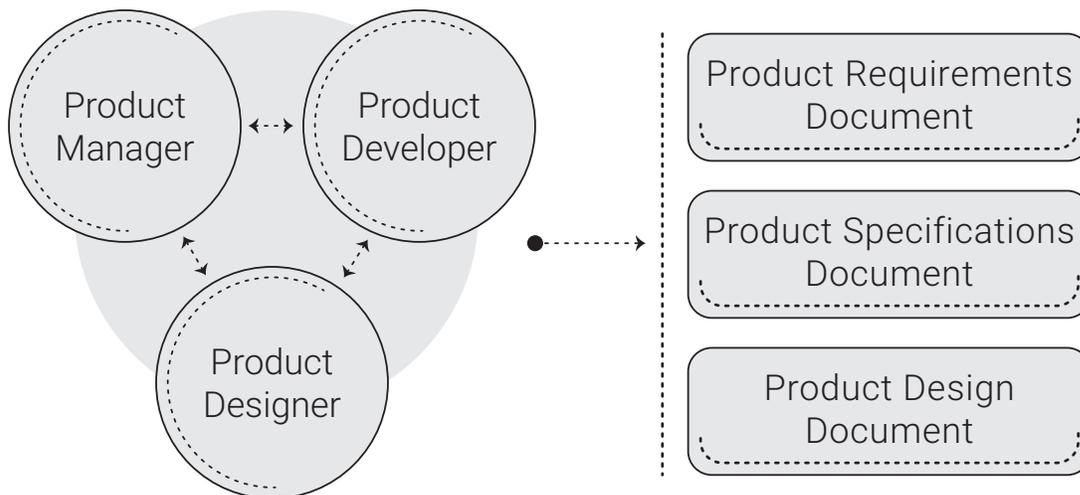


Defining and Designing the Product

Product Definition is not only the name of the phase but also a guiding force in the product planning and development process. If the Business Case (discussed in Chapter 11 of the book) 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 designing and building (or producing) of a sellable product. Success of the Definition phase is measured in terms of a product whose purpose is fully understood and whose features and attributes actually solve (or contribute heavily toward solving) a customer's problem or enable the customer to take advantage of an opportunity.

Getting the product definition as right as you can and as soon as you can really does matter. A properly constructed product definition will help you communicate and negotiate with Development, which will help make sure that you have what you need, when you need it. The document used to carry out this negotiation is the Product Requirements Document or PRD. It may also be augmented by a separate product design document that characterizes or portrays physical specifications, user interfaces, and other relevant items. The terminology your firm uses will likely vary, but here is the bottom line: The PRD is a business- and market-driven document that describes the functional and nonfunctional characteristics of a product that reflects business, market, or customer needs. The diagram below represents a simple characterization of the documents used in the product definition process.

The PRD outline is shown on the following page.



Product Manager's Desk Reference (3e)

Illustration Insights – Chapter 12 – Figures 12.2a, 12.2b

Defining and Designing the Product

Product Requirements Document (PRD) Outline

1. HEADINGS

- a. Versions & history
- b. Approvals & signatures

2. INTRODUCTORY INFORMATION

- a. Purpose & strategic context
- b. Market environment
- c. Product description & life cycle state

3. TARGET CUSTOMERS

- a. Users, influencers, & decision makers for the product

4. FOUNDATIONAL ELEMENTS

- a. Naming conventions
- b. Numbering schemes
- c. Rationale or purpose for each requirement
- d. Dependencies (and how those will be called out)
- e. Conflict resolution process
- f. Diagram standards used to describe work flows, clarify intent, etc.
- g. Traceability & references

5. FUNCTIONAL REQUIREMENTS

and how those should be shown to reflect the basic intent or what the product should do.

6. NONFUNCTIONAL REQUIREMENTS

that describe characteristics, properties, or qualities, and described as features or attributes. Nonfunctional requirements can also be divided into a number of categories and subcategories. These include:

- a. Areas associated with customer usage or usability
 - i. Efficiency or speed
 - ii. Transaction turnaround times
 - iii. Learnability or ease of recall (for usability & simplicity)
 - iv. Acceptable errors that a user or customer could make
 - v. Feedback (as in a sound, "click," or otherwise)
- b. Areas associated with physical characteristics
 - i. Size
 - ii. Appearance
 - iii. Weight
 - iv. Styles
 - v. Colors
 - vi. Designs

6. NONFUNCTIONAL REQUIREMENTS (CONTINUED)

- c. Areas associated with performance and quality
 - i. Speed
 - ii. Response time
 - iii. Precision
 - iv. Number of simultaneous users
 - v. Reliability
 - vi. Capacity
 - vii. Scalability
 - viii. Durability
 - ix. Longevity
- d. Areas associated with operational support or integration
 - i. The physical environment
 - ii. Interfaces & compatibility with other products or systems
 - iii. Hardware requirements
 - iv. Software requirements
 - v. Release or launch plans
 - vi. Operational environmental integration
- e. Areas associated with maintenance & support over the life of the product
 - i. Documentation required
 - ii. Maintenance or maintainability
 - iii. Adaptation or migration from the current environment
 - iv. Auditing or monitoring the performance of the product or system
 - v. Access: physical or remote
- f. Areas associated with data
 - i. Data elements
 - ii. Fields (size, alpha, numeric, alphanumeric)
 - iii. Ranges
 - iv. Constraints
- g. Areas associated with safety & security
 - i. System or product access
 - ii. Verification
 - iii. Privacy
 - iv. Safeguards
- h. Areas associated with laws or regulations
 - i. Local or country specific
 - ii. Time frames required
 - iii. Standards body compliance
- i. Areas associated with global or international usage
 - i. Local packaging or design
 - ii. Local performance
 - iii. Local materials

Product Manager's Desk Reference (3e)

Illustration Insights – Chapter 12 – Figures 12.3, 12.4

Defining and Designing the Product

In many cases, there may be more requirements than is feasible to include in a product version or release. In Chapter 5 of the book, a decision matrix was shown to help you make decisions and help you with prioritization. IN Chapter 11, you were shown how to use a decision matrix to evaluate different product investment opportunities. Because you always have to make trade-offs, you can use a decision matrix to prioritize requirements. A sample is shown in the table below.

	Aligned with strategy	Fulfills the customer value proposition	Contributes to desired product positioning	Technology is available	TOTAL SCORE
Requirement 1					
Requirement 2					
Requirement 3					
Requirement 4					

After the activities and documents have been completed for the Definition phase, the product team must prepare for the Definition phase review with the product portfolio review board. One of the documents that should be completed prior to the phase review is called the Product Team Concurrence Form, which is the actual sign-off “cover page” for any documentation used to present the final investment proposal to the portfolio review board. An example of this type of template is shown in below.

NAME OF PRODUCT:

NAME OF PROJECT:

Functional Organization	Name of Authorized Team Member	Phone	Signature	People Resources Committed	Financial Resources Committed

AGREED TO BY THE PORTFOLIO REVIEW BOARD

BY:

DATE:

DENIED BY THE PORTFOLIO REVIEW BOARD

BY:

DATE:

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