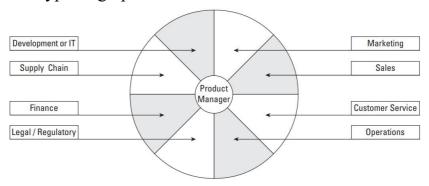


Figure 4.2 - Typical Cross-Functional Team Members

The daisy wheel depicts the typical functions designated as the members of a core product team. No matter what visual representation is used, it should be applied consistently in the organization.

Overall, poor team behaviors can be compared with those of a dysfunctional family. Poor behaviors lead to a lack of harmoy and focus, so identifying them early—by alert and focused product managers—can keep things running smoothly.

Effective product managers should strive to follow a different approach to cross-functional teaming. "Functional" cross-functional teams are focused and goal directed. The most efficient cross-functional product teams are those that share the following key characteristics:

- 1. The product team leader has the experience and stature to actually lead the team. Usually, this person is a product line manager or a product director.
- 2. The team is in place across the life cycle, which means that members may come and go, but their business function remains bound to the business of the product.
- 3. The members are delegated and earn their "empowerment" through the actions and decisions they make, and the results they deliver.
- 4. They enjoy the autonomy of being able to get the job done and work collaboratively, set realistic goals, and communicate with one another when there is a risk.
- 5. Their primary loyalty is to the team, not to the function, and the team is rewarded for the results they achieve collectively.

6. They are tolerant of one another's individual differences, strengths, and weaknesses but still share their commitment to the team's goals.

Teamwork, team mechanics, and proper team documentation are needed to communicate, collaborate, and make decisions. The right tools will equip team leaders and team participants with the strategies to plan, negotiate, and carry out work, cross-functionally. They will also effectively monitor the work of the team.

The Product Management Life Cycle Model provides a holistic framework and reference point for assembling the cross-functional team. The three primary areas of work—New Product Planning, New Product Introduction, and Post-Launch Product Management—represent the general areas of accountability for the product team. Teams may be in place from idea to launch, from launch to discontinuance, or across the life cycle.

Not every functional group will have the resources or level of involvement to require a full-time member on the product team. Functional groups with specific resources dedicated to a specific product will typically have a full-time, or at least nearfull-time, member based on the needs of the team and the current phase of the life cycle. Regardless of the membership status, each functional team member participates in both formal and informal supporting teams. These supporting teams represent the actual working teams (or project teams) that are responsible for planning and executing the agreed-upon tasks needed to support the individual projects that are spawned from the main product or product line team. Actual membership designations may vary among product teams, divisions, or business units of the same company and usually vary across industries. Functional areas of primary team members may include: Marketing or Product Marketing; Finance; Product development (IT or Engineering);

Sales; Operations; Supply chain; Customer service or support; Legal; Regulatory; Field operations; Standards; Security and safety; Manufacturing; International

Functional team members provide needed functional expertise to the product team, but they are also responsible for coordinating the work of others in their functional organizations. This means that not only must they interoperate with other team members, but they must also represent the capabilities and expertise of their own discrete business function as they negotiate across the business functions. If they cannot commit those resources to the product team, then they put the entire team in jeopardy. This pivotal point of contact is critical: they are ultimately accountable to the team for the implementation of their committed FSPs.

There are three different levels of cross-functional product team participation that help to describe the needed level of participation on the team: Dedicated Core Team members, Associate or Extended Team members, and Advisory members.

- 1. Dedicated Core Team members bring one member per functional organization, authorized to make commitments on behalf of their function to the product team. These members are accountable for meeting the agreed-upon goals for their functional area.
- 2. Associate or Extended Team members are part-time (which could be half to three-quarter time) members. They are usually subordinates of Dedicated Core Team members and may be dedicated to a particular product or product project. They are not permitted to make final commitment on behalf of their function
- 3. Advisory members are those who are called in to participate on an as-needed basis because they represent their organizations to many different product teams. Organizations like

Legal, Regulatory, PR, and Training are examples of Advisory members.

A very interesting and useful method can help clarify roles and responsibilities in an organization, especially when it comes to task assignments for projects. It can also be a great tool for cross-functional product teams when there are cross-team dependencies and deliverables. It's called RACI, and it's used to define which functions are responsible, consulted, or informed for each milestone or deliverable required of the cross-functional team. RACI is an acronym, representing the four potential roles that a functional area can play relative to a specific milestone or deliverable. The components of the acronym have the following meanings:

- 1. Responsible—the person who owns the deliverable, also known as the "doer." The doer is the person who executes a particular deliverable, or at least delegates and oversees its execution, and the single point of authoritative information on the current status and outcome of the deliverable.
- 2. Accountable—a person who has the authority to approve the completion of a task or activity. In general, the accountable individual has a larger stake in the outcome; thus, this person makes the final decision on execution.
- 3. Consulted—a person or persons who may be asked for assistance. The source of this is a group of people who may want or need to influence the final decision. These people are generally consulted before any major decisions are made, and before a given deliverable is executed.
- 4. Informed—a person who is kept up to date on the execution, output, or status of the deliverable, but who does not influence the result.

For most business elements of the cross-functional team, approach goals will seem obvious and routine. Development

members of the team, however, may be more prone to set avoidance goals. For instance, in the software development and manufacturing realms, goals are often set for things like "defect rates," giving the impression that things can only get so good. Bottom line, sometimes it's realistic to set avoidance goals, but most of the time, the specific language of the goal should represent progress, growth, and forward-looking action.

Second, the structure of a goal often determines the level of commitment that a team member is willing to offer. Two factors play into this effect: goal importance (how challenging or visible the goal seems to be) and goal attainability (how realistic the goal seems to be). In fact, both individuals and teams find it easiest to commit to goals that are as challenging as possible without being unrealistic, sometimes (erroneously) called "stretch goals."

As products move from one area of work to another (from New Product Planning to New Product Introduction, for example) or from one phase to another, team membership will evolve. The matrix shown in Table 4.2 provides a way to identify team members who need to be associated with the team at various phases across the entire life cycle. This template can be modified for your own environment and include the names of the business functions that are specific to your organization.

Table 4.2 - Cross-Functional Team Membership Across the Life Cycle

	Strategy	New Product Planning			New Product Introduction		Post-Launch Product Management		
		Concept	Feasibility	Definition	Development	Launch	Growth	Maturity	Decline
Product manager									
Marketing									
Development									
Finance									
Sales									
Operations									
Supply chain									
Customer service				ile.					
Legal/Regulatory									
Manufacturing									
HR									
International									

This idea of keeping the team to the right number of members for the job is referred to as team sizing, and it is the responsibility of the executives or senior business leaders who are cross-functional themselves, and who have portfolio oversight for several product lines or product portfolios. After all, those who allocate investments across product teams should be able to allocate the human resources as well. Note that Figure 4.4 refers to Core Team members, but there may also be a number of Associate or Advisory members involved at various points along the way. It's very important to manage these "nonvoting" attendees carefully, especially since they tend to be very focused specialists in their own functional areas. Can you remember a team meeting where a particular technical or financial discussion completely derailed the agenda, only to be resolved later as a nonissue being pushed by someone with too narrow a focus? Choose the attendance at each team meeting, and in each life cycle phase, carefully.

The key point is to always maintain relevant membership in the cross-functional product team; any functional area that has a vested interest in—or needed expertise for—a particular phase should participate in the team. Anyone whose only contribution is pressure toward an unbalanced process or a side agenda should be excluded, or at least reintroduced to the rules of the crossfunctional team.

Theme 5 - DECISION MAKING: WHAT'S NEXT?

- 1. The importance of decision making
- 2. Decision making and problem solving
- 3. Saving grace: a case study about decision making
- 4. Decision-making techniques
- 5. Analysis paralysis and rational ignorance
- 6. Gut-feel decision making
- 7. Business intelligence

One of the most important things that product managers need to do, no matter what their job level in the company, is to recognize there are always decisions to make because there are always problems to solve.

The greater the product manager's familiarity with these indicators, the more rapidly the indicators can be processed in his or her mind and on spreadsheets. This leads to greater rapidity in the decision- making process—and greater speed is a key differentiator for good decision making.

In larger companies, many different people have to be included in the decision-making process, which involves dealing with many different personality types. Some of these people need an endless barrage of data, which unduly extends the decision-making process. Others are seemingly comfortable with less data because of their "third eye" into the other more nebulous areas of the business environment. Some call the extended process

"analysis paralysis." An unwanted outcome from extended analysis is a failure to act, opening you up to being beaten by a competitor. Balancing the need for speed and the need for data is essential. As a matter of fact, the need for speed and data will continue to exert pressure on managers at all levels of the company. How do you deal with this constant state of urgency?

If decision making is the fulcrum, then what exactly are we trying to leverage? The multitude of variables in the equation for product man- agers includes known product strategies and tactics; cross-functional team expertise; finances; competitor knowledge; competing initiatives; and your (and your team's) time, just to name a few. Accurate and timely data is your friend, and that data should be as accurate and available as possible, so that the decision maker is able to do what needs to be done.

The crux of decision making is that it leads to solving problems. The word problem doesn't mean it's bad, it just means there is a situation to deal with and it requires attention. Part of the decision-making process is built upon determining the problem's root.

To identify problems and evolve alternatives, as a product manager, you will have to do a lot of the digging and research yourself. If you are working on or leading a cross-functional team, you cannot get your team members to listen and participate in problem solving and decision making if you are not the orchestrator of the prob- lem-solving process. In order to smooth the way, you may want to take advantage of a simple model to guide the problem-solving process, as shown in Figure 5.1. This process acknowledges that there is an observed situation followed by an opportunity to clarify the problem.



Subsequently, the team gets the data it needs, analyzes it, and comes up with possible solutions. Each solution is a possible outcome, so it requires an analysis of risks, and with that, a mitigation plan that, when acceptable by all, leads to the agreed-upon outcome.

In order to illustrate some of the complexities and challenges related to decision making

Some questions below so that you can make some decisions about the pros and cons of each option. Each option should be considered within the context of cost, schedule, resource availability, impact on customer loyalty, and brand reputation for the bank.

- 1. What option would you choose and why?
- 2. Is there enough data to make a decision? If not, what additional data would you want to have?
- 3. What would happen to the bank if competitors found out about this internal oversight?
- 4. What other dimensions would you think about in making the most appropriate decision?

The scenario just reviewed is fairly simple because it is presented in a linear fashion. However, problem solving and decision making are generally a bit more complex because the process requires careful consideration of a variety of variables.

It is important to create decision- making maps using this flowcharting technique. The essence of this tech- nique is breaking down problems into smaller and smaller pieces, and then going back and forth through the process so that you can discern the following:

- 1. Is the problem you see the real problem?
- 2. What is the importance of the problem?
- 3. Why is this important and deserving of your or your team's attention in relation to other issues you're addressing?

- 4. What additional data do you need?
- 5. How comfortable is everyone with the amount of data (that's a decision in and of itself)?
- 6. What are the potential outcomes, or other problems, that could emerge from this decision?
- 7. What would you do about those other problems if they emerged?
- 8. How will you document what you did so that others might learn from your experience?

By cycling through this process, one can usually whittle the problem down to, at most, three options, if not two.

Ideally, perfect solutions tend to show up by continued iteration, but often there are at least two options that fit the combination of risk and urgency presented by the problem. Ronald Howard, a learned explorer in the area of decision analysis, wrote, "Decision making is what you do when you don't know what to do." Therefore, we focus on a variety of techniques that are designed to support decisions and provide a degree of perspective or insight into how the problem might be solved. There are four additional techniques that can help identify the best option, or at least refine your options so that a choice is easier:

- Combining options
- The morphological box
- The decision matrix
- The decision tree

Combining Options

If you have only two options, it's critically important to consider the possibility that they aren't mutually exclusive, that is, they can both be executed without working against each other in any noticeable way. In many cases when problem solving, the choice of whether to execute two or more options simultaneously comes down to one of marginal cost and marginal value. Sometimes, the more options you have, the worse your decision—or you might not make a decision at all. Curiously, over-analysis, or analysis paralysis, is easy to fall into when the possible negative impacts of a bad decision (the opportunity cost) seem much greater than the potential gains made by deciding.

The New Product Development process is a some- what structured decision-making process. On the whole, though, day-to-day product management is a massive exercise in decision making. Some things you just have to do, and some minidecisions will be easy and will turn out ok; some will be harder and have more significant consequences, but you must deal with all of them.

As explained above, decision making has many objective methods, but a great deal of subjective content. Some of that subjective content can be qualified with rational thought, while some of it is based purely on instinct, intuition, or emotional reaction. In fact, decision making based solely on reason may or may not lead you to the most effective option. Often a well-rounded decision requires "going with your gut," other- wise known as gut-feel decision making.

Psychologists have come to understand that we generally have two neurological reactions to any problem. Our rational reactions employ logic, structured in slow, clear, linear argumentation that may continue for hours, days, or weeks. Usually in only microseconds, however, we use somatic markers (our basic survival instincts) to holistically analyze and pass judgment on the situation. These markers are often expressed directly through our physical reactions, such as embarrassment, anger, fear, fight-or-flight responses, excitement, and so on.

One of the growing areas of decision sciences in business is known as Business Intelligence (BI). Although it appears to be a new concept, in fact it dates back to the late 1950s. BI refers to a

collection of technologies that gather, process, and present information about business operations. The overall purpose of BI systems is to provide businesspeople with a comprehensive, structured set of easy-to-understand metrics.

BI generally focuses on internal data such as sales, production volumes, and operations, so it should be distinguished from purely external data based on competitors, industries, and markets. That said, you must realize that BI describes not only the internal operations of your particular company, but also the interaction between your company and the marketplace. As a result, there are many trends you can "see" based solely on BI—trends you should then verify with available external data points. In fact, BI can be an incredible wealth of information about your customers, charting everything from spending patterns to preferences.

Dozens of BI vendors exist in the marketplace, so you can quickly gather a mountain of information on this up-and-coming toolset on your own. Based on the earlier discussion of gut-feel decision making, though, I caution you to be very careful in evaluating and implementing BI in your own organization. Many vendors present study after study decrying instinct and gut-feel as "incredibly costly."

Theme 6 - FINANCE FOR THE PRODUCT MANAGER: KEEPING SCORE

- 1. The language of business
- 2. The basic financial statements
- 3. The income statement
- 4. The balance sheet
- 5. Cash flow
- 6. Demystifying discounted cash flow

7. Financial planning for product managers

8. Managing the business

Finance is the common language of business. If product managers are responsible for running the business of the product, they need a good foundation of fundamental financial skills. They must be able to under- stand and assess how a product's financial returns affect the business and the product portfolio. In addition, they need the financial acumen to manage future investments in their product wisely. Product managers need grounding in the fundamentals of business finance.

Basic financial statements and vocabulary will be defined. These include Income Statements (sometimes called the Profit and Loss Statement, or P&L), Balance Sheets, and Cash Flow Statements—and an explanation of the importance of discounted cash flow and "net present value" or "NPV."

These key techniques are aligned with the Product Management Life Cycle Model and are then applied in two broad categories: planning and managing the "business of the product." Each of these topics will be developed as the chapter evolves.

Product managers should be able to review and analyze financial statements. When business and financial people talk about gross profits, depreciation, working capital, and cash flow, they must comprehend the meaning of these terms and feel comfortable when discussing financial matters. The language of business is derived from the accounting field. Your familiarity with this critical business vocabulary will increase your stature as a product manager and earn you greater respect from your crossfunctional team members as well as from management.

Financial statements are the most important and universal documents utilized by businesses. They are the functional

instruments used to manage the business, make decisions, and communicate results to various interested parties.

Since products are "mini-businesses" for which product managers and their teams are responsible, it is important to understand that these same financial statements are used at the product level. Product man- agers use these statements to create and communicate product budgets, analyze results, and make decisions when results don't align with projections. The product manager should also understand how these tools are used to disclose information about the product's performance to stakeholders, namely your cross-functional team members and your management.

Additionally, the product manager should make sure there is strong financial expertise and representation on the product team. Understand- ing and applying financial techniques does not automatically bestow the underlying knowledge about the mechanics of corporate financial management and accounting. The financial representative to the team provides critical insights when Business Cases are created, forecasts are derived, and analyses are carried out.

The Income Statement is sometimes called the Profit and Loss State- ment, or just "P&L." Since the P&L tracks product or business perform- ance over a given time period such as a month, quarter, or year, it is referred to as a periodic statement. The P&L helps to determine whether the product has contributed a profit or loss over the specified time period. Each product should have its own P&L. The basic P&L format for a product is shown in Table 6.1.

TABLE 6.1

Projected In	ncome Statement	for Product ABC	for the I	Upcoming Year :	20XX
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	Budget
Sales (Revenue)	
Number of units	10,000
Price per unit	\$6.25
Total revenue	\$62,500.00
Cost of goods sold (COGS)	
Materials	7,500.00
Labor	4,500.00
Overhead	9,800.00
Total COGS	\$21,800.00
Gross Profit	\$40,700.00
Gross Profit %	65.1%
Expenses	
Marketing	5,400.00
Sales	3,300.00
R&D	3,235.00
General and administrative	2,100.00
Total expenses	\$14,035.00
Earnings before interest and taxes, depredation and amortization (EBITA)	\$26,665.00
Depreciation and amortization	500.00
Interest expense	350.00
Income taxes	2,631.00
Net income (profit)	\$23,684.00
Net Income %	37.9%

There is an easy way to view the P&L. Divide it into two halves. The top half of the P&L considers revenue and the specific costs to create that revenue. The bottom half includes the expenses incurred by the func- tional departments as they support the business or carry out their daily activities.

The top half of the P&L opens by accounting for the revenue brought in from the sale of products or services to customers. Revenue is calcu- lated by multiplying the unit selling price by the number of units sold:

Revenue = Unit Selling Price × Units Sold

If your company produces tangible goods, a variety of costs are incurred to produce them. (Note: Service-based businesses or software companies do not have material costs; however, you should always check with your finance department to determine if

there are any costs in this category.) These production-specific costs, in total, are referred to as cost of goods sold (COGS), and represent the direct costs incurred toproduce the product and any overheads allocated in the production of the product. COGS is generally composed of the cost of raw materials, the associated labor to assemble the product, and various direct and allocated overhead costs like rent and electricity for the facility used in the production or assembly of those products:

Material + Labor + Overhead = Cost of Goods Sold (COGS)

Gross profit (sometimes called gross margin), is the profit earned directly by the sale of the product. It is derived by subtracting COGS from revenue. Gross profit is very significant because it represents an important measurement of product profitability. For product managers and their cross-functional product teams, gross profit is often the only measure of product profitability that can be reasonably applied. The gross profit must be significant enough to cover the expenses incurred by other departments that support your product—and deliver a net profit at the end of the financial period. Gross profit in absolute dollars, and as a percentage of revenue, is also an important measurement when comparing one product's performance to another (within the portfolio), and in comparing your company's results to its competitors:

Revenue – COGS = Gross Profit Gross Profit / Revenue = Gross Profit %

The bottom half of a P&L is where the different functional depart- ments' expenses are listed. These expenses are categorized by functional departments, including Sales, Marketing, R&D, Customer Service, and other operating expenses. There is usually an allocation for "general and administrative" expenses, which are borne by all products and

distributed to product line P&Ls by the company according to predetermined algorithms. However, these expenses (directly charged to the product or allocated by predetermined formulas) are often beyond the control of the product manager and the team.

If it is possible to establish budget line items for expenses that are budgeted in Marketing Plans, and to be able to track those incurred expenses against those plans, the product team would have better visibility into the impact of those marketing investments on the prod- uct's market performance and profitability. This could be accomplished as a collaborative effort with the Finance department. The team could thus "absorb" its marketing allocations and, as a consequence, be able to recognize the direct expenditures for product-related marketing investments.

After operating expenses are accounted for, the next level of prod- uct profitability must be calculated. That is called the earnings before interest and taxes, depreciation, and amortization, or EBITDA. In some companies, this might be referred to as "income from operations." This allows for the separation of interest and taxes from the actual operating P&L for the product:

Gross Profit – Operating Expenses = EBITDA

There are some additional expenses that are often charged against product P&Ls: interest and taxes. Interest is sometimes allocated to a product or product line to cover a proportion of the cost of the company's borrowing money to finance its operations. Taxes are levies by federal, state, provincial, and local governments on profits earned by a company.

All of these categories are typically beyond the extent of control of the product manager and the product team. However, in many cases, positive gross profit or even EBITDA can "evaporate" because of other allocations or charges, such as interest, taxes, depreciation, and amortization.

The true profit of a business as well as a product's "bottom line" or net profit can be calculated by subtracting all expenses, interest, and taxes from EBITDA by the following calculation:

(EBITDA) – (Interest, Taxes, Depreciation, and Amortization) = Net Income

Net Income / Revenue = Net Income %

Net income (or net profit) is the whole reason that your company is in business. If the bottom line isn't greater than getting a return on investment such as interest from a bank, why run the risk of operating a business at all?

The Balance Sheet is a financial statement that takes a "snapshot" of the assets and liabilities of the company at a specific point in time, and depicts the overall net worth or equity of the company at that particular point in time. It is different from the P&L, which shows results for a financial period.

The Balance Sheet depicts the assets owned by the business and how those assets are financed with money from creditors or the capital of its owners or shareholders, or both. The Balance Sheet states that the business is in balance. Like the human body, the Balance Sheet must be in a state of balance, or homeostasis, if it is to function properly. The Balance Sheet has a basic arithmetical formula or equation:

Current liabilities are those obligations that must be paid off within one year. These include payments for operating expenses, supplies, and materials as accounts payable. Current liabilities may also include short- term loans, the interest on those loans, the current portion of loans required to be paid within one year, and taxes owed.

Long-term liabilities (often called long-term debt) describes obliga- tions that mature beyond a year. Many companies incur long-term debt (or issue bonds) to finance capital expansion or to finance other business activities. This is where the term leverage often comes into play. When a company is "heavily leveraged," it is said to have a lot of debt—money it owes to others.

In general, the Balance Sheet is usually a reference tool to the product manager. However, in certain instances, assets would be an area of interest. For example, if new equipment or facilities are needed to support product investments, the product manager would be concerned about the investment required as well as the future depreciation of these new assets allocated to the product.

Every month, the company checkbook receives money from sales of products and services (revenues) and disburses money in order to oper- ate the business (expenses). The best parallel to use is based on our own personal lives. We receive money from salaries or other sources, and disburse money for our living expenses. In a nutshell, this describes cash flow.

It is not a typical responsibility for the product managers to know every nuance of cash flow management. It is largely the responsibility of the CFO or treasurer of the company. However, a fundamental under- standing of cash flow is important for the product manager. The reason is because all forecasts (and the underlying assumptions in those forecasts) involve the translation of market share estimates and sales projections into financial information. This information is synchronized with the cal- endar so that the appropriate plans can be made coincident with the expected arrival of money from sales, and the outflow of money to sup- port operations. The CFO reviews the forecasts of all the product teams within the company to determine how much money to anticipate to finance business operations. If shortfalls are predicted, the CFO needs to work out where to get money to pay the bills. If there is an excess of cash flow, then the CFO has to have a plan in place to invest the money so it doesn't sit idle instead of producing profits.

This scenario can be an example. If the product manager predicts a product launch in May, first orders in July, and payments from July orders in September, the team's financial member informs the CFO about the product forecast and the CFO inserts this into the cash flow plans. (By the way, if you are producing a physical product, your factory forecast is also tied to the assumptions about when your product will be selling).

Product managers, at some point in their career, have to carry out the following:

- 1. Create Business Cases for product investments
- 2. Assemble forecasts
- 3. Test planning assumptions (sensitivity analysis)
- 4. Derive product cost models
- 5. Establish pricing models
- 6. Prepare product budgets

Each of these planning activities is critical to setting up the business of the product so that its results can be tracked and compared against those plans. I'll briefly discuss each one. However, these topics are discussed in more detail in other chapters.

Creating Business Cases for Product Investments

The product manager is requesting money from management (typically the product portfolio review board) and is going to prove that the product team can deliver a positive return to the business.

Assembling Forecasts

Forecasts are also created to determine the market share the product can capture. Market share postulations and assumptions are built on a solid foundation of industry and competitive research, and needs-based market segmentation models. For example, assumptions for sales volumes are evaluated in conjunction with the Sales department, because Sales needs to be

able to commit to delivering those volumes and, of course, needs to be appropriately compensated for selling the product.

Assumptions are also linked to demand forecasts for tangible goods so that the factory's production schedules can be created. In addition, fore- cast assumptions are linked to the work of the Marketing department since marketing programs must be appropriately timed to stimulate inter- est in the product and drive sales activity. If the sales forecast is too low, there won't be enough product available and customers will go elsewhere to satisfy their demand. If sales volumes are too low, inventory positions will build, wasting company money.

Deriving Product Cost Models

Product managers should have some ideas about the cost models used to plan and manage products. The three methods discussed here include standard costing, target costing, and activity-based costing.

Every product, within the context of a carefully crafted marketing mix, has to be priced. Pricing models abound. The most appropriate model is a value-based approach, although many companies use cost-plus pricing, which I do not advocate. Pricing is both art and science, but is built upon a solid foundation of well-researched and understood customer needs and competitive pressures. This basis determines how the product is ultimately positioned in the market. Pricing is also determined based on the strategic goals set for the product. Introducing a new product at a lower price can "buy" market share. If your product is sold in the luxury consumer segment, your prices are usually priced at a premium. Some companies price for short-term gains in revenue or profit; some try to sell as many units as possible.

Given a basic understanding of financial statements and product budgets (plans), it's appropriate to expect that the product

manager can understand and explain how actual outcomes compare with the estab- lished plans.

To properly evaluate the product's financial performance in an orderly fashion, three general questions have to be asked, and answered. What is the variance? What happened? What is the action plan for reme- dying (or further exploiting) the situation? These questions can lead you to uncover possible problems to be addressed by the cross-functional team, the resolution of which may ultimately improve market perform- ance and profitability of your products and services. The structure for carrying out the analysis and reporting to management during a product review session is demonstrated in Table 6.2.

Product Profit and Loss Variance Analysis

Whatis variance?	What happened?	What is the action plan or remedy?
Unit volume is 450 units (4.5%) greater than plan.	There was a sales contest in the last quarter.	Consider using this to boost sales in the future.
Unit prices were \$.37 or 5.9% below plan.	Apparently, the sales team had to do intense discounting in the fourth quarter to promote sales. Sales volumes would have been lower than plan. Sales said that the competitors were also pushing deals in the fourth quarter.	In the future, if discounts are below the preauthorized amounts, special pricing authorizations will be required from product management.
COGS are slightly above plan by an average of 2.2%. Material costs were greater than plan by 1.5% and overheads were 6.2% higher than plan.	Upon further analysis, the supplier raised prices due to higher shipping costs and overhead was higher because electrical costs went up. Both material and overhead variances were due to fuel costs. (The utility said that oil prices went up. 30 percent and they raised some of their rates accordingly). The higher costs for materials and overhead were offset by lower labor charges due to a productivity enhancement on the production line.	Purchasing is looking into local suppliers to minimize shipping costs and Operations is exploring changing lighting to energy saving bulbs. It is also looking to change the hours of the plant from 9-5 to 7:30-3:30. Starting 1.5 hours earlier will reduce electric usage by 6 percent and the production workers union agreed.
Gross profit is slightly below plan by 3.8%.	The problem with gross profit is the lower average selling price (even with higher volumes) as well as higher COGS, as explained earlier.	Remedial action is being taken with Sales, Purchasing, and Operations. Results will be provided at the next review session.
R&D expenses were 19.8% higher than plan.	R&D said that two of their top engineers left the company and went to work for a competitor. A major project deliverable necessitated the hiring of contract workers.	This is a temporary variance and was approved by the head of R&D and the CEO.

Perhaps the most important ratios for a product manager are the two profitability ratios, gross profit percent and net profit percent. These are derived using the following formulas:

Gross Profit / Total Revenue = Gross Profit % Net Profit / Total Revenue = Net Profit %

Another profitability ratio that would be of interest to the product manager would be return on investment (ROI). ROI is often calculated for many purposes when an investment is made. It asks, "How much will I, or did I get back from the investment?" ROI can be calculated for a marketing investment (Marketing ROI) or a product investment that was justified by a Business Case. The ROI for the product as a profitabil- ity ratio looks at the overall investment made in the product and the actual profits generated by the product because of that investment. It is strongly advised that product managers be very careful when trying to use ROI because it is often very difficult to isolate the exact return for the investment made. As such, it can be abused and can lead to over- exaggerated results and future over-optimistic forecasts. Work closely with your financial team when considering these measurements.

If the product manager keeps good records, he or she will have a valid ongoing analysis of customers who buy, competitive activity, and other relevant financial and operational analyses to correlate the prod- uct's performance (portrayed graphically on a life cycle curve) with explanations as to what happened and why. This is important because future investments will need to be calculated by the product manager to match the life cycle state of the product within the context of its evolving strategy, plus the evolving investment profiles for other products within the portfolio.

Module 2 MAKING THE MARKET YOUR PRIMARY FOCUS

Theme 7 - THE PLAYING FIELD AND THE PLAYERS: ANALYZING THE INDUSTRY AND COMPETITION

- 1. Becoming the expert
- 2. What is an industry?
- 3. Industry classifications
- 4. Putting industry evolution into perspective
- 5. Carrying out industry research

Successful business people and entrepreneurs are knowledgeable, totally involved, and passionate about what they do. They are constantly seeking cues and clues from the markets in which they operate.

Product managers in sporting goods companies are usually ardent about sports. They are aficionados who keep up with and even actively engage in particular sports. They have a hunger to know as much as they can. I'm an avid skier and expect the product managers of companies that produce skis to have enough expertise about the sport to offer skis designed for the demands of skiers like me. People who feel strongly about something—a sport, a hobby, or even their professions— understand passion. If you keep that level of enthusiasm in mind, you'll be motivated to develop the analytical and evaluative skills needed to compete successfully in the marketplace. The more you keep your eye on what's happening and why, the better you'll be at generating the best strategies for your products and services.

When colleagues and team members see magazines and research documents on your desk, and hear you discuss industry

activity knowledgeably, they'll realize the benefit of such strong focus. This may motivate them to seek and integrate their own observations into their work routines. Your posture as a leader will grow as you are perceived as "the" expert about the industry and the competition. Others on your product team will take their cues from you. The more you pursue and assimilate market signals and take action, the better you will be at creating the best strategic options for you and your team to grow the business.

Any industry as an arena or playing field made up of companies that focus on solving the problems and serving the needs of discrete groups of customers.

Another definition of the term is that an industry is composed of companies who focus on the same market segments with similar solutions within a sector. Governments look at broad categories of the economy to determine areas of expansion and contraction, and these categories are called sectors. If you follow the world of investments, you'll hear or read about sectors.

However, there is no rock solid definition of industry. That's because industries keep changing as customers' needs keep changing. Customers keep moving around (geographically); products keep developing; technologies keep evolving.

The one unchangeable fact you can depend on with industry is that it is constantly changing. Sometimes the changes are fast; sometimes slow. Change depends on many aspects: politics, the regulatory environment, the economy, social trends, consumer preferences, the state of technology, and other factors. The primary rule of "blocking and tackling" is that you, as a product manager, be always vigilant about what's going on in your industry and decide what you want to do with your products based on the customers you're competing for.

Here are some basic facts product managers should know

- In North America, there is an industry classification structure called the North American Industry Classification System (NAICS). It lists only manufactured products. There are several dozen NAICS codes for different industries.
- There is the North American Product Classification System (NAPCS). This U.S. Census organization created 71 product lists for a variety of industries.
- There is also a Global Industry Classification Standard (GICS), established in 1999 by Standard & Poors and MSCI Barra. The GICS acts as a framework for industry analysis used by investment research and other financial professionals. According to the structure as of 2006–2007, there are 10 major sectors, 24 industry groups, 67 industries, and 147 subindustries. How you describe and classify an industry is important. It will help you understand what your research yields, to analyze how industries change and evolve, and the ways that competitors within each industry change. Now let's talk about how to analyze an industry.

Industries evolve because market forces evolve. Think of most industries today and how low-cost global communications, the Internet, transportation, and technology have impacted how people do what people do; how companies make and deliver products; and how customers' preferences change.

A good way to analyze an industry and its evolution is to select two that are highly visible in their morphology. One is the U.S. airline industry within the Industrials sector; the other is the U.S. commercial banking industry within the Financials sector.

Product managers in businesses, must be vigilant about industry capacity and the downward pressure on prices. Their strategies tend to focus on outdoing competitors in service and convenience, cost management, productivity, and greater efficiency. In this market environment, they would want be make

sure that their product portfolio strategies would help them maintain profitability, and avoid erosion of margin.

Furthermore, in these heavily competitive environments, product managers should factor into their strategies other marketing mix elements to support their products. As a product manager, you will need to foster greater levels of cooperation between product line groups and work together to prune product lines and focus on continuously clarifying customer needs. You would probably want to provide broad solutions packages or bundles, and other creative measures to surmount the possible problems of these overgrown, maturing industries.

Product managers must develop highly sensitive industry radar due to their knowledge that industries constantly change. Such ongoing monitoring provides a steady stream of data that you can translate and apply to potential opportunities and action plans for the product.

As the product manager, you are an important catalyst for effecting profitable and productive change. It is up to you (and most likely, your marketing counterparts) to obtain this vital data on a timely and ongoing basis. You have to be aware of the need to keep current and to process all data so that meaningful possibilities and successful future strategies for the product will emerge.

After identifying what you want to learn, you have to determine where to obtain the data and what to do with it. Here is a listing of potential resources: Industry trade journals Business periodicals Internal reports on trade shows or industry events attended by others in your company, from shows you attended, or from analyst coverage of those events Trade associations Governmental agency reports and Web sites Standards groups Financial market analyst reports Syndicated

research ■ Key word searches on the Internet ■ Field research and interviews.

Table 7.2 - Putting Industry Activity into Perspective

Past 3–5 Years	Past 1–2 Years	Current Year	Future
- 0			

Once you acquire the data, you might want to begin filling in a table (as shown in Table 7.2). This enables you to construct a chronology of prior year industry observations, current observations, and future possibilities, some which may be articulated in the writings and forecasts of analysts, editors, and other industry specialists.

There is a technique that creates a useful, macroscopic view of a given market area. It examines the political, economic, social, and technological factors affecting a market or a geographic area. PEST is the acronym used in most marketing books that prescribe this standard analysis. However, in many market environments there are regulatory controls and some other instances that may not fall into any of the other categories, so the letters PRESTO encapsulate and offer a better approach. It's useful to consider each of these factors individually:

The major thrust of a model that depicts competitive activities that give you good clues is made better when it is augmented by really good market radar. The more experience you have from "living" in the market, the more you are able to make sense of what you hear, see, and read. To illustrate this, think about the following points:

- More participants in a market mean more competitive activity. Soft drink companies vie for quarter-point gains in market share when they reduce the prices of their colas by 30 percent for a week through a chain store grocer.
- When the general economy slows down, the remaining suppliers struggle to maintain market share. When homebuilders enjoy explosive growth, there is plenty of business to go around. But when the real estate market slows, builders must compete more vigorously for a smaller, more cautious group of homebuyers.
- When a company has a strong brand, they may not have to compete quite so vigorously.

Theme 8 FINDING MARKETS TO CONQUER BY UNDERSTANDING CUSTOMER NEEDS AND MARKET SEGMENTS

- 1. The common denominator in segmentation: customer needs
- 2. How markets are segmented
- 3. Market segmentation and the marketing mix
- 4. Describing the target market
- 5. Planning and carrying out customer visits

In the world of fast-moving consumer products and services, there are many opportunities to take market and customer snapshots in rapid succession. Such snapshots reveal helpful insights into why customers buy certain products and how they use those products. In businesses with fast-moving products, the performance results of product and mar- keting strategies need rapid responses so new strategies can adjust to meet new needs. In complex business-to-business (B2B) industries, even with rapid customer and market feedback, companies sometimes move at a

glacial pace. It can take a surprisingly long time for strategies to be reformulated.

Maslow posited that there are several layers of needs, beginning with primary physiological needs like the need to eat, to survive, to be sheltered from the elements, to rest so that we can rejuvenate, and so on. At the next level, he indicated that there are safety needs. Safety allows people to stay safe from physical harm, from illness, from pain, and more. Next, there are social needs, which may be satisfied through affili- ation with others, including the need to be supported and to participate in productive, rewarding relationships. He further proposed that there are needs that contribute to self-esteem and self-respect and suggested that there are also cognitive needs, which require that we learn, grow, and become more aware of the world around us (which, by the way, is what's needed for good decision making).

These very basic elements have merit for our discussion on market segmentation and how true needs form the building blocks for appro- priate segmentation models.

In order to accomplish the work of market segmentation, you must understand the difference between underlying needs and product features. Table 8.1 provides some clarifying examples.

Feature	Need
A personal identification number (PIN) for a debit card.	Safety and security—to protect your money and your identity.
A telephone with an amplified handset.	To be able to hear clearly.
A telephone with large push buttons.	To be able to see clearly.
A chair with an easy-to-use height adjuster.	Comfort.
A fast-loading computer game on an airplane.	To be entertained during long flights (to avoid being bored).
An intuitive, easy-to-navigate user interface for a Web site.	To be informed quickly when there is little time.

Markets can be segmented based on a variety of characteristics, but of utmost importance is the difference between consumer and business mar- kets. Consumer markets tend to be distributed within the traditional marketing categories that characterize each segment:

- Demographics guide the product manager or marketer to classify people by age, gender, education level, ethnicity, culture, income, and other dimensions.
- Geographic indicators designate where consumers live and work. A major coffee chain sets up a store every few blocks in a big city—they must know something. People who live in Florida have very different needs for furnaces and air conditioners than people who live in New England.
- Values and beliefs are important gauges because they relate to the characteristics of needs-oriented affiliations. For example, some customers may have political or religious affiliations. Some may support causes, such as protecting the environment or treatment of animals. These customers represent, as the marketers like to say, psychographic profiles, which may

indicate what sorts of companies' products they may wish to affiliate with (e.g., envi- ronmentally oriented people may only buy "green" products). Values and beliefs are also very important for brands: if your customers don't like your stand as a corporation, they may not buy from you no matter how much they like your product— think Nike and sweat shops.

Loyalty indicators help to determine how often a customer buys a product or uses a service. Frequent buyers, frequent flyers, and heavy users may be our favorite customers. Again, brand is important here.

Business markets may share similar characteristics with con-sumers, but more often are focused on the following:

- Geographic areas in which companies operate serve as useful delin- eations. This partitioning into local, regional, national or interna- tional categories allows you to determine their degree of market coverage and therefore, potential opportunity for your product. The number of facilities and the business carried out at each spe- cific facility are also of concern to the B2B product manager. This is especially important for international business operations.
- Company size would include sales, market share in an industry, number of employees, assets on the balance sheet, profitability, market capitalization, and other traditional business measures.
- Industry or industries served offers you the chance to get a sense of the trends and activities in this area
- Market segments on which these companies focus allow you to identify who their customers are, or even who their customer's customers are (in more complex B2B2B or B2B2C enterprises).
- Loyalty indicators, as mentioned in the earlier consumer bulleted list, are important because you want to

understand the buying patterns of these businesses. A hotel chain may offer a local business better rates and amenities when the company commits to having all its traveling employees stay at that particular hotel chain.

Not only do customers need to be categorized as consumers or busi- nesses, but there are a host of subsegments within each grouping. These subsegments are typically known as customer segments or customer tar- gets (I often refer to these as "target customer types" when referring to the detailed makeup of constituents within a broad market segment). Whether classified as a consumer or business market, they comprise, typically, people who use a product, influence its purchase, physically have to buy the product, or are the decision makers. This consideration is particularly important when it comes to identifying shoppers or buyers—whether or not there is an intended willingness to pay (e.g., to write the check or part with the cash) for a specific benefit. Each of these customer segments has its own distinctive set of needs, and product managers or marketers can be caught off guard if they don't consider these distinctions.

The reason product managers need to know about each of the market segments is so that they can define which customers they should focus on. They also need to know that the different customer types bring vary- ing value to their business. Market segment definitions, as discussed previously, divide customers into groups with similar characteristics. That's fairly simple to grasp. However, the axiom is very significant. The reasoning is that a business should not formulate an identical mar- keting mix for different customer types (although it seems like that is too often done).

Segmentation models should allow product managers to tailor the marketing mix to specific market segments or target customer types, thereby affording the business a greater opportunity to satisfy the needs of that specific group. A marketing mix strategy should also focus on the customers within those segments who have enough purchasing power to be profitable to the business. This means that if you have aimed at the right target, the customer types in the chosen segment should favor a specific product (especially if it is correctly positioned), be inspired by advertising and promotional messages, believe that prices reflect the value delivered, and acquire the product through the most convenient channel (or place, e.g., a retailer, representative, supplier, manufacturer, over the Internet or through an intermediary).

Take that big coffee retailer. Their target customer is a coffee lover who appreciates the amenities of the store's environment. The coffee retailer knows this target, prices the products at a premium, and pro- motes the product through media outlets most likely to reach their targeted customer. That's a marketing mix of product (coffee), pricing (at a premium), promotion (through the optimal media), and place or channel (the retail outlet and other places that sell that brand of coffee). That's a marketing mix most suited to a particular customer type. The coffee retailer won't pursue other coffee drinkers who don't value the ambience or appreciate the premium quality coffee.

When a product manager prepares product strategies, Business Cases, and other product or marketing documentation, it is necessary to describe why a specific segment is chosen. These particular segments represent the target market. Industry trend data and competitive activity levels provide clues that determine the size and desirability of a seg-ment. Thus, market attractiveness is selected based on several factors:

1. The degree to which the segment is growing. For example: the large number of baby boomers in the United States is creating sizable opportunities for companies offering services

focusing on con-venience, travel and leisure, and health care. The segment is also attractive because demographic data suggest that there is a tremendous amount of wealth built up by this part of the population, and since they're not all retiring and sitting around (many continue to work and save), they have more money for discretionary items.

- 2. The number of competitors vying for the space. If there are too many competitors in a given market area, customers may have too much choice and it may be more difficult to establish a differen- tial advantage with your product. However, companies with sufficient financial resources can often advertise their way for- ward, leveraging their brands and recognized names. Witness the growth of retail banking branches in major cities.
- 3. The manner in which a segment is accessible by known distribution channels. The Internet redefined the world of commerce, making products and services available for purchase twenty-four/seven. Retail stores are open more hours. Warehouse stores serving consumers and businesses abound. Everyone is on the go and almost everyone is connected electronically.
- 4. The profit to be gained by bringing products and services to those seg- ments. No matter how attractive or accessible the segment, if it won't make enough money, it isn't attractive enough.

When you looked at your market segments based on credit card balance, what kinds of segments might you want to preserve and which ones would you want to target to build up? If the banking industry is characterized by intense competition, then you would want to do at least two things: (1) guard your current customers from being lured away by other banks. For example, those with good balances who pay large fees; and (2) take market share from your competitors, perhaps by pursuing large-balance

accounts. To achieve this, you have some decisions to make about what to do.

Table 8.2 presents this example in a matrix format showing five general groupings of credit card customers, segmented by the size of the balances they keep on their cards.

TABLE 8.2

Segmentation Example

Segments by Credit Card Balance	Number of Accounts	Account Profitability	Segments Vulnerable to Competition	Strategic Options
Less than \$1,000	40,000	Low		Maintain
\$1,001-\$2,000	90,000	Low-medium	×	Grow
\$2,001-\$5,000	56,000	Medium	×	Grow
\$5,001-\$10,000	39,000	Medium-high		Grow
\$10,001-\$15,000	19,000	High		Maintain

By using this simple model, a product or portfolio manager may be able to consider different options, based on which segments offer the best opportunity, while managing the risk profile of the portfolio.

Good segmentation models help bring the world of the customer into better focus so that product managers and marketers can focus their efforts on the most effective communication methods to those customers to impel usage. Such models also stimulate more granular thought regarding the needs of each segment, and cultivate a fertile ground for potential new product features or attributes.

The preceding example shows why it is important for product managers and marketers to really understand how customers operate. To do this, you need to get into the field. Product managers often face travel restrictions, which is

doubtless a challenge. However, if a product manager asks to visit the customer, there's a very good chance his or her manager will heed the request.

The correct documentation for this vital element of market research is a visit plan. Many salespeople use a somewhat similar technique to chart which customers they're going to visit and in what sequence, but this is not quite the same. A product manager can plan a visit with a salesperson or account manager. Procedurally, you can't initiate this alone—you need to respect the salesperson's domain. When you have a clear plan for what you want to accomplish for a visit requiring travel, you improve the odds your travel request will be approved, restrictions or not.

Customer visits are generally carried out when your products are sold to other businesses. B2B organizations have target customer types, which include buyers, users, influencers, and decision makers.

If you were to put the customer segment representatives around a table (the buyer, the user, etc.), you'd probably find that your customer's company has a cross-functional team. Now extend the model a little fur- ther. If you're in the "vendor" company as the product manager, you too work on a cross-functional team.

Single visits don't necessarily provide you with the context and benchmarks to compare one customer's environment to another. There- fore, visit strategies should consider a variety of visits over time. Some visits will be to the same customer over time and some will center on a multiplicity of customers over a period of time. Some visits take place because there's a problem with the product. Some are to showcase new products. Some even happen when the customer comes to visit you at your location for a demonstration or customer advisory group meeting. The kind of customer visits being advocated here are for fact finding,

observing, looking for potential opportunities, and, of course, to identify or validate customer needs.

Theme 9 - PREPARING TO SET YOUR MILEPOSTS: FORECASTING FOR THE PRODUCT MANAGER

- 1. Forecasting basics
- 2. Validating market and demand potential
- 3. Forecasts are built on beliefs about the future
- 4. Validating assumptions and applying customer preferences
- 5. How much can we really make? Deriving market share estimates
 - 6. Sales forecasting
 - 7. Making the sales forecast useful
 - 8. Demand planning

1. Forecasting basics

To begin, a general set of definitions is needed, as well as a sequencing of events. These are summarized below and discussed in more detail later in the chapter. Product managers are typically responsible for the following:

- 1. Determining the total size of a desired market, which is called the total addressable market (TAM);
- 2. Deciding what portion of that market the product can penetrate, or the attainable market share (AMS);
- 3. Figuring out the number of units or the volume that the sales team can commit to sell;
- 4. Calculating the number of units of tangible product that can be produced (which is called demand planning);
- 5. Determining realistic pricing for the product and how that pricing will vary over time;

6. Translating the sales and demand forecast into a realistic budget for the product.

This list of responsibilities is summarized in Figure 9.1, which depicts it as a simple sequence of events.

FIGURE 9.1

Forecasting Sequence New Product Forecasting Existing Product Forecasting Size of Total Market Resize the Total Market (What's the potential?) (Has the potential changed?) Market Share Estimate Market Share Revision (What can we hopefor?) (What's your curent share?) Sales Forecast Sales Forecast (What will Sales sell now that we (What will Sales sell?) have historical data?) Demand Planning Demand Planning Intangible Intangible (Can we produce enough?) (Can we produce enough?) Products Products For tangible products For tangible products **Budget Forecasts Budget Forecasts** (What are the financial outcomes?) (What are the financial outcomes?)

You will notice that there are two different columns in Figure 9.1. One column shows the sequence for new product forecasting, while the other depicts existing product forecasting. Notice that each column has the same categories and the work is essentially the same. The main distinction between the two has to do with the availability of data. New product forecasts may not

have a robust suite of data available to figure out the size of the market or determine whether the market is worth pursuing.

New products can also include enhancements to existing products. The arrow that connects the Post-Launch Product Management area of work (Strategic and Tactical Product Management) and wraps back around to the forecasting sequence shows the recursive nature of the product life cycle as the business management of the product is carried out. This is important, because when you already have products in the market, you have to reforecast, using the same sequence. Hopefully, you'll have much more data, and with any luck you can compress the work associated with forecasting market size or attainable market share. This will allow you to focus on working with the sales force to develop more realistic sales forecasts, and free you up to work with your Demand Planning organization (if you have tangible products.)

The Business Case must have a forecast section and a series of assumptions that justify the investment in new products or product enhancements. The Marketing Plan for the product will support the business scenarios that, in turn, support ongoing business opera- tions. For example, suppose an existing product isn't being enhanced or upgraded in an upcoming year. Or, suppose during mid-year you have to recast and update the sales forecast and budget for the product. In any instance, you will use the same general thought process to validate or improve your initial set of assumptions. All of these are driven from the heart of the cross-functional team, led by the product manager.

Evaluating the attractiveness of a market requires that you consider many factors. It is critical to determine future product or business viability. Once this attractiveness is understood, the product team is in a better position to decide if the market is substantial enough and accessible enough to continue pursuing,

or, at least, to pursue in the future. There are two approaches to complete this evaluation: One way is to determine or understand the market potential, and the other way is to assess overall potential demand.

Market potential, or, "what could we possibly sell?" is driven by the possible size of the total market, attractive market segments, and the growth rates of those segments. These "upper-limit" estimates are complex to derive unless you have some evidence of market variability, along with some idea of the size of the markets themselves. Some of the methods used to capture this data require that you:

- Use a statistical model that takes some percentage of a segment's size and allocates the market share estimates across the segment. This could include a percentage of the population within a segment or percentage of units sold across the number of competitors.
- Consider past unit sales volumes as a way to evaluate market potential. If your sales volumes (in units) for the preceding years have been growing at 5 percent per year, for example, and you believe that your competitive market share will not shift as you make a series of product enhancements, you might want to continue your 5 percent per year growth rate.
- Examine distribution channel performance, which can be helpful, assuming that you are able to track product sales through each channel. A company that uses traditional, direct methods may expand their channels to include the Internet or indirect distributors, or expand to a series of international resellers. Any of these approaches may help you garner greater levels of market share.
- Consider a variety of analyst perspectives, based on research reports, to determine how to characterize market potential. You can use industry analyst research reports and

abstract some of the most salient characteristics and trends in the market to estimate potential sales. This can be a great way to navigate the marketplace, and to determine your share relative to the competition within the context of the direction of the overall industry.

- Use general governmental resources or industry associations. I like using U.S. Census data, because it's easy to get population numbers by age, by region, and other demographics (see www. census.gov). Another such resource can be found on the Web site "Survey of Current Business" (www.bea.gov/scb/index.htm) to understand a variety of data related to gross domestic product, price indices, and other economic data.
- Determine the level of competitive intensity in a market area. This is an important context to have. You want to know whether or not there is stiff competition with many products. If you're already in that market, then you understand the dynamics of that environment. If you are considering a new product entry in a crowded market, then you must make sure your product is highly differentiated. Michael Porter's "Five Forces Analysis" is a good method to use.

Possible demand, or "what would customers actually want to buy?" This can be characterized using the following general approaches:

- 1. Determine what portion of the overall population (based on demographics, geography, etc.) could actually buy the product.
- 2. Identify the number of people who actually buy or use the prod- uct or product type. For example, think of toothpaste: If each person in a market area buys an 8-ounce tube of toothpaste four times a year, and if you multiplied that number

by the number of people in a segment, you would get an overall number based on product use by segment.

- 3. Measure "intent to purchase." In many companies, the Market- ing department frequently carries out surveys that ask respon- dents directly whether they would buy a product, and if so, when their next need-state might emerge.
- 4. Discover analogous product performance. This is another very effective method. If you are able to understand the pattern of sales or market uptake for similar products in your company, you may be able to identify adoption patterns. For example, if your com- pany introduced a similar product in the past, how well did it fare against its forecasts? What problems did it encounter? What has been the company's track record in capturing market share? Of course, past performance won't guarantee that your forecast will achieve the same results, but it does serve as another useful reference point. It also provides an indication averaging over many factors of how well your company can perform. If you can obtain the data of performance versus forecast, you have a reliable way of adjusting marketing, sales, and other input to the model.
- 5. Finally, you can use a competitive analogy. Although somewhat difficult to derive, there may be some available industry analyst data to determine competitor market penetration rates, volumes, and other indicators for their new product introductions.

Forecasts are based on data, knowledge, and, ultimately, assumptions. Essentially, where you do not have an available fact that you need, you will use an assumption.

You're taking a large data set and continuously narrowing it down, subject to known and assumed parameters. If you have an existing product, you have data about your current market segments, customer needs, product volumes, and financial data. When your boss says you have to raise your sales fore- cast by 5 percent next year, barring a lack of investment to drive marketing, sales, and other supporting structures, you do the arithmetic and you're done—regardless of whether the forecast is rational and achiev- able. It's usually a management edict that ends up contributing to missed numbers. Real, usable product forecasts are dependent on meeting not only the existing needs of known customers, but also anticipating needs of existing and new customers, so you'll need to take that into account.

It is very important that all assumptions are clearly identified. First, the market, your company, and the competition are not static. Assumptions can change over time and must be fed back into the forecast. Second, these assumptions are often the major factors in under- standing the risk surrounding a product investment decision. At some point, a changed market forecast or risk level may indicate that a new product introduction be changed or abandoned.

With the fundamental context about forecasting in place, let's tackle the first two areas in the forecasting sequence described earlier. These include:

- Determining the total size of a desired market, the TAM, and
- Deciding on the portion of that market that the product can penetrate, or the AMS.

Let's walk through the steps to accomplish these goals.

Step 1. Assess TAM. If you had no competitors, and you could sell all the units of your product to each and every possible customer within a segment, how many units would you sell and how much money would you make?

Total Possible Market Volume × Average Unit Price = TAM in Dollars (or currency)

- Step 2. Segment the market based on TAM. These segments are subsegments of TAM or customer types of TAM based on typical market segmentation characteristics like geography, demographics, and so on.
- Step 3. Derive assumptions. Assumptions represent possible combinations of future outcomes. Remember, assumptions are used in other Product Management documents, including Business Cases, Marketing Plans, product requirements, and product strategies. Assumptions may consider market attributes such as technology, competitors, industry (PRESTO), and shifts in customer preferences.
- Step 4. Estimate the AMS. How much share could you attain, in unit volumes, pricing, and revenue? Each market segment has a historical profile and future size based on the parameters you establish, or parameters established by outside research sources. If you have existing products, you might be able to use some of that historical data.

The case example uses a fictitious company and easily identifi able market segments. This is not meant to be an academic study, but rather a simplified example, so that you may be able to construct similar forecasts on the job. You will also find, as you read this, that there may be some missing data or issues you might have wanted to know more about to validate the assumptions. My suggestion is that in your own forecasting work, you create a list of data elements you think would be important and then reach out to other data resources in your company or search on the Internet to find more about each data area. Forecasting is a craft you learn over a period of time in your career; the nuances of the situation and variables you consider will always vary.

Ultimately, you will want to know roughly how many units will be sold and how much money the company will be able to

make. Of course, you'll want to know whether you can create, produce, and deliver the product, which is part of the next section on demand planning. Typically, your man- agement will suggest to the Sales executives, Marketing executives, and other leaders that sales rise at a specific percentage over the prior fiscal year in order to deliver the results to stakeholders, who are usually sharehold- ers. The underlying assumption is that there is a history of sales activity. However, you should always remember that sales forecasts, like all fore- casts, are usually subject to industry activity and competitor actions.

One of the important contextual elements for sales forecasts is that they be expressed in ranges of possible outcomes. When you prepare a Business Case, a budget, or even a production forecast, you will want to make sure that you consider best-case, expected, and worst-case scenarios. The more alternatives you try, the more tedious the work. Sensitivity analysis—the testing of a set of assumptions—is particularly helpful in this case. I suggest that product managers always have what I call the "worst-worst" case in mind. For example, if you think that the best case is achieving 100 percent of last year's sales volume, and your worst case is 85 percent of last year's sales volume, you need to consider what might happen if you only had 50 percent of last year's sales volume. What would the P&L look like in that case?

What you need most, when compiling a sales forecast, is the actual sales force. Sometimes salespeople are asked to create their own sales forecasts by product. These are rolled up, and then a sales executive car- ries out a negotiation with the sales people in order to negotiate the final quota. However, if this is done without product managers involved, then there may not be a connection with the reality of making sure that product is available. Furthermore, Marketing input is needed to deter- mine if lead generation or demand generation programs are on the marketing investment docket. Finally, how good is Sales (and the company) at meeting sales forecasts?

Product managers can triangulate this internally derived data with surveys and other observations carried out during customer or field visits. Understanding buyer intentions can truly help in capturing the most likely buying scenarios.

Sales forecasting is not a once-and-done series of tasks. Forecasting is a continual work in progress. The job of the product team is to continue to build its knowledge base and database of market activities. Econo- mists are always looking for new data, analyzing cause and effect, and working to improve forecast accuracy; so, too, should the product team. Best-in-class companies maintain repositories of market, customer, and competitive data to enable this constant refresh to take place. Product teams help in data collection and analysis. The Product Master Plan is an excellent repository for this data as well.

As suggested in the previous section, useful forecasts try to provide several scenarios about the future, which give needed validity and integrity checks. That's why best-case, worst-case, and even likely-case scenarios are so important. To put these checks into place, consider four actions that help you validate your assumptions:

- 1. Make sure that you identify your data sources. Note whether infor- mation comes from past sales data, economic data, government data, and so on. Refer back to the earlier section on "Validating Market and Demand Potential."
- 2. Constantly update the data with an ongoing program of product sales and market performance reporting, as well as ongoing market research.
- 3. Write everything down. If you don't document the situation for each assumption set, you won't remember what you meant. This is important not only for sales forecasts, but any

forecast that winds up in a Business Case, Marketing Plan, or other document.

4. Finally, consider any other external constraints that might put a damper on potential sales. A larger reality may provide some kind of limitation because of a dynamic of the market, the econ- omy, or another broad, less-controllable category.

After the sales forecasts are prepared, the company's demand planners step in. The demand planning environment is different from sales forecasting. Sales forecasts ask, "How many will we sell?" Demand plans describe how the company will make sure that the company can produce or supply the product at the needed time at an acceptable cost.

Demand planning is a very dynamic process. As with many Product Management practices, demand planning benefits from a strong dose of cross-functional support. Specifically, you need to members from the supply chain organization, Manufacturing, Finance, Operations, Sales, and Marketing. The demand plan starts with the sales forecast. This pro- vides the demand planner with the "how much is to be sold" scenario. From this, supply chain elements must be considered. The company must either source raw materials or procure product elements and components so that the product can be produced. A service provider like a wireless company has to not only procure cell phones from other suppliers, but they also have to link their subscriber forecasts with supplier forecasts so they have enough units on hand to sell. They also have to make sure they have enough network capacity. A supply of cell phones and the network capacity comprise the demand plan for that particular industry. Ultimately, the product has to be available so that it is orderable and can be shipped and delivered. Remember that the cell phone includes not just the cell phone but anything that is

sold with it, such as the battery charger, manual, activation instructions, and packaging.

Furthermore, the demand planning function needs to not only make sure that there are enough goods to sell, but also make sure, based on sales cycles, inventory turns, and other measurements, that they can replenish inventories as needed. Demand planners benefit from performance data from within the firm, including:

- Return rates
- Number of products destroyed and not returned
- Inventory turnover
- Obsolete inventory numbers
- Sales forecast accuracy
- On-time shipping rates

The more your demand planners are able to synchronize their efforts with sales and market forecasts, the more closely they can influence the supporting functions of procurement, manufacturing, and distribution. This is very important, because if these functions are out of sync with the rest of the organization, operational inefficiencies will develop, resulting in the misuse of valuable financial and human resources.

Theme 10 - STRATEGIC PRODUCT PLANNING: THE INFLECTION POINT

- 1. Strategy is a dynamic continuum
- 2. Using a generic strategy
- 3. The waterfall effect
- 4. Dynamic strategy for the product manager
- 5. The "product as a business" strategic planning model

The term strategy is virtually indefinable. Strategy (from the Greek strategos) is an amalgam of two Greek words: stratos meaning "army," and ago mean- ing (roughly) "to lead." Centuries ago, Sun Tzu, a Chinese general, wrote a book called The Art of War that focused on effective war strategies and tactics. One of its major themes is the futility of seeking hard-and-fast rules instead of fluid, adaptable strategies.

For the product manager, the relevance of the phrase "leading an army" means defining a holistic, but flexible strategy and being the "general" (or CEO) of the product team.

Taking the analogy of "the product manager as general" further, a general (product manager) directs a series of actions over the long term.

He may or may not have a clear picture of enemy strength and disposi- tion, but as a good leader, he has built a number of broad contingencies into his strategies.

For product managers, as in all business, it is important to differenti- ate between strategy and tactics. They sit at opposite ends of a continuum and you can't have one without the other.

Strategy requires a plan of action that encompasses a future time- frame. Strategy addresses an entire chain of events or actions that may be separated in space and time along the value chain. Strategy must have more flexibility, and less dependence on specific events or pro- cesses. Strategy has an inherent capacity for greater reactivity to patterns of events or outcomes. Strategy focuses more on gaining an advantage that is tied to a desirable future vision (such as an advantageous market position). Strategies for products are less concerned with actions that make up the individual, day-to-day operational components of the product manager's work.

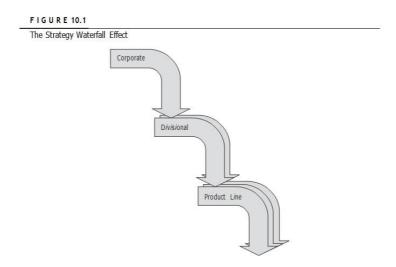
The characteristics of tactics are opposite to those of strategies. They depend on specific resources or external actions

and are not intended to take into account contingencies and unanticipated obstacles. Tactics do not take the broad view, nor do they deal with major changes. They only address the immediate problem. In baseball, when a batter swings, his focus is on the hit. He doesn't watch the shortstop "step into" a possible infield ball. Like that batter, whose action is only in the moment, tactics deal mainly with the present. There is no time to ruminate on future gains, or to pause and evaluate status. The next action must only deal with the immediate situation: the next punch, the next step, surviving the next round.

One of the most influential voices on competitive strategy is that of Michael Porter, the father of the value chain, along with strategic groups, generic strategies, and a host of other key concepts in this area. Pivotal among his observations is the idea that structure follows strategy. Rather than impose strategies over existing business structures and organizations, companies should create groupings that embrace the cascade of strategies. Another valuable observation from Porter is the idea of generic strategies, defined as broad classifications of strategic thinking. He suggests three types of generic strategies: cost minimization, product differentiation, and market focus. However, companies must choose only one generic strategy, because generic strategies work against each other when mixed.

For example, imagine a heavily commoditized industry wherein a CEO focuses on cost minimization (appropriate to the market). Then, in midstream, he begins a program to differentiate the products. The cost of additional R&D, customization, and market research would likely undo the gains made by cost cutting, while the commodity nature of the industry would indicate that differentiation could only gain marginal results. As a general rule, using more than one generic strategy tends to be counterproductive.

Within the corporation, there must be a cascading continuum of strategy from the top down. Corporate strategy must interlock with division or business unit strategy, which must, in turn, cascade into portfolio, product line, and product strategies, as shown in Figure 10.1.



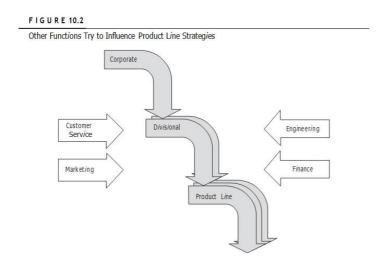
Sorting out (or even adjusting) this cascade is one of the larger responsibilities for the product manager. Organizational strategy variations sometimes make these cascades challenging to diagram.

In an ideal cascade, corporate strategy sets the position in terms of market dominance (industry, technology, or demographics); financial objectives; and corporate "identity" positions such as culture, values, mission, and overarching goals.

Divisional or business unit strategies define more specific advantages tied to more specific markets, industries, technologies, or segments. They also include financial objectives that focus on an optimal portfolio of investment options, as well as components of a divisional budget, so that product managers may more effectively evolve the strategies for their products.

When companies have carefully crafted strategies and methods to achieve them, they tend to have higher levels of product success and higher levels of employee engagement. Who doesn't want to play on a winning team, and who doesn't get caught up in bringing passion and extra effort into a successful endeavor? When companies are more successful with their products, they tend to invest more in innovation, advertising, promotion, people development, and infrastructure. Carefully planned investments tend to improve the probability that new-to-the-market, category-defining products can be conceived and brought to customers.

Product Management is not confined to its own niche and performance. It is contingent on dealing with the functions of the corporate enti- ties within the cascade. Figure 10.2 provides a simple visualization illustrating how other business functions continually try to influence what happens at the product line level.



These functional strategies are orchestrated by functional department members with an agenda that attempts to cast the best possible light on the overall performance of that function in fulfilling its charter. Functional strategies tend to introduce elements that result in subopti- mization, which is the bane of good strategy because it inhibits overall performance. The simplest example is the soccer player who "hogs the ball." Even though this "hot shot" might make three individual goals, sharing the ball could allow more goals by better integrating the skills of the other players into the mix. The net result of this kind of grandstanding could easily mean the star player breaks a record while the team loses the game.

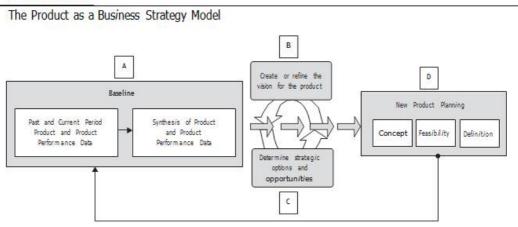
Successful products owe their stellar achievements to dynamic strategy. The product managers of these high fliers are always aware of the dynamism of strategic events. They are constantly alert for and responsive to the contin- uous change in the oncoming, constantly morphing stream of actions, reactions, opportunities, and capabilities. Such dynamic strategic thinking helps product managers to process and accommodate higher levels of risk and uncertainty. They can react more effectively to "patterns" in the marketplace. The potency of such a full-spectrum strategy has a much deeper impact on advantage and position than any traditional operational strategy, no matter how extensive. What does all this mean? Your strategic plans for your product are all about future position. Dynamic strategies modify the future vision over time to address marketplace changes.

The effective product manager is responsible for creating a full-spectrum operational and dynamic strategy that merges formulation and implementation, while accommodating all elements of the marketing mix.

The diagram in Figure 10.3 shows a business model deconstructed into its components. Using it will help you produce a meaningful analysis of what should take place in each phase. But first, you have to get the data needed to get the right perspective; second, and perhaps more difficult, you must decide

on the "what." The "what" is really the "what to do" in order to plan the appropriate strategies and tactics.





Synthesizing Data and Creating Useful Information

Collecting the data up to this point is only part of the journey to the baseline. Referring to the Product as a Business Strategy Model (see Figure 10.3) the next step is to synthesize the data—or to knit the data together in a way that creates informational tip-offs, which can help you visualize and think of new ideas and opportunities.

The acronym SWOT stands for strengths, weaknesses, opportuni- ties, and threats. Most people who have learned about strategic planning are familiar with the SWOT model. Basic familiarity with a model does not mean it is used correctly, especially when SWOT is carried out at the product or product portfolio level. It is easy to default to the use of company or divisional indicators because there isn't enough sensitivity to the necessity of carrying out product level SWOTs. However, in many instances, when working with my clients, I have found that there just isn't enough product level data. Caveat: A casual

attitude or just sheer avoidance of this analysis can result in exposing your product's weak- nesses, leaving your product (and perhaps your company) vulnerable to the competition. Collecting this product level data, and organizing it so that you can carry out a SWOT for the product or product line can seem an overwhelming, time consuming, and exhausting chore, but let me assure you, this is a necessary task.

In each one of these quadrants, you need verifiable market data, product data, financial data, and operational data.

When a product exhibits a strength, it is contributing positively to the portfolio and is strongly differentiated from those of its rivals. It could be its positive contribution to the revenue stream, its reputation with cus- tomers, its competitive position, its unique technology, or its documented quality as perceived by customers and analysts. You need the right level of data to help you define these strengths. Notice the words documented and proven. This means that you have data to support the claim.

A weakness is the opposite of a strength. The product is not robust, its design or style is outdated, it is competitively inadequate, customers return the product too frequently, or there are too many complaints. A weakness could include a lack of breadth in a product line, or eroding market share. It could also mean that it is not generating a profit for the product line. All of these, and more, can contribute to a poorly perform- ing product.

A threat is typically felt from outside of the organization. Threats leave the product open to a competitor's attack. For example, if your competitor has introduced a competing product with a more attractive value proposition and greater benefits and is telling potential or current customers that your business has problems (whether this is true or not), such a competitor could succeed in taking market share from you. A threat can also connote that your product is in danger of losing cus-tomers

because it no longer meets the needs of the customers within your chosen market segments.

Opportunity is the last and most important quadrant to be worked on. It is the culmination of your research and the focal point for the strategic product planning process. The reason is that "opportunity dis- covery" is part of the inspiration and ideation process. Your analysis and interpretation of the product's strengths, weaknesses, and threats can be the catalyst for generating fresh and innovative ideas for new products or enhancements of existing ones. Opportunities or possibilities could include the creation of a product that fills what you have perceived to be an unmet need or a product enhancement that beats the competition. It can help in redesigning a product to make it more attractive. It can suggest investments in promotional or channel development to stimulate demand and deliver the product to a wider market area. It can include a change in a production technique or an operational support system.

The opportunity quadrant of your SWOT analysis is linked to your product's future success, and that is why you need to work on all of the other SWOT quadrants first—before you put anything into the opportunity section.

The strategy of a company or one of its divisions is formulated by its executives. It is the game plan that stakes out the firm's industry posture and competitive position. Product managers have the responsibility of creating a vision and strategy for their products, consistent with the division's or company's strategy.

Module 3 THE START OF THE PRODUCT'S JOURNEY AND THE NEW PRODUCT DEVELOPMENT PROCESS

Theme 11 - The Concept Phase

- 1. The basic process
- 2. Ideation: what's the big idea?
- 3. Categorization of product "projects"
- 4. Sorting out opportunities
- 5. Looking down the product pipeline
- 6. Securing approval to move to the next phase: the concept review

Product and service ideas that will make it in the marketplace, and make a profit at the same time, are the rarest of all. Every day you're bombarded with a barrage of opportunities and product ideas, and from those, you cull a number of those ideas that seem to be promising. But how do you decide which of those have enough merit to be appraised further? How does a product manager decide which ideas are suitable enough to pursue further? How do you recognize the truly workable, relevant ideas to build a product on? Finally, how do you decide which ones should go through the relatively hard work of the actual Feasibility phase and which ones are left on the table and get pushed off the table as time goes on? This theme will put all of these into perspective, as we explore the Concept phase, which is the first phase of the New Product Planning area of work.

Depicted here is a process for reducing a large number of product ideas to a smaller number that have the best chance of achieving success in your chosen segments. The process profile for the Concept phase is shown in Table 11.1.

Concept Phase Process Profile

Input	Activities	Output	Decision
Ideas and opportuni- ties from a variety of sources	Assessing the opportunity	An "Opportunity Statement"	Whether to move to the next phase (feasibility) or to reject the opportunity

Starting with viable ideas from a variety of sources (Input), the product manager assembles a small core team to assess the worthiness of each possible candidate (Activity) and to discuss (and document) its intent in an Opportunity Statement (Output). When a viable opportunity is uncovered, worthy of additional analysis, the product team usually presents its findings to the product portfolio review board with a recommendation to provide additional funding to support additional analysis in the Feasibility phase.

Ideation is often associated with innovation, which seems a natural connection. Product managers shape the future state of a product with their vision, and that vision is shaped by their knowledge of the relevant markets.

Market-based patterns and trends are the first places on which to focus your ideation lens because there is a lot of material to take in. Delve into and research the many sources of market information: review trade journals and business publications, visit customers, scan your daily informational feeds, read synopses from your competitive intelligence group, review relevant blogs, and check into any other sources you can think of. Doing this will help you identify many useful indicators. Furthermore, you should be sharing the knowledge you gather with your cross-functional team, on a continuous basis. After all, the product manager is not the sole contributor to the ideation process. Each and every team member is a source of ideas and opportunities.

As a matter of fact, for ideation, it is vital that you draw on people from Marketing, R&D and/or Engineering, Materials Research, Operations, Technology, Product Design, and Market Research, to name just a few. Bring these people together for some storytelling and brainstorming. Here's why:

- Storytelling allows people to express what they've seen, heard, or read in a way that builds context. These stories can, of course, include visuals, diagrams, and mind maps to connect ideas to implications, issues, systems, people, or other random topics that may emerge.
- Brainstorming helps stimulate "so what?" questions, which helps the team identify potential answers that may clarify problems or create solutions.
- Many consultants and facilitators are good at carrying out this kind of end-user research and translating it into compelling products that solve customer problems in unique ways. You may find it useful to get some support from one of these expert resources.

This is why real market and customer focus is vital to the success of your products. The most important takeaway is this: It doesn't matter one bit how good your process is if you can't come up with some good ideas that provide your product with something unique that separates it from the competition. And if the product can't be differentiated because the market has commoditized it, than hopefully your company, or your division, has either a reliable brand or some really great way to inspire sales.

When you carry out diagnostic activities in a company, or facilitate a workshop, usually ask participants about their product ideas. Everyone is enthusiastic about their ideas until I ask the question, "Where do you keep those ideas?" Answers range from "on my laptop" to "in a spreadsheet" to "in my head." These are

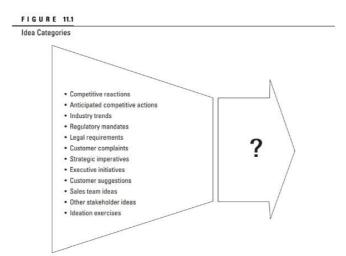
not the most nurturing places for ideas to germinate. In fact, many better mousetraps have never seen the light of day because they got lost in a drawer full of "stuff." Some companies have idea repositories, which in itself is a great idea. Any interested party, whether inside or outside of the company, should be able to submit ideas. Suggestion templates on Web sites and e-mails to a suggestion inbox are just two methods for collecting ideas.

Once collected, these ideas have to be processed. First, all ideas should be classified by the idea type:

- 1. A minor enhancement to a product, like a new feature or attribute;
- 2. A major enhancement to a product, or a grouping of features or attributes;
 - 3. A brand new product or a derivative;
 - 4. A new or upgraded product platform;
- 5. A breakthrough product where nothing exists in the category

Classifying ideas is useful because it quickly determines the amount of work needed to follow up on the idea. Too often, your product ideas and opportunities are focused on the first two—minor or major product improvements or enhancements.

The next categorization is the idea source or motivation for the idea. The trapezoid in Figure 11.1 contains many of the most common idea sources. To the right of the figure is an arrow with a question mark meaning "What do we do with this?"



The ideas and opportunities collected, categorized, and listed will continue to accumulate until the product manager and team decide to do something further with them. Since there are usually many concepts, they tend to build up, like a bucket of liquid. If your "bucket" gets too full, it will overflow and good ideas may get lost. An opportunity inventory will help you keep track of what you have in "stock." If you use a standard repository, at least it's easier to check what's in your opportunity inventory. It is important to review the material in the inventory on a regular basis. If the inventory builds up too much before you process it, then you may feel overwhelmed by the task and you may miss a vital market opportunity.

However, processing is easier said than done. With so many opportunities, you can't possibly have enough time to thoroughly investigate each one. Therefore, the initial screening of ideas, or rapid opportunity assessment, is the purpose of the Concept phase. "Rapid" means a couple of hours to a couple of days, depending on the level of complexity and perceived importance to the business. The document called the Opportunity

Statement is shown as a template in Table 11.2.

Name of this opportunity	
Idea type or category	
Source of the idea	
Date of original evaluation	
Product manager's name	
Name of engineer	
Name of marketer	
Name of other evaluator	
Summarize the situation and descured (second control of the situation and descured):	ribe the problem (describe how the need was
For whom? (The market segment o	or target customer)
How would it solve the problem?	
How is this opportunity strategical	lly aligned?
What are the characteristics of th	e market that make this attractive?
Who are the primary competitors?	,
High level financials (rough estimate	e of unit volumes, pricing, revenue, and possible
cost targets).	

The product manager doesn't evaluate ideas in a vacuum. I cannot overemphasize this point. Every idea, or perhaps "bundle" of ideas, needs to be evaluated by a subset of the cross-functional team, including the product manager, a technical person (developer, engineer, scientist, or technologist) and a marketing representative. An opportunity can usually be assessed in one or two short sessions (perhaps an hour or two each). Keep this core team small to allow for a rapid appraisal. When a full team is present, there may be too many opinions in the room and the pace will slow markedly. The idea inventory is usually pretty much backed up, so these small core sessions are intended to relieve that

pressure by allowing the small, agile team to quickly assess the perceived importance to the business. Table 11.3 describes the roles and responsibilities of this smaller, core cross-functional team.

T A B L E 11.3

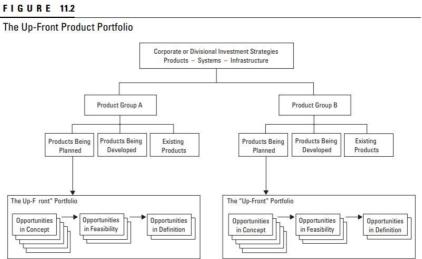
Cross-Functional Team Membership During the Concept Phase

Team Member	Concept	Feasibility	Definition
Product manager	Product manager leads the session. Provides context, business, and market logic. Helps establish strategic linkage. Manages the idea repository and helps guide priorities.		
Marketing	Provides data and other content in relation to the industry and the competitive situation. Leverages knowledge about customer needs and market segments. Provides balanced thought on the marketing mix model (pricing, promotion, and channel). Determines whether or how the idea can be delivered to the market.		
Development (IT/Engineering)	Provides technical knowledge and support to determine whether the project is technically realistic and provides a rough order of magnitude of its complexity, resource requirements, and timing		
Strategic planning	Optional participant in determining strategic importance based on divisional or corporate intent.		

Since this is a cross-functional initiative, with a possible decision to move the opportunity to the next phase, each member of this small core team works together on the Opportunity Statement giving their input and recommendation. Each function should estimate the level of resources they believe their team could commit to the product from development through discontinuation. A full Functional Support Plan (FSP) isn't necessary (yet) because the opportunity is merely being evaluated, based on what is actually known by the participants in the evaluation.

Another key to rapid assessment relies on each small core team member's own storehouse of knowledge and expertise. Every functional representative must be able to discuss the opportunity and make a decision about it. If one member has to do a vast amount of new research before final discussion, it slows down the process, and the other participants will tire and lose impetus. Eventually they'll stop bothering to evaluate ideas. Team members' strong familiarity with the current products, industries, customers, and technologies will speed the process. Ask more experienced team members to produce drawings, sketches, models, user interface mock-ups, or anything else that can help the team better visualize the idea and the solution.

A given opportunity may be important enough to be classified as a single product "project," or it may represent several different projects. It's also possible that the opportunity may enhance (or inhibit) existing product activities. The dynamic mix of opportunities during planning has to be viewed as an "up-front portfolio" of opportunities. The faster the industry activity, and the faster the overall product life cycles, the more dynamic the up-front portfolio. This continually evolving up-front portfolio needs to be evaluated in light of the entire product portfolio, as depicted in Figure 11.2.

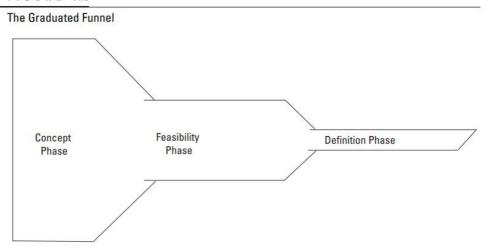


Underneath each product group are three boxes: products being planned, products being developed, and existing products. These three categories comprise the entire product portfolio.

Detailing the box called "Products Being Planned" is a representation of the three phases of product planning—a visualization of the winnowing process. Planning, for the product manager, amounts to evaluating a lot of opportunities and striving to find those few that demonstrate the best business and financial attributes for the company.

The flow of opportunities through the phases of product planning represents the dynamic product "pipeline" of new product projects. Even while you're evaluating new ideas, the speed with which product projects are moving through that pipeline must be carefully considered within the context of the entire product portfolio, not just your team's portfolio of new opportunities. In other words, even though you're still evaluating ideas, you have to look down the pipeline to see what else is "in process," and "in market."

Some call this activity "pipeline management" and it serves to govern the speed with which product projects can be considered. You can't push too much through the pipeline or there won't be enough resources to develop, launch, and eventually manage the products in the market. In the pharmaceutical industry, the pipeline is judged by industry and market analysts to determine the chance that the company will be able to introduce a blockbuster product. (Stock analysts refer to the drug company's "new product pipeline.") Figure 11.3 illustrates the common viewpoint that the number of opportunities shrinks as the process proceeds. Ultimately, budgets dictate that only a small number of incremental projects can actually be carried out. The progressive, graduated funneling visualization helps to make a connection. Even if you have 100 ideas, only two or three may end up coming out of the funnel.



The progressively narrowing or graduated funnel is the usual way product management and product development practitioners think of the planning process. When this is the only thing that product planners actually think about, then the business may be exposed to undue risk.

Think of the planning process as the on-ramp to a high-speed highway or motorway, and refer to Figure 11.4.

FIGURE 11.4

The Product Manager's Motorway

Products in the market in Decline (moving slowly)

Products in the market in Maturity (moderating growth)

Products in the market in Growth (moving quickly)

Products being readied for launch now (on the on-ramp)

Products in development – to be launched in the near future (Getting ready to enter the on-ramp)

Products being planned (looking for a place on the highway)

The traffic moving on the highway itself (at high speed) is

used as the representation of the existing products presently being supported in the marketplace—the existing product portfolio. The speed that products can move along on the "highway" is how the company's product capacity is determined. If there are too many products on the highway (in the market), then the products being launched or slated for launch may consume all the remaining available capacity. Therefore, when too many products are planned without consideration of what's already on the highway, a higher level of risk may impact the product and the reputation of the company.

As you contemplate new products or enhancements to existing products, your strategic thinking about the current situation of all the products in the market must get your full consideration. This is another reason product portfolio management is so important.

If several opportunities are going to be considered in the Concept phase, the team needs to present their findings to a product portfolio review board or similar group, staffed by a cross-functional group of senior managers or executives who have the authority to allocate investment money within the organization. A formal review session should be attended by key stakeholders on the product team, and these members should be prepared to defend the investment, or to recommend its rejection, especially if an executive sponsor had asked for the team to review the opportunity. The session may be brief, but presentations to executive portfolio groups are often mixed sessions where new opportunities are only one part of the agenda.

It is important to demonstrate to the review board that you have carefully thought out the opportunity within the context of market, customer targets, ability to develop, and financial viability. Concept reviews should represent your team's knowledge, experience, and efforts. You must display confidence

as you discuss opportunities that your team assessed. Ask directly (and with equal confidence) for money, resources, and time to do additional research to determine whether or not the opportunity is worth pursuing. Before going to the review board, make sure you have a Concept phase checklist (exemplified in Table 11.5).

Criteria	Yes	No
The idea has business merit.		
It has been tested for strategic fit.		
The market need is understood.		
The competitive situation is understood and seems viable.		
The technology seems adaptable and available.		
The financials have merit.		
The resources for the next two phases are available.		
The marketing group can carry out the research in Feasibility.		
The decision review is scheduled (on date).		
Approved for moving to the Feasibility phase?		

It will serve not only as a reminder to look at all business and technical issues prior to your review, but also to set the stage for a go or no-go decision. You want to answer one key question for the review board: Should the project be rejected or moved to the next phase?

Theme 12. ASSESSING FEASIBILITY

- 1. Finance functional support plan
- 2. Customer service functional support plan
- 3. Sales functional support plan
- 4. Operations functional support plan
- 5. Supply chain functional support plan
- 6. Resource planning and summarization

The Finance department's FSP is one of the most important because it describes the activities, functions, and tools that help the product team focus on financial viability and future product profitability. It also helps provide the linkage to other interconnected functions such as compliance, governance, and reporting to support the business of the product. The Finance FSP is primarily focused on providing economic evaluations, financial modeling, forecast support and tracking information for the product manager and the product team. Generally, Finance must be able to:

- Conduct economic and financial analysis for product investments.
- Make sure that product and market forecasts have the right sup- porting data and assumptions to ensure they are financially achievable, believable, and realistic.
- Provide support for Business Cases, including discount rates for net present value calculations, and other required financial standards.
- Set up the appropriate systems and tools to track and report on product financial performance.
- Set capital budgeting parameters for equipment, facilities, etc.
- Support the derivation of market-based pricing models working with Marketing and Product Management.
- Prepare financial statements used for the Business Case.
- Collaborate with the Supply Chain group (or procurement) and Development on the bill of materials so that cost of goods estimates can be formulated.
- Develop revenue and gross profit estimates based on pricing models, unit volume forecasts, and cost estimates.
- Establish contact with and prepare to provide input to the regulatory and reporting organization so that product financial data complies with all necessary standards.

The Customer Service FSP for a new or enhanced product describes the activities, responsibilities, and deliverables of the

Customer Service organization. Customer service may be a combination of order taking (which can be inbound sales over the phone, outbound telesales, or a combination of both) and service (which can be inbound complaints and problem handling and/or case management, or outbound service like following up on service quality and customer satisfaction surveys).

Currently, there is an increasing focus on customer interactions and the customer experience, which elevates the priority of customer service programs. Therefore, the Customer Service FSP should address the major issues and evolving trends related to servicing and supporting customers. The entire range of support channels should be considered: telephone, Internet, teller machines, kiosks, e-mail, and so on. The commitments of the Customer Service function should help the team:

- Determine what is actually needed to carry out support activities in terms of training and staffing based on required service levels.
- Ensure that customers can contact the company (inbound) to report problems or lodge service requests (case management or trouble handling).
- Estimate the combined inbound/outbound human resources that are required to support blended interactions and a variety of programs (e.g., up-sell, cross-sell programs).
- Confirm that systems and resources will be available so that customers can call in or log in to submit orders (usually in conjunction with IT or other systems organizations).
- Ascertain the feasibility of different interaction channels through which service, sales, or support might be provided.
- Verify that the supporting infrastructure can facilitate and measure the desired customer experiences.
 - Secure training from Marketing for Customer Service

personnel.

- Staff the contact center.
- Define necessary IT or operational systems availability and capacity for contact systems and Web infrastructure.

The Sales FSP is a highly important document because it paves the way for the product team to communicate and negotiate with Sales. Good product ideas will remain only product ideas unless the Sales team agrees to supply enough qualified people to sell the product. Sales also needs to bring to the table a willingness to be trained and a capacity to compensate salespeople for their efforts. Without these pieces of the selling puzzle in place, the product will probably fail to meet its business objectives. The Sales FSP can serve to minimize the risk of product failure because it enables the product team to secure commitments from the Sales team for items such as:

- Sales forecast estimates
- Market sizing validation—working with Marketing
- Sales operations activities
- Well-established relationships with the Human Resource department for alignment on compensation plans
- Partnerships with Marketing to ensure training is carried out at the right time
- Reporting on progress so the product team can monitor performance

The Operations FSP, especially during the product planning phases, serves as another integration document, because it may contain contributions originating from many organizations. Think of the operational infrastructure of a firm that enables everyone else, in every function, to be able to carry out their work. These areas might include:

1. Facilities

- a. Site management
- b. Building maintenance
- c. Laboratory setup
- d. Plant setup
- e. Equipment management
- 2. IT and its supporting systems such as:
- a. Customer ordering systems
- b. Billing systems
- c. Customer management or contact management systems
- d. Company Web site
- e. Accounting systems
- 3. Installation and maintenance
- 4. Field operations (repair, infrastructure surveillance)
- 5. Quality and productivity programs
- 6. Human Resource Management:
- a. Training and development
- b. Organizational development

Each subfunction in the operations department could provide an FSP, but not every department is a core team member. The most critical questions about Operations support are usually as follows:

- Can the product be set up in a system so that it can be ordered, billed, and posted to the right accounts?
- Can products be put into the electronic product catalogs and showcased on the company Web site?
- If installation is required, can installation and maintenance programs be put into place?
- Can related field operations and activities be carried out?

If the product requires components or materials that must be procured from outside suppliers or vendors, an FSP is needed from the supply chain team. This FSP describes the activities, responsibilities and deliverables that are needed to:

- Have a vendor selection methodology to support the product as needed.
- Be able to work with product development on designs and drawings and in the creation of bills of material for the product.
- Support the sourcing of product components or entire products from external suppliers.
- Collaborate on material logistics to ensure that the materials are available on time and that finished goods can be transported to and through distribution channels.
- Coordinate with Finance to make sure that vendor payment terms are agreeable and that monies will be available to pay vendors according to those terms.
- Carry out vendor negotiations on pricing—work with Finance to ensure that cost of goods can be captured.
- Work with Finance on standard or target costing programs.

During the product planning phases, each business function must provide documentation regarding the resources that are required to support the product in the next phase. This is an important determinant of whether or not a product project can be authorized to proceed to the next phase, or if it must be rejected. Recommended that each team put together a *Resource Estimate and Approval* document as part of their FSP input to the team. This is also a great tool to use when considering the ongoing management of existing products and for defining resources that should be used when the product is in the market (during Post-Launch Product Management).

After all Resource Estimate and Approval forms are collected, the product manager should have a snapshot view of all

resource commit-ments. Not only is this important for the current phase, but it could also capture subsequent phase estimates. A suggestion might be to use the *Product Team Resource Summary* form. By the way, this is a great tool for the product manager when providing summary reports to management.

The FSP is a great tool to establish the cadence for securing data from other team members, highlighting their commitments, determin- ing the dependencies, and identifying any risks. This approach gives team members a guide that tells them what they need to do, whom they work with, what they are responsible for, the time frame within which to work, and if there are any risks that may stand in the way of thiswork getting done. This also allows the product manager the opportu- nity to look at the bigger picture and act as the team's "quarterback." As it is, product managers have a heavy workload. If, in addition, they must fill in on jobs others are responsible for, important details could be missed and such oversights would likely jeopardize the success of the product.

Theme 13. DEFINING THE PRODUCT

- 1. Product definition documents
- 2. Managing requirements
- 3. Linking the product definition to "building" the product

4. The EXIT PLAN

Product Definition is not only the name of the phase, it is a guiding force in the product planning and development process. If the Business Case is one of the most important documents for product management, the product requirements are the bridge between the activities of product planning and the actual building or production of a sellable product.

The Business Case is the primary business document for product definition. The product description section of the Business Case should contain major elements from the product requirements. It should clearly reflect the research and findings carried out throughout the phases of product planning. The elements of the Business Case that directly influence the product definition include:

- 1. The degree to which the product is aligned with the strategy of the product line or business division within which the product is situated.
- 2. A solid understanding of customer needs, including the needs of users, influencers, and decision makers.
- 3. A clear perspective on the competitive environment and how the product will help the company to win in the market.
- 4. A recognition of the economic and regulatory environment and its impact on the product in its chosen markets.
- 5. Explicit positioning in the market and in relation to the competition.
- 6. Demonstration that the product's features and attributes were derived using structured qualitative and quantitative priori- tization within the context of customer needs and market requirements.
 - 7. Solid risk assessments and mitigation strategies.
- 8. A valid, balanced marketing mix model (product, pricing, pro- motion, and distribution).
- 9. Project resource availability to carry out the work in develop- ment and operational execution.
- 10. A committed cross-functional team that shares the vision and purpose for the product.

The product manager needs a systematic approach to shaping the product definition. The product requirements process is fairly well documented, especially for the technology industry.

The general steps in requirements management consist of the following:

- 1. Eliciting requirements,
- 2. Defining requirements,
- 3. Organizing documents, and
- 4. Managing requirements from beginning to end to assure that there is complete traceability.

A primary result of this effort is the creation of clear documentation that defines the functionality, features, and/or attributes of products.

There are two main types of requirements, both of which focus on the customer or user: functional requirements, and nonfunctional requirements. Functional requirements reflect the basic intent of the product, or "what it's supposed to do." Functional requirements are often articulated using the word shall. Nonfunctional requirements describe characteristics, properties, or qualities that the product "should" or "must" exhibit. These are sometimes called behaviors of the product, usually related to the product's desired characteristics, usability, or maintainability (and sometimes, per-formance).

As product definition evolves, the cross-functional team has to decide how the product will be "built." Building the product could mean soft- ware development, the actual manufacture or assembly of tangible products, procurement (external sourcing) and distribution, or staffing to deliver a service. More and more, products are being built beyond the four walls of your building—often in other countries. You may build the product in another location by your own company or you may have to have someone build it for you. Building in-house just might not be the right decision for a variety of factors, including cost, time, market proximity, supplier proximity, local regulations, or current

capacity.

Outsourcing is the word used when a function that may normally be carried out by your company in-house is actually carried out elsewhere by another party. Whatever the condition you and your team encounter, you have to be able to carry out a "make versus buy" or "build versus- buy" analysis. In the next section, I'll describe how to carry out a make versus buy outsourcing analysis.

When entrepreneurs start up new companies, they have a specific goal they want to achieve. When authors write novels, they build characters and a plot, and ultimately direct the story to a conclusion. When a product is conceived, it is envisioned to evolve across its own life cycle. Our Product Management Life Cycle Model is a representation of that holistic, beginning-to-end point of view for the product. During the phases of product planning, it is up to the product team to establish the market conditions that would trigger a decision to withdraw the product from the market.

The Product Definition phase is the keystone set in place by the product manager and the team because it marks the point between the plans being set in place, and the actions and activities that will bring the product to life. The idea, whether it was for a new product or an enhancement, made it into this phase because of its business and strategic merits. The work carried out during the Definition phase focuses on the remaining research and legwork used to finalize all of the necessary planning documentation, including the Business Case, the PRD, the Product Launch Plan, and the Marketing Plan for the product. This chapter focused specifically on the PRD and the Launch Plan with supporting activities such as make versus buy as well as setting up future life cycle states. All of these documents set the stage for developing and launching the product.

Theme 14. THE BUSINESS CASE

- 1. Characteristics of good business cases
- 2. Business case structure

At the outset, you should clearly understand that the Business Case alone is not a management accounting report or financial document. It seeks to qualitatively and quantitatively rationalize an investment, while considering elements of market needs, proposed solutions, and economic outcomes. It is based on varied assumptions about the current state of the market and possible future state scenarios. It also establishes a consistent paradigm for rationalizing investments across the product portfolio.

Business Cases must be believable. The executives who oversee the product portfolio have limited resources and, often, limited patience. If you and your team appear with incomplete Business Cases, poorly crafted assumption sets, erroneous forecasts, or wild, unsupport- able claims, you will probably not be asked back. Product managers must always think about building their credibility horizontally and ver- tically within the organization—and the Business Case is a primary tool for doing so.

Business Cases vary in size, scope, and level of effort, depending on the amount of investment and degree of risk involved. Business Cases should be sufficient to put the point across. They don't have to always be excessively long and verbose. Regardless of length, however, Business Cases usually undergo several iterations before you have just the right blend of information.

Business Cases absorb input from different people from the most appropriate cross-functional team members. Before you

begin the Business Case, ground rules for document sharing and version control methods should be agreed upon by the team building the case. The product team leader may assign a Business Case project owner, which may be the prod- uct manager or the product team leader. It is the responsibility of that team leader to maintain version control. By the way, all Business Cases should be archived in the Product Master Plan.

Business case structure

Cover Page

Every formal business document needs a cover page. A cover page iden- tifies the document (Business Case) and serves to communicate to the audience the name of the product, a project name (if needed), the names of the team members, a version number, a date, and anything else that may be helpful.

Executive Summary

The executive summary is used to capture the essence of the entire case in one or two pages. It describes the purpose of the case and sets up the formal investment request. It achieves this by summarizing the business and market environment, and describes how the customer's needs are being met. Furthermore, it presents the assumptions made, culminating in a high level financial profile. It is prepared as the final step, when the rest of the Business Case is complete.

Framing

Every good story needs a strong context, and this section of the Business Case is where you set the context for everything you want to say to man- agement. In fact, this is the perfect section to tell a story about what you've observed, what's happened that caught your interest, and why you're interested. This material allows the team to express two things: a chronology of events that led up to building the case, along with the over- all business situation; and a formal funding request that describes what is needed now, next year, and in subsequent years.

Business Need and/or Strategic Fit

The goal of this section is to describe how the product line or product portfolio will benefit from the investment. You should describe the opportunity based on the business or market need, and describe the dif- ferent alternatives that were considered when coming up with your approach. Most organizations focus on revenue improvement, cost sav- ings, and operational efficiency. These are usually structured as invest- ments that increase market share, improve customer satisfaction and loyalty, or improve efficiencies of the internal operational infrastructure.

Market Assessment

This section of the Business Case provides the context around which the case is built. Included are the data about the industry, the competition, the market segments on which the investment is focused, and the needs of the customers in those segments. This should be expressed in a way that shows a clear understanding of customer needs such that the investment can be defended to management. Additionally, this is where the market window may be discussed, namely, what market conditions abound that make this an important, timely investment. When does the market need the product or enhancement, and when is it right for the company to release the product?

One of the most useful documents for this purpose is the Product Requirements Document (PRD). Product requirements represent cus- tomer needs, competitors, technologies, and other standards that help shape the product's functionality and positioning in the market relative to the competition.

Project Proposal

The project proposal reflects the level of effort required to develop, launch, and manage the product in the market. The cross-functional team assembling the Business Case creates it.

Often, a project plan is cre- ated that focuses only on the work necessary to develop and launch the product. Consequently, many product investments fail to meet their tar- gets because they don't consider the investments required to support the product when it's in the market. There have been many instances in my work with companies where the "line of sight to the market" is not established, so the product fails.

Assumptions, Forecasts, and Financials

Scenarios are stories about the future. A variety of scenarios should be portrayed because the Business Case is essentially a well-thought-out story that proposes an investment that will impact the future of the busi- ness. Useful words for scenario building may start with, "What if ...?" As you develop your scenarios, each story may be changed, or altered slightly, to reflect adjustments in forecast volumes, pricing, costs, and expenses—that is, your assumptions about the future. For each scenario, change only one or two variables at a time, so that outcomes can be com- pared against a financial "base case." The variables that are usually changed in the Business Case center on pricing, volumes, costs of goods, cash flow projections (getting paid), selling cycles, the discount rate, and expenses by department.

Ultimately, the Business Case should demonstrate an incremental benefit to the business. After all, the investment is adding to the portfolio of products in some way. The Chief Financial Officer and your CEO are par- ticularly interested in the incremental portfolio impact, which is consid- ered in "before" and "after" scenarios. The before scenario is your base case. (Some people use the term "as-is" to describe the current situation). Think of the base case as business as usual: if you didn't make an investment, how would the business look now and into the future? To highlight your proposal, select a scenario

showing how the business would look in the future with more units, different prices, different market timing, and other variations that the forecast assumptions might suggest. (Some people use the term "to-be" to describe these future states.)

Theme 15. THE MARKETING PLAN FOR THE PRODUCT

- 1. The marketing plan for the product is a functional support plan
 - 2. Building a historical marketing profile
 - 3. The Marketing Mix: Strategies and Tactics

The Marketing Plan is nothing more than an FSP, from Marketing, for the product. What's most important for you to take away is that the Marketing Plan for the product, like any plan, sets up an outline for explicit marketing work activities that have to be carried out at various points along the product's life cycle.

Product teams use the Marketing Plan to map the product's pathway into the market. It describes a variety of investments that need to be made and sets up a marketing budget for the product, as well as metrics that can be used to compare actual performance in the most important areas of the plan.

The Marketing Plan is prepared in a collaborative manner between the designated representative from Marketing (or Product Marketing) and the product manager. Sometimes, the responsibility for the creation and management of the plan will end up in the hands of a product manager. At other times, some of the work will be carried out by a marketing man- ager or product marketing manager, or others who actually work in other subfunctions within the marketing department. By the way, in many companies, the product managers and marketing managers report to the same person.

To construct a Marketing Plan, you can begin your work by formulating a historical marketing program profile. You want to check what's already been done, from both inbound and outbound perspectives, as far back as reasonable. Your work on this is similar to organizing your data for strategic product planning. As the plan evolves, you will be turning to the various Marketing subfunctions whose input is necessary for the creation of a successful Marketing plan

The best way to begin the project is by delving into the various types of historical inbound data. There may be organizations within your com- pany that can help. However, in some cases, you may have to do a lot of the research yourself. Either way, the goal is to get the most complete background possible.

The Marketing Plan is only as valuable as the team's ability to carry out that which is articulated in the plan. In my experience, especially reviewing past Marketing Plans from some of my clients, only a small portion of the programs envisioned in the Marketing Plans is ever car- ried out. The typical Marketing Plan seems to be more of a wish list or things to think about doing, rather than an explicit road map for calcu- lated tactical marketing investments seeking a desired outcome. In order to be successful with your Marketing Plan, you cannot fall into this trap.

Many Marketing Mix models are based on the four P's: Product, Price, Promotion, and Place (or channel). These should be your control levers for marketing execution. This section of the plan should provide sufficient detail for management to be able to clearly and directly understand your planned activities in order to approve them. Many of these elements have been called out in the documentation evolved for the strategic plan for the product. Therefore, in addition to clarity and completeness, this part of the Marketing Plan should be consistent with that documentation.

Marketers today are determined to integrate many different types of marketing communication vehicles into a holistic program ("integrated marketing"). With this type of emphasis, the marketing mix may be thrown out of balance because the emphasis is on reaching a vast array of customer types through a plethora of methods (e.g., young mobile consumers using Internet-enabled portable devices).

With all mix forces vying for resources, it's important to remember to focus on the achievement of balance across and between all marketing mix elements.

Each Marketing Plan should have a good supply of back-up data, statistics, charts, and anything else that may serve to explain that which is communicated within each section of the plan. Sources should always be called out within the relevant area of the plan, with a reference to the page or sec- tion of the appendix where the source document can be found. The goal of these sections is twofold: they must call out any detailed evidence that proves or supports your recommendations; and these sections should absorb any material that seems too detailed for other sections of the plan. A few trips to other Marketing Plan reviews (at least, those that involve your management) will help you gauge the right level of detail for the main document and supporting material.

Theme 16. EXECUTION AND OVERSIGHT DURING PRODUCT DEVELOPMENT

- 1. The product manager as facilitator and partner
- 2. Product managers must understand execution
- 3. Managing project plans helps manage risk
- 4. Product testing

During Development, the relationship between the product manager and the Development function is especially important, because the people in Product Development, Quality Assurance, or Product Testing, and any other supporting function are vital to the successful creation of the product. Product managers walk a fine line in this relationship while they keep the Development team focused and on schedule. Simultaneously, the product manager must make sure that the product's progress is tracked against the Product Requirements Document (PRD), the Business Case, and any project plans that were established and approved.

You can imagine, then, that the product manager's relationship with Development goes beyond just teaming. The product manager must help the Development team finesse some of the aggravating issues and administrative trivia that may arise. For example, the prod- uct manager must make sure that the appropriate hand-offs take place at the right time. Did Development send the right bill of materials to Procurement and Cost Accounting on time? Did the hand-off take place between Development and Manufacturing? Is Logistics, or Shipping, or Fulfillment aware that a product is coming and are they ready to handle it?

Similarly, the product manager must manage external requirements that may impact development efforts. For example, the product manager must ensure that regulatory approvals/certifications for local or international product deployments get done in order to make sure that the prod- uct can be marketed, sold, and supported domestically or internationally. This might include the laboratory tests for electrical safety, financial product's regulatory compliance, food or pharmaceutical safety, type approval for communications equipment compliance, and others.

In short, the product manager must clearly understand

execution, which is about getting things done. If there were no conflicts, everything would be done as soon as possible, on time, and flawlessly. Once the dependencies for a given task have evaporated, two types of conflicts prevent immediate and swift action: conflicts of understanding, and conflicting agendas. Very often, both types of conflicts emerge during both Development and Launch, occurring between functions or even within one function. And the product manager must surface and deal with these conflicts right away— it's the only way to prevent them from throwing the project off track.

Many product managers lament that they are just managing projects most of the time. This may be true because product managers must follow up on the work (tasks) or projects of other people in different business functions. There is no way around this.

Whether you enjoy project management or find it tedious, the fact is that you should know something about it. Years of experience in managing projects has shown that well-structured project plans track development progress very well. Good project management is pivotal. Most project deliverables and results are only as good as the project plans themselves. Managing these work activities, deliverables, and dependencies—and relationships—has already been codified in a standard body of knowledge (described in the next paragraph). By implication, the product manager must know project management. Understand that the product manager doesn't always have to do active project management, but may have to play the role as needed. In some companies, there is a Program Management Office staffed by able project managers who are dedicated to teams. In other companies, another capable person can be assigned from a related business function.

One of the reasons that project management is so important

to prod- uct managers, especially during the phases of NPI, is because the quality of project management impacts the readiness of the product, based on all of the FSPs. Project management has a standard protocol and methodol- ogy defined by the Project Management Body of Knowledge or PMBOK® (pronounced "Pim-Bok"). It defines a project as "a temporary endeavor undertaken to create a unique product, service, or result."

The product manager and the team must verify that the product works, and will be built according to the product requirements. Making sure that the product actually works as designed is the function of testing. At this juncture, it is appropriate for the product manager to be involved in oversight of testing (to make sure it's being carried out), as well as do some actual testing to make sure that the functionality and features are actually working as planned. Every company has a variety of testing protocols as well, so make sure you're familiar with those. Knowing how important testing is in assessing the product's integrity, here are some of the types of testing situations or protocols you may encounter:

- Functional testing considers whether the product is actually doing what it is supposed to be doing. For example, if your company is building automated teller machines (ATMs), you might enter the amount on the ATM screen, press the enter button, and see whether the ATM gives you the right amount of cash. If it doesn't, then the ATM doesn't function as required.
- Use testing allows the product to be tested under the actual conditions for its usage. An employee of the company could be asked to use the prototype, or it could be tried out in a laboratory environment. Some critics of use testing say that it just delays the product introduction because it takes too much time.
 - User or customer interface testing is another key test.

User inter- faces could apply to anything from toys to electronic games to computer applications. How a user or customer interacts with the product to bring about the desired experience is the goal of this type of testing.

- Stress testing usually means that the product has to withstand certain conditions. It could include materials testing or just functional testing under severe conditions. At AT&T many years ago, public pay phones had to be tested to withstand severe temperature and weather extremes.
- Systems interface testing is important for products that are parts of larger systems or contain many subsystems. For example, IT systems may pass data between dissimilar systems, using compatible or standard formats. Extensive testing is required to ensure that the data isn't corrupted because of a faulty interface.
- Structural or material testing may be required for components or parts of products. Sometimes these tests are carried out by out-side companies. Product managers may not be involved directly with this type of testing, but it's useful to understand and plan for this activity.
- External testing and approvals were mentioned previously. Some products cannot be sold unless they comply with specific stan- dards as established by regulators. For example, electrical test- ing, fire safety testing, and a host of other approvals may be used.

The most important thing is to start very early in the development process. A certification not carried out in time to allow for potential rework or laboratory time availability can delay a launch by many months and put you at a competitive disadvantage.

Theme 17. INTRODUCING THE PRODUCT AND

ORCHESTRATING THE LAUNCH

- 1. Launch benchmarking outcomes
- 2. Synchronize your documentation (the business case, marketing plan, and launch plan)
- 3. Make sure distribution channels are able to sell and deliver the product

The most frequently seen issues related to product launches include:

- 1. A failure to establish clear market windows for the introduction of products.
- 2. Executive champions are not assigned to lead important launches. Even when they are assigned, they do not keep close enough tabs on the progress of the launch.
- 3. Launch plans are not synchronized with the Business Case or are not included in Marketing Plans.
- 4. Sales force and channel organizations do not have the capacity to sell the product, and, in many cases, do not have their compensation plans adjusted to encourage the sale of new products.
- 5. Sales and Marketing collateral is incomplete, inaccurate, or late.
- 6. Sales training is not carried out on a timely basis, or the training is not sufficient to equip salespeople to sell the product.
- 7. Operational systems and infrastructure elements within the busi- ness are not ready to support the launch, either because they are brought into the process too late, or are not sufficiently staffed.
 - 8. Launch metrics are missing, incomplete, or ignored.
 - 9. Product teams are reluctant to kill a product mid-

launch, even if that's obviously the right thing to do.

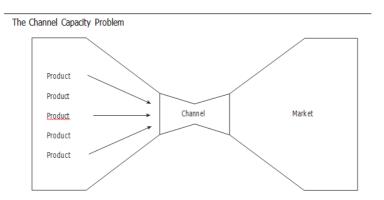
Just because these outcomes were identified does not mean that all companies did not carry out launches. In fact, most did, despite many challenges. The benchmarking suggested that even when some of these mistakes were made, products went on to be successful.

The Business Case, Marketing Plan, and Product Launch Plan must be carefully synchronized, and more importantly, they must remain in lockstep. If they don't offer all team members the chance to "sing off of the same song sheet," you may miss important details. As suggested earlier, the main documents often are assembled and owned by different people under a variety of conditions, using different assumptions. What is important is to make sure that you are all focusing on the same set of objectives. It is up to the product manager as the leader of the team to make sure that these documents are explicitly linked and the related work activities are integrated and synchronized. Ongoing team status meetings and a forum for communicating project plans, resources, deliverables, and dates will contribute to better launch outcomes and outstanding harmony between the teams.

The Business Case, which served to justify the investment in the product and its associated marketing expenditures, is the guiding docu- ment. The Marketing Plan for the product sets the tactical wheels in motion, and, as mentioned in Chapter 16, if a launch is to take place, the Launch Plan's elements will be included in the Marketing Plan for the product. Think of the Launch Plan as a project plan that lays out the tasks and activities to introduce the product to the market. When thought of in this way, the launch activities, along with other Functional Support Plans, are easier to isolate. All of these documents are housed in the Product Master Plan, so there is always an integrated plan of record for the product.

Sales and distribution channels must be able to sell and deliver the prod- uct. Often, too many products are simply pushed into retail and/or wholesale channels, and the channels often don't have the capacity to carry the product to the final destination. This can result in a lack of "shelf space" for the product with distributors, or a lack of real mind- share on the part of salespeople. This undesirable situation is referred to as a channel capacity problem, depicted in Figure 17.1.

The Channel Capacity Problem



The benchmarking results have shown that when capacity issues exist, forecast volumes are not realized within one or two months after the launch and sales volumes tend to be negligible. Worse, however, are the results of product portfolio reviews that show thousands of inactive stock- keeping units (SKUs) with virtually nonexistent inventory turnover for tangible products.

In many cases there is no intermediary between the product team and the channel organization, meaning there is no one to resolve capacity issues, even when they work for the same marketing executive. A channel capacity manager or similar job category, supervised by the product portfo- lio review board, would be a good way of minimizing this risk. Further- more, if the capacitance issue could be surfaced as a decision-making criterion earlier in the product planning process, some product invest-

ments might be curtailed. This would leave room for product investments thought of as having a greater probability of achieving success.

Introducing a product to the market involves a complex array of activities. The cross-functional team is supposed to grease the skids of the organization by making sure that the product can actually reach the market via the chosen distribution channel, and be sold by those who are believed to be able to sell it. In retail banking, for example, there are a host of deposit-oriented products, each with terms and conditions and new features that are supposed to stimulate demand. If the retail bank branches are short of staff, there is the likelihood that salespeople in the branch will not have the capacity to even read the internal product release notes, let alone effectively sell the product.

MODULE 4 CONTINUING THE JOURNEY: POST-LAUNCH PRODUCT MANAGEMENT

Theme 18. AUDITING RESULTS AFTER THE LAUNCH

- 1. Using an Impartial Auditor
- 2. Win-Loss Audits
- 3. Assembling a Report

The Post-Launch audit, like any financial or operational audit, should have an impartial auditor. This may seem difficult, but it can actually be a peer of the executive sponsor or even someone from the corporation's quality office or equivalent organization. It must be someone who understands processes, systems, and corporate methods. A formal report from the launch auditor should be the output of this process. As the product manager, you will want to work closely with the Post-Launch auditor so you know what to expect. You should serve as the guide to the

auditor, perhaps along with a Marketing counterpart (or whomever led the launch).

This auditor should use the actual Launch Plan as the baseline doc- ument. The first order of business on the auditor's list of things to do is to gather all the launch documentation, which would include project plans, FSPs, and anything else that explains the general structure of the work, timing, FSPs, project plans, and deliverables involved in the launch. The auditor will also want a list of everyone associated with the project who had major responsibilities (an organizational chart can be very helpful for this). The auditor will probably want to set up interviews with each of the major stakeholders to determine:

- 1. How each of them believes they performed.
- 2. How their organization is currently being impacted in relation to their actual agreed-upon commitments to the launch.

The auditor should review each function's project plans to make sure that they fulfilled their commitments, and understand what may or may not have happened.

First on the audit agenda is the market window. The market window should have been established at the time the Business Case was created (which is when the initial Launch Plan should have been assembled). This window may have represented the company's typical launch cycle, or the launch may have coincided with an announcement at a trade show or similar event. Whatever criteria and launch window were established, the window should have been chosen to garner maximum market reaction. The question is, did it? The audit may look at the prod- uct availability ratings in an automated system, in relation to the planned dates, in a format like the one shown in Table 18.1. Discussions about discrepancies (and lessons learned) should actually take place in the audit meeting.

Table 18.1

Audited Results: Market Window Compliance

Launch Activity	Plan	Actual	Variance and Reason		
Controlled	April 1	May 10	15-day delay due to incorrect logo on		
introduction date			packaging and delayed arrival of		
			instructional insert from the printer (because the Document Production department did not have this in their project		
			plan).		
General	July 15	September 5	Product defect in early deliveries was		
availability date			found in sourced component. QA never		
			checked the component because their		
			engineer left the company.		

In Table 18.1, the controlled introduction (CI) date was scheduled for April 1, but the product's packaging and instructional insert were not ready on time. In the 40 days between the planned CI and the actual introduction, valuable operating and product feedback was missed. The general availability didn't change at that point, apparently because no one noticed that there was a problem. In fact, there was a component problem that caused a delay of 1.5 months. In that time, valuable market momentum could have been lost.

Another key Launch Plan element deals with the existence of an executive champion, who should be identified in the Launch Plans. There is a real role for this sponsor in providing oversight to the launch project team, and in removing obstacles so that the team can carry out its work. Often, key decisions need to be made. If the executive in charge is not available, less than desirable consequences may result. In any Post-Launch audit, it is very clear when executive support is evident or lacking.

In Table 18.2, an audit of a specific activity within the launch sequence reveals that the sponsoring executive was needed

at a launch meeting to agree and sign off on a venue.

Table 18.2

Audited Results: Executive Sponsorship

Launch Activity	Plan	Actual	Variance and Reason
Decision on which venue to	February	March	Executive champion was not
use forthe launch ceremony	5	12	available for the event planning
and public announcement.			meetings due to previous
			commitments. The Marketing team
			did not have the authority to bind
			the company to the preferred
			venue and so lost the time slot and
			venue. Furthermore, the key
			industry analyst who was available
			only in the location was then
			committed by her company to
			another project.

The executive may have had another obligation, but there was a breakdown in communication that jeopardized the launch, resulting in a five-week delay in a decision. This, in turn, caused the loss of a favored venue and the support of a key industry analyst. All of these failures happened because the executive in charge may not have thought it was important enough to make the decision, and the appropriate emergency escalation paths were not put into place.

Another key area of focus during the launch audit is to make sure that sales training takes place in a timely fashion with the right materials. Sales training can be delivered through both formal and informal events, usually coordinated between product managers, marketers, and, often, engineers or developers. As Table 18.3 demonstrates, delays along the launch project pathway delayed sales training by a month in our example. In that month,

salespeople could have been learning more about the product, and could have been interacting with Product Management and/or Marketing to clarify questions and issues.

Table 18.3
Audited Results: Adequacy of Sales Training

Launch Activity	Plan	Actu al	Variance and Reason
Sales training—Eastern	To be carried out	June	The e-mail notice to the
region	betweenMay 10 and	12	head of the Easternregion
	May 20		went out on April 20
			instead of March 10.
			The brochures were not
			ready on time due
			to writing and publishing delays.
Sales training—Western	To be carried out	June	The product demos that
region	betweenMay 20 an	19	were supposed tobe
	May 30		delivered by
			Development were not
			ready until the first week
			of June. The developer in
			charge missed the second
			launch meeting and
			didn't send a delegate.

One of the reasons for the use of a cross-functional product team and FSPs is to make sure that the product can be inserted into the market, so that business can be transacted. The Operations FSP is a complex set of interrelated sub-plans that may include areas like Finance, IT, Human Resources, Methods, and other basic business functions. There are complex, interfunction interfaces that need to be maintained, especially if many different databases are located within different operating departments.

The Post-Launch audit should involve a concerted effort to understand all of these interdependencies, which should have been called out in the launch project plan. The auditor may need to interview and investigate each of these areas to isolate any breakdowns in communication, and also to accentuate positive activities that were completed, so that future Launch Plans (and Business Cases) can consider these organizational intricacies.

The internal audit for win-loss starts out with an understanding of what led up to the sales situation. The salesperson and his or her manager should be involved in describing the source of the lead and the people with whom the salesperson interacted. This serves to validate that they were working with the right customer and that they understood the motivations of that target customer type (buyer, decision maker, etc.). It also helps the product manager make sure the customer target is appropriately characterized. Additionally, the auditor reviews call reports or notes, which should have been documented, in the sales management or CRM (customer relationship management) system.

One of the most common problems in the internal sales audit is that salespeople don't always record their call notes or reports, so it's difficult to follow the audit trail. The other challenge is to sift through embellishments and potential exaggerations by the salesperson or sales manager, in terms of uncovering actual needs and whether the product actually was appropriate for the customer. Other sales process issues that should be addressed include a discussion of who the competitors were, what they were representing (if known), and how this may have been expressed in conversations with customers. Finally, the salesperson should be asked what he or she believed were the decisionmaking criteria for the sale (e.g., benefits, features, installation, service, pricing, references, brand image, and

customer's perception of the company, among others).

Once the internal interview and internal data elements are examined and summarized, an outreach to the customer is needed. The customer interview requires an impartial person to initiate contact, just to make sure that the right person is contacted—preferably, the decision maker. Although it may be considered an easy interview to arrange and carry out, it should be taken very seriously. This activity is like an act of diplomacy. Diplomats use formal protocols to interact with other diplomats.

The first step in the process is to send a letter or other communiqué to the decision maker (on company stationery). The author of the letter is another executive or an auditor. This may sound old-fashioned, but a letter sets the stage for the formality with which this should be carried out. Appropriate care is necessary even if there is a win, and even if you have a good relationship with the customer. Once the customer responds (via whatever mechanism you wishphone call, e-mail, or postal letter), suggest a formal agenda for the meeting. The meeting agenda should be documented and agreed upon in advance, including the duration of the meeting, topics that are off limits, a discussion of how the request for the proposal came about, who the bidders were, how they found out about your company's product, and the overall decision-making process. Another topic that should be on the agenda is the sales process, including the role of the salesperson, and his or her responsiveness, professionalism, and degree of understanding of the customer's business. Once the interview ground rules are established, the meeting is executed, with the auditor recording detailed notes and highlighting the most important points.

Theme 19. POST-LAUNCH PRODUCT MANAGEMENT: RUNNING THE BUSINESS

- 1. A Structure for Running the Business of the Product
- 2. Identifying the In-Market Life Cycle State of the Product
- 3. Leading the Cross-Functional Product Team
- 4. Recasting the Strategic Mix
- 5. Product Profitability and Financial Performance
- 6. Marketing Performance Management
- 7. Revising the Marketing Mix
- 8. Protecting the Brand
- 9. Integrity in Doing Business

In spite of the "field-expedient" nature of Post-Launch Product Management, we can structure the product as a business model into several sub-models, tools, and analytical techniques. Even though it isn't a pat process, the elements of this model do make better sense when considered as the following set of activities that product managers should be able to carry out:

- 1. Identifying the "in-market" life cycle state of the product, so you know where your product sits on the product life cycle curve.
- 2. Defining "what's happening now" with the product as a busi- ness, using a variety of scorecards. Scorekeeping runs as a powerful undercurrent to the business. Your measurement tools are shaped by the data derived from your ongoing review of finan- cial results, industry and competitive movements, operational performance indicators, and customer reactions to the product.
- 3. Influencing your cross-functional product team, as you lead its evolution into something akin to a small board of directors for the product. You will also learn about the importance of frequent product review meetings, replete with a standard agenda and a way to record the results of those sessions.

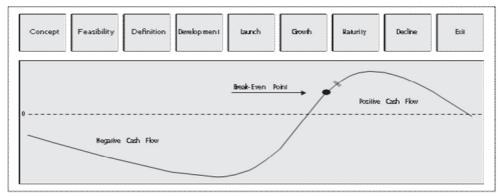
- 4. Recasting the strategic mix, which links life cycle position, score- keeping, and cross-functional team action planning, to a variety of new possibilities and actions. Strategic mix is an expression embody six business guideposts for running the product as a business. The strategic mix uses an acronym called PUMICE, which expands into the following categories:
 - a. Product profitability and financial performance.
- b. Unforgettable customer experiences to build or bolster the brand.
- c. Marketing performance management, which includes market adoption, marketing mix management, and branding activities in your chosen market areas.
- d. Integrity in doing business, because your reputation may be what sustains you in the long run.
- e. Customer loyalty, so that happy customers continue to buy your product and recommend you to others.
- f. Efficient operations, so that everything runs smoothly along the value delivery chain.

There are probably more measurements, conditional actions, and specific milestones that you can establish in your own Post-Launch envi ronment. In general, though, these four steps will give you a pretty good model for running your own product like your own business.

A product life cycle curve can be represented by either a product's revenue, gross profit, or cash flow across its entire life cycle. As shown in Figure 19.1, the cash flow curve suggests that during the Planning, Development, and Launch phases, the product is using up cash, but not generating any.

Figure 19.1

A General Product Life Cycle Curve

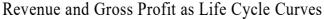


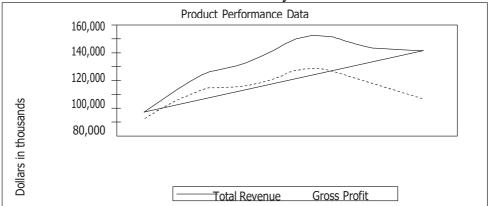
When a product is in the Growth phase, the cash flow is increasing at an increasing rate. It further depicts the fact that positive cash flow must "pay back" the initial investment, hence the "break-even point" notation on the curve.

Mature products, on the other hand, have revenue that is either increasing at a decreasing rate, or is relatively flat. There are some prod- ucts that can be mature for extended periods of time with stable revenue and predictable profit contributions. Some mature products can even contribute higher gross profits than they did earlier in the life cycle, mainly because of operational improvements to the business. Finally, Decline phase products have sales decreasing at an increasing rate with eroding profits and vanishing customer bases.

There are even more granular views you can take in characterizing a product based on sub-phases, such as early growth, middle growth, and late growth. It depends on how granular you want to get and the speed with which you need to respond to market signals each life cycle state. Each of these curves, either for planning purposes or showing actual performance, is the result of data points that are graphed and plotted. Every product has a unique set of characteristics and thus may have a curve that does not follow a standard shape. Each curve tells a story about the business of the product, and all of the data points collectively tell a more complete story.

Using these curves can be a little complex, though. Take the representation of two different curves depicted in Figure 19.2.





Notice that the revenue curve stays higher for a longer period of time and slopes down gradually, while the gross profit curve descends at a more rapid rate. A product manager who believes that sales are going up in year three is not wrong—if that's the only observation point.

As can be seen, though, by year three, the gross profit is already under pressure. Perhaps salespeople are discounting prices and pushing higher volumes, while raw material costs continue to soar. There could be a host of scenarios that might explain such data. The main point, though, is that the life cycle curve for a product in the market is not really one curve, but many that have to be assembled as a storyline. Even more importantly, that storyline needs to be put into perspective—a perspective provided by the original Business Case for the product.

Finally, when you pinpoint the product's correct life cycle state, you can choose the most appropriate investment strategies for the product. If you believe your product is really in the Growth phase, you will likely be investing in product improvements and promotional programs. However, if you misunderstand the product's life cycle state and invest heavily in a

mature product (that you believe is in growth), you probably won't reap the kinds of returns you're expecting, and you would also be using up valuable resources that could be applied to other endeavors. Once the product manager has a view of the product's place in the market, graphically portrayed, the team's efforts can be more effectively focused on the most appropriate future strategic options.

The cross-functional product team should remain in place across the entire life cycle, acting as a board of directors for the product. The team should manage the product as a business, according to agreed-upon roles and responsibilities, and as articulated in Functional Support Plans. The team should review the data regarding the product's market progress, uncover tactical alternatives or new strategic options, and decide on the best course of action. In essence, the team has to decide what's next, based on signals from the market and new data from within the organization, such as newly reprioritized projects, downsizing, or reorganizations.

The strategic mix incorporates strategic and tactical work categories that should be used by the product manager and the team to guide the prod- uct through the marketplace. Throughout this book I talk extensively about the marketing mix, with its component four Ps: product, pricing, promotion, and place or distribution channel. The Strategic Mix is a little different, because it encompasses the six categories mentioned earlier, using the acronym PUMICE, Recall that PUMICE stands for:

Product profitability and financial performance Unforgettable customer experiences
Marketing performance management
Integrity in doing business
Customer loyalty
Efficient operations

How the product performs financially and how it fares in the market deter- mines its overall success. Solid product financials focus on the achievement of planned revenue for the product, management of the cost of goods sold, and control of gross profit in relation to established plans. Aside from this fundamental set of indicators, devising future strategic mix options that result in higher levels of product profitability and market success can be very complex. In corporate finance, market analysts often talk about the quality of earnings. At the product level, financial quality is also important and gross profit seems to be the financial metric over which a team may have the most control.

There may be instances where a product's financial contribution is difficult to ascertain, due to its inclusion in a larger portfolio, needed by the company to maintain competitive parity. For example, banks cannot get rid of checking accounts, even though they are only marginally profitable. Some companies may not have discreet product financial data, but instead focus on the product line data. Outside of any accepted portfolio anomalies, the main point is that without solid financial data, a product's financial success cannot be determined.

Other than financial performance, market performance is the other major determinant of product success. Market performance indicators help us understand how well the product is performing based on market adoption, marketing mix effectiveness, and the brand images of company or product. The market is simply the place where the product is sold and bought, and thus is outside of the four walls of your company. What matters most is what happens in the market, because this provides an outside-in perspective, which allows the product manager and the team to have an appropriate set of market-oriented guideposts, such as those used when figuring out the current state of the business.

Successful market adoption of the product within the context of the Business Case or other annual business plans is determined by the following:

- The degree to which it is perceived as being different from other available products (how it's positioned).
- Whether its benefit is priced appropriately (the value proposition).
- The degree to which it is available (as in multiple channels versus a single channel).
- The amount of awareness that is built around the product (through advertising and promotion).
- The degree to which customers believe that service and support will be provided, should it be needed (either in the buying process or after the sale).
- The experience that is created when purchasing the product, using it, or obtaining service.
- The efficiency with which the business operations infrastructure supports the product.

Pricing strategies are incredibly important across the entire life cycle, since they are so visible to the customer. Pricing strategies change as products and markets mature. Pricing is the one way that customers validate that the product delivers the value or benefit provided by the product. This is where the value proposition is put to the test on a daily basis. Often, product managers, marketers, and salespeople fixate on prices because pricing is the most visible barometer of success. When the sales team says, "We lost that deal because our price was too high," it evokes one set of feelings, and when they say, "We won because our price was so low," you experience another, similar set of feelings. Incorrect pricing when a sale is easily made can leave a team wondering whether money was left on the table.

On the other side of the counter, pricing sets in motion a series of post-purchase analyses for the customer. After they purchase a product, customers actually have to own and/or operate it. Some of the truths about total value of ownership begin to settle in. Customers begin to ask, "Was it worth the price paid?" Products cost money to own and operate. Electronic gadgets require an endless supply of batteries. A new car may require higher insurance fees, premium fuel, frequent maintenance, and very expensive tires. A new software system may require annual maintenance fees, administrative overhead, training, and customization. All customers, at some point, may question the Business Case they constructed (on paper or in their heads) when they decided to buy the product.

Market-oriented pricing strategies must be revisited across the product's life cycle. Market pricing strategies are the antithesis to traditional, inefficient, cost-plus models. Cost-plus pricing is invariably dangerous because it disregards the most important variable of all—that of volume or quantity. The impact of cost-plus pricing can be highly positive or highly negative, depending on the base assumptions and the outcome.

Just about every product manager works in a company. The company operates within a market area with local offices, people who live in the community, and officers who represent the company in industry circles and to financial analysts. History shows us that some companies go astray because they don't always report accurate financials, have complacent boards, or tolerate other sloppy governance. The mission state ment of the company is usually a great place to learn about what it stands for. If all the gears are synchronized, then the reputation of the company can be built on its brand image, stature in the community, or other values that permeate its hallways and beat in the hearts of its employees. If not, the company will be viewed as

lacking integrity.

Integrity in business dealings is what all employees in a company should practice and maintain based on codes of ethical business methods. This might mean using quality components or materials in products so that they are safe; fair and equal treatment of people in the company; or fair business standards with customers, suppliers, and partners. Product managers must demonstrate the highest level of integrity. Even if they are not responsible for running the company, they are still responsible for running the business of the product.

Theme 20. LIFE CYCLE PRODUCT PORTFOLIO MANAGEMENT

- 1. What Is Life Cycle Product Portfolio Management?
- 2. A Portfolio Reference Model
- 3. The Ideal Work Structure for Product Portfolio Management
- 4. Product Projects in New Product Introduction
- 5. Products Being Planned
- 6. Portfolio Decision Making

Managing a portfolio of products is no different from managing an investment portfolio. Products are simply investments made by the company. Good management of your product portfolio requires close oversight, constant review of historical and current performance, and the courage to rebalance and rationalize the portfolio when necessary while aligning your actions with the overall strategy of the firm. Whether you're managing a small product line or commanding several product categories that go across the firm, you must decide how to

allocate limited funds across many possible product investments.

Life cycle product portfolio management is an ongoing, multi-dimensional, multi-phase, decision-making methodology that allows a business to achieve strategic, market, financial, and operational balance across each and every product in an organization, across all life cycle phases. Embedded in that definition are the most important messages about life cycle product portfolio management:

- 1. Ongoing. Product portfolios should not be analyzed just once a year, or just when things break. They must be analyzed frequently enough to fine tune the mix of investments at the speed of the market.
- 2. Multidimensional. Solid business management practices always consider many strategic market factors, as well as a variety of internal factors (e.g., core competencies or technologies) at the product line, group, division, and corporate levels.
- 3. Multiphased. A comprehensive view of the portfolio considers all products across the entire life cycle. This includes opportunities being analyzed (new product projects being planned), products being developed, products being launched, and products that are being sold in the market.
- 4. Decision-making methodology. Best-in-class Product Management practices ensure that you make the best possible strategic and financial decisions, even when allocating investments across the entire portfolio of products.
- 5. Achieving balance. A diverse product portfolio balances investments by considering how much is being invested in every product, across its life cycle, considering the risks associated with each of those investments.

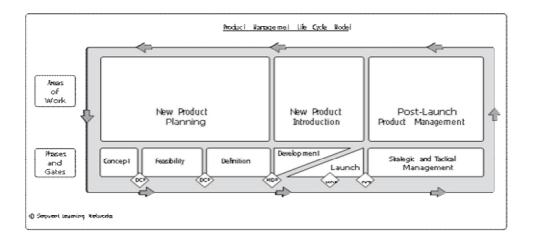
In the world of finance, an investment portfolio is composed of the number and type of securities held in an account.

Most people know the three rules of investing money: "Diversify, diversify, diversify." Say what you will, a diversified mix of investments is critical to achieving portfolio balance, within the context of the investor's goals and individual tolerance for risk. If you were an investor, and you had a portfolio of financial instruments (stocks, bonds, mutual funds, etc.), you would probably want to examine that investment portfolio on a fairly frequent basis. Human nature even has us looking more often when times are good and the portfolio is growing. Conversely, we tend to "cover our eyes" and not look as often when the markets are not doing well. Most financial planners suggest that investors take a look at their portfolios once or twice a year and see how well the portfolio is performing against the goals they established. At that time, you would re-balance the port- folio by selling underperforming investments, possibly taking some profits, and reinvesting in other, more promising areas.

The Product Management Life Cycle Model (PMLCM), shown in Figure 20.1, is not only used as a reference for individual products. As it turns out, it is a true reference model for the entire product portfolio.

Figure 20.1

Product Management Life Cycle Model



The PMLCM sets the stage for dissecting the portfolio into its requi- site elements, so that each piece can be assessed. The areas of work serve as a good way to take a first cut at dividing up the portfolio into chunks, which I call "meta-buckets."

Compared with the initial PMLCM, the first difference you will notice involves the size and configuration of the areas of work or meta-buckets. In this model, Post-Launch Product Management is represented as bigger than all of the other work areas and New Product Planning is represented as smaller (although still slightly larger than New Product Introduction). New Product Introduction is represented as smaller because the number of products (in various phases of development or introduction) may be smaller than in the other areas of work.

Another difference in this model variant is that it shows smaller boxes, seemingly arranged in a linear manner. This gives us three meta-buckets and nine total product buckets.

The meta-buckets include the following:

New Product Planning serves to distill many ideas for new prod- ucts or enhancements to a small number of "product projects" that have the best chance of achieving market success. There is a constant stream of activity as new ideas

continually flow through the system, each supposedly better than the next, vying for scarce financial and human resources. Product projects in this bucket absorb resources; they do not contribute any money to the company.

- New Product Introduction covers the development and launch of new products or enhancements. For portfolio management purposes, I like to think about this as "work in progress." This means that the company has decided to invest financial and human resources in developing those enhancements or new products and is readying them for market. Products in develop-ment or being launched also absorb resources and do not contribute any money to the company.
- Post-Launch Product Management refers to the products that are in the market in various phases, characterized by market position, revenue, and profit contribution (or lack thereof) to the business. Current products usually contribute positive cash flow to the business to finance operations and pay salaries. They also provide money for reinvestment so that the business can grow.

Now that you have had a high-level glimpse of the type of product and project analyses and status information that needs to be brought in front of the product portfolio review board, what's next? Portfolio decisions are made based on the careful analysis of the current situation, and based on what needs to be done to help the organization achieve its strategic objectives. Decision options can be categorized by posing questions and considering outcomes:

- Should products in development be canceled?
- Should a mature product be revived?
- Should we focus on investments to increase market share?
 - Should we invest in a more diverse set of products so

that we minimize our exposure to risk in a given product category?

- Should we invest in improving the product's name recognition in a limited geography?
 - Should we invest in cost cutting for a product line?
- Should we invest in other marketing mix elements, new distributtion channels, or more advertising and promotion?
 - Should some products be discontinued?

When people are evaluating their financial investments, they ask three questions: Should we buy? Should we sell? or Should we hold? These are the decisions that the portfolio review board must consider.

The helpful evaluative methods that serve as a good balance to weighted decision matrices may include:

- Financial measurements, which might include the anticipated return on investment (ROI) for the product, or the current ROI. Products can be ranked by the financial resources used and returns provided to the firm.
- Basic checklists, such as whether or not a product meets certain criteria. For example, "Is the product uniquely positioned in the market?" A yes or no answer is needed. The board will then tend to respond positively to the number of yes responses.
- Decision trees can also be used, to determine the other possible outcomes that might emerge—or other decisions that might have to be made if one path is chosen over another.

In order to make progress, product portfolio decisions must be made. If the appropriate go/no-go decisions are not made, then products will proliferate and the portfolio will remain out of balance, exposing the organization to unwelcome competitive attacks.

For the product portfolio review board's product line

reviews to be viable and effective, there must be ready access to detailed project and product data. The most efficient way to get this data is through standard corporate financial and other "back office" systems. Complementary data sources might also include sales pipeline data and quotas. These will help the review board visualize the kind of business that may be coming into the company. This view may, in turn, help the board weight some of the decision criteria that will be scored to determine the best possible avenues for product investments.

Ultimately, the product review board is there to take action. How- ever, even when equipped with the right tools and data, the board often fails to make the most appropriate decisions. Some boards allocate money to projects that don't perform, but then don't terminate the projects when they discover these are problems. Other boards don't allocate money to products for needed improvements. Many get lured into rosy, 30 percent growth rate projects, and then get disappointed later because those returns are not realized. The point is this: even with data, product portfolio decision making can be difficult.

Theme 21. DISCONTINUING THE PRODUCT

- 1. Barriers to Discontinuation
- 2. The Discontinuation Decision
- 3. Product Discontinuation Documentation
- 4. Other Types of "Discontinuation"
- 5. Sample Discontinuation Notice

For some reason, this natural conclusion to the life of a product seems to be a major challenge for many firms. Product and portfolio managers don't take product discontinuation seriously, nor do they typically make it an important part of product life cycle management decision options, apparently

because they:

- 1. Don't pay close enough attention to the financials or market performance indicators.
- 2. Aren't attuned to this part of Product Management or may think the responsibility belongs elsewhere.
- 3. Feel that if they lead the exit, they'll lose their job, and that others in the organization will lose their jobs as well.
- 4. Feel that the up-front investments have already been spent. Why bother removing it from the market if it doesn't cost anything to keep it there? You might hear, "Who knows, maybe someone will order one."

If good life cycle product portfolio management provides for the investment in a steady stream of products across all phases of the life cycle, then it should stand to reason that the portfolio management process should actively consider discontinuation, not prevent it. If we get past the psychological factors for avoiding discontinuation and adopt a controlled exit process as a best practice for Product Management, per- haps we can look at product discontinuation as a logical conclusion to the product's life.

First of all, product discontinuation does not just happen because customers stop buying the product, although lack of sales is a good reason to discontinue one. Product discontinuation is part of the normal portfolio evaluation cycle. The life cycle product portfolio management process recommends evaluation of all of the products in the portfolio. The approach defines which products are currently in the market, what is being primed for launch, what product projects are in development, and which product projects are in various planning phases. Second, product discontinuation doesn't occur on a given date. Just like the launch that phases the product out of the market, the discontinuation process phases the product out of the market. You can't just pack

up your tent and go home. Since discontinuing products is a natural part of the life cycle, it's worthwhile to explore the decisions and processes for doing so.

The discontinuation decision process (versus the actual decision itself) should not be difficult to initiate, especially if end-of-life signals have been pulsing onto the cross-functional team's radar for some time. With due diligence, the product team should have noticed explicit, Decline phase indicators. Understand that sales don't just automatically drop off the chart, unless you're selling some style-oriented or fad product. A number of signals point to a product's readiness for discontinuation:

- The product is no longer strategically viable or valuable to the firm.
- Sales volumes and revenue are declining rapidly, or have evaporated.
 - Market share of your product is falling precipitously.
- Customers have been encouraged to switch to another product that your company sells.
- Customers have switched to a competitor's product that is less expensive or more attractive.
- Production or maintenance costs are escalating and the product is losing money.
- Team members are disinterested and unmotivated by a sinking product.
 - Salespeople aren't willing to sell the product.

Even though, in the past, there may have been some reticence on behalf of the product manager to bring up the topic with management, these signals tell you the time is right to take action.

In order to appropriately structure the necessary decision making, a for- mal decision document should be created. This document tells the life story of the product, describing why it's probably time for it to enter the retirement phase of its life cycle. This document is called a Product Discontinuation Document (PDD).

The PDD is organized around building a case for the discontinuation of a product and its withdrawal from the market. The PDD describes the roles, responsibilities, and necessary communications among stakeholders within the company, as well as communication plans to reach customers, suppliers, and partners outside the firm. It is also an important document that describes the existing contractual relationships that the company may have with those customers, suppliers, or partners. For example, if there are multi-year withdrawal provisions in contracts with certain customers, those liabilities need to be surfaced, funded, and managed. Ultimately, the PDD becomes a formal means for cross-functional product team members to understand their roles and responsibilities throughout the discontinua- tion and market withdrawal process.

For example, the following types of strategies are often considered for discontinuation:

- A company might outsource the labor force for a product or sell off the product to another company.
- There may be intellectual property rights or patents that may be of value, and those can be sold as well.
- For products significant enough to be small companies by them- selves, a management group from inside the company (or even a separate outside company) might purchase the product as a business and set up its own operation with the product and the customer base. Just because a product doesn't make strategic or financial sense to one company doesn't mean it won't make sense to another.

Finally, sometimes a truly undesirable situation arises where a product becomes harmful or unsafe and requires a

complete discontinuation and market withdrawal. In this case, the most important thing to do is to figure out how to mobilize quickly and bring all the products back to the company for disposal. Rapid discontinuation and recalls don't qualify for formal product discontinuation case studies. However, if you work in an industry where a recall is a possibility, emergency procedures should be documented so that if the situation arises, the organization knows how to mobilize and deal with operational and logistics issues and, of course, the public relations and other controlled communications to the market.

The initial decision to create a product is guided by a Business Case, which justifies the investment and describes how the product should perform in the market. Just like a Business Case is used to invest, a formal method, along with clearly thought out documentation is required to disinvest. Just like the launch was shown as a gradual ramp- up to the market, when a product is discontinued, there is a gradual ramp-down. This ramp-down allows customers to migrate to other replacement products or make other arrangements. It also allows you the opportunity to put whatever sustaining infrastructure in place to support the ramp-down, including the procurement of spare parts, service staff, or other extended support activities required to fulfill the company's obligations to customers and to ensure that the company's brand is fully protected.

RAISING PRODUCT MANAGEMENT EXPERIENCE QUOTIENT (Practical Advice):

- 1. If you are new to Product Management or are considering a job in Product Management, visit the human resources department and ask them for some current product manager job descriptions. By reviewing them, you can recognize the kinds of tasks that product managers carry out in your company. This might help you devise some of your own professional development work.
- 2. A helpful method to learn about product management in your company is to have an information-sharing discussion with a senior member within the product management organization. Seeking out people and asking them about their career progres- sion and how they gained experience along their career journeys will also give you a more interesting perspective on this job category. Further to this, ask to see an organization chart to see how Product Management is set up in the company.
- 3. If you're already a product manager, you have at least one prod- uct for which you are responsible. That product (hopefully) solves a unique customer problem. From time to time, you should be able to verify that the product actually does solve a customer's problem and that the product carries a differential advantage in the marketplace. It may help you to reflect or reevaluate some of the foundations on which your product was built, such as:
 - a. The unique customer problem it helps to solve,
 - b. The type of customer who has this problem, and
- c. The reasons these customers choose your product over a competitor's.
- 4. Within your company or division, there will be some relation- ships or connections between products. There could be

shared platform elements, technologies, or components. Understanding these connections and documenting them in a visual way has value by helping you recognize a variety of factors that might influence your product. One idea would be to find out about the existence of product, product line, and product portfolio dia- grams, as shown in samples throughout this chapter. If they don't exist, you might try to draw them yourself using a variety of resources such as your company's Web site, and by visiting the product managers or who are responsible for those products to have them help you with those drawings.

5. If there are any true "solutions" sold by your company, perhaps you can learn about these in your discussions with Product Man- agement leaders, marketing leaders, or perhaps in a professional services department in the company. Try to learn about how these solutions solve bigger customer problems and ask if you

can review any real case studies related to how these solutions really did solve customers' problems.

- 6. What type of thought or technical leadership does your company exhibit? Are there any documents or resources you can explore to help you learn about your company's distinctive advantage?
- 7. Your company may employ platforms, or may have the opportunity to develop them. You can learn more about these product platforms by finding out if there is a platform organization. If there is, it is usually a chief platform architect or an equivalent group of people who have this responsibility. Visit these architects and have them describe the major platform elements as they are shared across product lines. This is critical if you are going to be creating product requirements when you will need to rely on your ability to clarify systemic dependencies and

interfaces. Additional work you might want to carry out in this area could be:

- a. Secure documentation to describe how the platform supports (or will support) current or future products.
- b. Review key drawings and documentation. Learn how the platform interfaces with the products. Learn if there are specific interface rules when defining products and writing requirements.
- c. Find out who, in your product development organization, is responsible for coordinating and testing interfaces with the platform group.
- d. Find out the process for making suggestions to the platform group to influence their evolution.
- 8. Find out about the product development process used in your organization. Get as much information and documentation as you can to learn about the terminology, documents, and protocols for planning, development, launching, and ongoing management of products. You can learn about this by working with a variety of people in Product Management and product development. Be sure you don't look at the development process from only the perspective of the Product Development department. Remember their functional process interlocks with the overall product development process.
- 9. Start now to create your own Product Master Plan binder. You won't be able to complete it in an afternoon. Rather, you can set up the outline for the documents you wish to create based on the list provided earlier in this chapter. If you can find any current or historical documentation, print it and place it in the binder.
- 10. Since much of your work is done while collaborating with others, consider putting a list together with the names and contact infor- mation of all cross-functional team members.

Include their man- agers as well. This should be inserted into the first "tab" of the binder titled "Team Contacts."

- 11. Whether your cross-functional team is official or transient, try to find any documentation that demonstrates how teams committed to the work of the product. Try to understand the structure of the current relationships and commitments between the various organizations that support success of your product. This can be achieved by talking to people who work in different business functions.
- 12. Make an appointment with your financial representative, or some- one from your finance department, who can help you understand the format and structure of your product financial statements. Find out how frequently they are produced so that you can have the most up-to-date financial data about your product.
- 13. Ask a financial manager to attend your product team meeting to explain the financial tools used by the organization so that you're all speaking the same financial language inside your company.
- 14. Begin working with your financial representative to help ana-lyze variances in the product P&L. Understand the steps that take you from perceiving the variance and asking the question, "What happened?" That will take you to a place where you are better able to either carry out the investigation, or to work with your financial team member to discover the cause of the variance.
- 15. Work with your management during the annual budgeting and planning process. Help define, or at least understand, the assumptions to be used in the creation of product budgets.
- 16. Identify the top metrics most appropriate for your product where they rely on financial inputs. As mentioned in this

chap- ter, use gross profit, an expense to revenue ratio, inventory turnover, or other financial analysis tools as may be required for your organization. Use these metrics as part of the product reporting or read-out regimen.

- 17. Set up a monthly status session for your crossfunctional team, or an even broader representation of team members where you "go through the numbers" so that everyone knows what's hap-pening with the business. Describe the positive contributions as well as the challenges where they are indicated by numbers that are below plan.
- 18. Create a visual, historic gallery of your product or product line. Use pictures or just text boxes or diagrams (if you have intangi- ble products). Call this the "retrospective visual product roadmap."
- 19. Generate a list of industry and trade periodicals and analyst organizations that are the most relevant for your organization or product line. To find out what exists, talk to as many people as possible in Marketing, Sales, R&D/Engineering, and anyone else you may learn about who might have this information. Subscribe to as many of these industry, trade, and analytical publications as you can. Some of these publications will respond favorably to requests for complementary subscriptions. Furthermore, every publisher is expanding their digital media distribution, so ask if you can be allowed complementary access. Use your funds wisely when you do have to pay.
- 20. Subscribe to every internal and external news feed or information summary service in the relevant areas covered by your products. Scan them frequently.
- 21. Create a magazine rack (or equivalent) outside of your office or in your war room, with all the publications you have secured. This will act as a reference library. People in the organization will take notice of these "leadership" indicators.

- 22. If there is a corporate information library or electronic repository, visit it often. Incorporate what you learn into periodic team reviews.
- 23. Every month or so, or as often as practical, invite your team members to an informal market review session. This means you have to actually put together a 15- to 30-minute presentation. The best time is before the workday starts or at lunch time. Bring food. The object is for you to share the latest industry and competitive news and to announce any major wins or losses. You'll quickly find that when meeting with the attendees, some of them may have read or heard about things you were not yet aware of. Be sure you record what you heard and keep copies of all the items discussed in your Product Master Plan binder.
- 24. Prepare a detailed industry and competitive analysis report. Keep it updated as often as needed (depending on the speed of product life cycles in your industry). You will find that when you are called upon to prepare a document, decide on a feature trade- off, or make a presentation, you'll always have one "ready to go."
- 25. Establish a contact in your Competitive Intelligence group and ask them to notify you when new content is available. Follow up by calling him or her every month or two to be updated on what's been happening.
- 26. Join a trade association for the industry in which you work. Attend conferences and expositions where you can view competitors' product information or attend where they may be giving a speech. Networking at these events is vital. You can glean a surprising amount of information.
- 27. When attending trade or industry conferences, be sure to write up a synopsis of what you found or learned, and share it with members of your cross-functional team as well as with your peers. When you attend a conference, you are the eyes

and ears for others, too.

- 28. Reach out to your Industry and Competitive Research organiza- tion, if one exists. Find out what they do and what their sources of information are. Perhaps you can encourage experts on the corporate staff who may be involved in corporate development or corporate strategy to talk to your product team from time to time to share some of their findings and observations—and some of their strategic plans.
- 29. If you have never done a forecast before, talk to your manager or peers to learn about the forecasting activities that have been car- ried out within your organization.
- 30. Collect some of the forecast data and outcomes. Find out how well the forecasts have fared against the actual performance, and what analyses were carried out to determine the cause of any variances.
- 31. Find out about the forecasting cycle in your company. What kinds of forecasts are product managers responsible for, and when do they work on these forecasts?
- 32. Work with other product managers to describe the techniques they use for product forecasts. What exactly did they forecast? Who did they work with? How did they arrive at the final numbers?
- 33. There are usually corporate economists or others in corporate level positions who are responsible for corporate forecasting. Try to introduce yourself to them and ask if they would be kind enough to explain their forecasting methods to you. Ask them about the data they incorporate and any models they might use.
- 34. If your company has a Demand Planning department, make sure you know how they do what they do, when they do it, and with whom they work. You will learn much from people who also work in Manufacturing, Procurement, and other vital areas.

- 35. As you improve your forecasting proficiency, begin to fine-tune your efforts in terms of establishing sets of assumptions for upcoming work, which might include a Business Case or a budget. As you improve your assumption formulation skills, you will begin to find it easier to draw conclusions. You will also develop a more astute approach to understanding risk, and hence, be more aware during future-state scenario planning.
- 36. Try to get a copy of your company's New Product Development (NPD) process documentation and try to align what was dis-cussed in this chapter with what happens in your company. What is similar? What is different? What are the standard documents called (e.g., Opportunity Statement)?
- 37. What is the equivalent executive group that makes decisions about allocations of money and resources for new product investments?
- 38. Is there a formal review process? Is there an opportunity for you to observe an idea review session?
- 39. What do you do with your product ideas? Find out if there is an idea repository or an equivalent storehouse of ideas or opportunities. Who is responsible for working through those ideas?
- 40. Do some research on how to carry out an ideation session and try it in your company with a small group of people with whom you work.
- 41. Try to carry out a lunchtime opportunity review session with a couple of people—one from Engineering and one from Marketing—to see if you could work through an Opportunity Statement.
- 42. Observe and/or participate in several opportunity review sessions.
- 43. For your product or for the product line group you work in, try to map out an up-front portfolio and lay out the

"product manager's motorway."

- 44. Choose an existing product in your company with which you are most familiar, preferably one that has several versions or models. Compare the features across versions/models and try to determine how much one product release varies from another. Try to determine whether the release is brand new or is a grouping of enhancements. You can then try to learn about the history of the release or new model by talking to the product manager who brought it about.
- 45. Construct a value proposition for an existing product in the product line group in which you work. Try to determine if it is complete within the context of what was discussed in this chapter. Is it aligned methodologically? How would you change it if you needed to?

GLOSSARY

Advisory (cross-functional) product team member—A cross-functional product team member providing consultative support on an as-needed basis. Advisory team members may come from Legal, Regulatory, Gover- nance, or similar functions.

Assumption—When used in a Business Case, forecast, or other planning document, an assumption is a statement that relates to a potential future state or future situation.

Attainable market share—The market share you could potentially, or realistically achieve (attain) in volume and/or revenue.

Balance Sheet—A financial statement that provides a snapshot of a com- pany's overall financial health. The Balance Sheet is composed of assets, liabilities, and owner's equity (or net worth).

Barrier to entry—A condition that exists in a market that makes it difficult for another business to establish a foothold. A barrier can include intense competition, governmental regulation, a shortage of skilled labor, or other obstacles.

Base case—When creating a Business Case, the base case is the starting point. The base case represents the current business as usual situation. A base case allows for other investment assumptions to be evaluated and then compared with the base case.

Capacity Management—Used in this book, capacity management refers to the ability of a distribution channel to be able to take the product from its source, and deliver it to the intended customer. A lack of capacity in this case means that there are usually too many products that need to be sold and delivered, but there aren't enough capable resources.

Functional Support Plan (FSP)—A major document used by members of a business function that describes the activities, deliverables, budgets, dependencies, and schedules for that business function to members of a cross-functional product team, on behalf of a product, across the entire life cycle of the product. The FSP is a major building block of the Product Master Plan.

In-market—An expression that refers to products currently being sold in the market.

Innovation—Refers to the solving of a customer or market problem in a way that is more unique than anything else that exists in the market. The solution can include either a radical or incremental change to a product or service.

Line extension—A product that is added to an existing product line either as a newer version or derivative of a current product.

Logistics—The activities involved with controlling the movement of goods through a supply chain, from the point of origin to the point of delivery through designated distribution channels.

Major decision point—During the phases of New Product Planning and New Product Introduction, major decisions are made that involve the commitment of financial and human resources for a subsequent phase. Alternatively, the major decision could be to discontinue any additional expenditure on the product idea.

Make versus buy analysis—A structured analytical technique used to determine the optimal manner in which to produce a product. The alter- natives include developing and building the product in-house versus having the product developed by another company.

Market analysis—The activity involved in translating data gathered from market research to yield information on which product and marketing decisions can be made.

Market attractiveness—The appeal of a market area based

on the cus- tomer types in that market area or market segment. Furthermore, an

attractive market can be identified by the ease of access (limited com- petitive activity).

Market focus—A strategic orientation of an organization or product team that holistically considers the dimensions of the industry, the dynamics of the competitive environment, and customers' needs in determining the appropriate product portfolio investments.

Market penetration—The degree to which a product is being sold in a given market area. Higher penetration means that more people in a cur- rently pursued market area are purchasing the product, or that the product is being sold in other market areas.

Market pricing—Pricing strategies that consider customer needs, the value proposition, strength of the brand, and other market forces.

Market research—The formal and informal methods used to learn about the industry, competitors, and customers, enabling an organiza- tion or product team to achieve the optimal market focus. Also the activ- ities related to the systematic, ongoing efforts aimed at gathering and capturing data about industries, competitors, and customers.

Market segment—A group of customers (or potential customers) that share common needs or buying behaviors.

Market segmentation—The classification method that helps product managers identify customer types based on specific categories such as common needs or similar buying behaviors

Market share—The amount of market demand that can be captured by a product or product line. Market share is expressed as a percentage of the total addressable market (TAM).

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