Blackblot® PMTK PRM Market Requirements Document (MRD)

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Document Revision History:

Date	Revision	Revised By	Approved By
<Enter revision date>	<Revision #>	<Enter your name>	<Enter name>

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1. <u>Introduction</u>

   1.1. <u>Document Objective</u>

   The Market Requirements Document (MRD) focuses on describing the market problem, market opportunity, and the resulting market requirements that help design a solution that addresses the market problem and realizes the market opportunity.

   <Comment: This document is presented to Engineering for solution planning and design.>

   1.2. <u>Executive Summary</u>

   <Write the executive summary. Provide a concise report of the pertinent facts, assumptions, and suggestions noted throughout this document.>

   <Comment: This section is the last section to be filled in and done once the MRD is complete. Focus on the key elements in each document section and do not exceed two pages. The executive summary is a miniature version of the entire document.>

2. <u>Market Problem and Opportunity</u>

   2.1. <u>Section Objective</u>

   This section describes the market problem and resulting market opportunity.

   2.2. <u>Market Problem</u>

   <Identify and justify the specific market problem. Explain any other interlinking market problems.>

   <Comment: The market problem is a "consumer" or "product" or "technology" problem in the target market. The market problem is essentially a situation (difficulty) that exists in the target market and requires change.

   - *<u>Consumer Problem</u> – A marketplace situation in which consumer needs remain unsatisfied (B2C). The solution to a consumer problem is a whole product.*
   - *<u>Product Problem</u> – An industry situation in which product requirements are unmet (B2B). The solution to a product problem is a product component.*
   - *<u>Technology Problem</u> – Challenges in applied science. The solution to a technology problem is scientific research.*

   2.3. <u>Market Opportunity</u>

   <Provide a statement detailing the specific market opportunity. Size and substantiate the market opportunity as much as possible. Document the assumptions and facts that validate and justify the market opportunity. Explain any other interlinking market opportunities.>

   <Comment: The market opportunity is a lucrative, lasting, and sizable market problem. Market Opportunity = Market Problem + Volume + Duration + Earning Potential.>

3.   Market Overview

   3.1.   Section Objective

This section describes the target market into which the solution will be introduced.

   3.2.   Target Market Description

<Describe the market at which the solution is targeted.>

      3.2.1.   Target Market Characteristics

<List and describe key characteristics of the target market.>

      3.2.2.   Target Market Trends

<List and describe influential trends taking place in the target market. Note the technological, economic, political, and competitive landscape.>

      3.2.3.   Target Market Segmentation

<Define and describe any form of applicable market segmentation such as geographical, demographical, behavioral, or sociological classifications. In addition, complete the table below.>

Market Segment	Key Characteristics

      3.2.4.   Target Market Time Constraints

<Describe any timeline constraints affecting the introduction of the marketplace solution. Note constraints such as: seasonal restrictions, competition, technological obsoleteness, or other major events.>

4.   Customers and Buyers

   4.1.   Section Objective

This section describes the customers and buyers.

<Comment: The customer is the entity that takes (financial) responsibility for the product. The buyer is the entity that decides to obtain the product (solution). The user is the entity that interacts with the product. Users are described in the "Users and Personas" section.>

   4.2.   Target Customer Description

<Define and describe the general customer profile towards which the solution is targeted.>

      4.2.1.   Target Customer Segmentation

<Define and describe any form of applicable segmentation such as geographic, demographic, and behavioral. How many distinct customer categories are there, and what are their characteristics? In addition, complete the table below.>

Market Segment	Key Characteristics

4.2.2.   <u>Target Customer Motivators</u>
<Define and describe the reasons why customers will buy the solution. Why would customers prefer the solution over the competition?>

4.2.3.   <u>Target Customer Influencers</u>
<Define and describe any tangible and non-tangible influencers on the customer's buying decision. Note influencers such as: price sensitivity, selectivity, culture, peer interactions, fashion, trends, or income level.>

4.2.4.   <u>Target Customer Goals</u>
<Define and describe customer goals in obtaining the solution. Customer goals in obtaining the solution are often to serve corporate business goals.>

4.3.   <u>Target Buyers Description</u>
<Define and describe the buyers, the entities that decide to obtain the product.>

4.3.1.   <u>BDM (Business Decision Maker) Buyers</u>
<Define, list, and describe the BDM buyers.>
4.3.1.1.   <u>BDM Motivators</u>
<Define and describe the reasons why BDM buyers will buy the solution. Why would BDM buyers prefer the product over the competition?>
4.3.1.2.   <u>BDM Goals</u>
<Define and describe BDM buyer goals in obtaining the solution. BDM buyer goals are often focused on issues such as: improving the organization, increasing productivity, or reducing costs.>

4.3.2.   <u>TDM (Technology Decision Maker) Buyers</u>
<Define, list, and describe the TDM buyers.>
4.3.2.1.   <u>TDM Motivators</u>
<Define and describe the reasons why TDM buyers will buy the solution. Why would TDM buyers prefer the product over the competition?>
4.3.2.2.   <u>TDM Goals</u>
<Define and describe TDM buyer goals in obtaining the solution. TDM buyer goals are often focused on issues such as: reliability, simplicity, integration, install-ability, support, or scalability.>

5. Users and Personas

5.1. Section Objective

This section describes Personas relative to the market problem and planned solution.

5.2. Personas

<Create and fill a persona description table for each possible persona relative to the market problem and planned solution.>
<Comment: The user is the entity that interacts with the product. Personas are a set of fictional, representative user archetypes with well-understood skills, attitudes, environment, behavior patterns, and goals.>

Parameter	Description
Persona name	
Background	
Skills	
Environment	
Attitudes	
Behavior	
Goals	
Notes	

<Comment: To illustrate the concept of personas, the following is an example of a network administrator persona.
Example:

Parameter	Description
Persona name	John Smith
Background	37 years old; network administrator
Skills	10 years experience, BS EE, CCNA
Environment	Corporate network with several servers and Internet gateway
Attitudes	Customer-focused attitude; passion for technology
Behavior	Monitors traffic and does troubleshooting
Goals	Seeks decision support and system auto-management
Notes	Usually works 50 hours per week

>

5.3. Persona Needs in the Present

<Describe what the personas are presently doing to satisfy their needs.>

5.4. Persona Linkage

<Describe how and which personas link back to the Customer and Buyer. This link helps establish the persona's relevance to the solution.>

6. Market Requirements

6.1. Section Objective

This section describes the market requirements that are drawn from the market problem.

<Comment: Market Requirements are facets of the market problem. In the entire requirements section, avoid defining a product and avoid

providing detailed design or implementation specifications. Suppose there are no objectives or relevant discussion for a specific requirement category or section. In that case, the requirement category or section must still be included, with the notation "N/A" (not applicable) and a short explanation. All market requirements describe the solution from the user's perspective and effectively depict what the user wishes to accomplish.>

6.2. Glossary and Definitions

<Provide a list of any market problem-related terms and their definitions, which will be used to describe the various market requirements.>

Term	Definition
<Term>	<Provide a definition for the term.>

6.3. Functional Category

<Provide a list of the operational characteristics, the working capabilities required of the solution. Write each market requirement separately in its own table.>

Field	Description
MR Identifier	<Provide a unique identifier using a consistent name convention.>
MR Name	<Provide a short name for easy reference to the market requirement.>
Directive	<Provide the instruction that guides and directs functionality being sought by the user. Each directive addresses a facet of the market problem. The directive format is: "User [persona] <shall/should[(high/medium/low)]> be able to <functionality>.">* *<Comment: The special conventions used in the directive are:* • *Square brackets "[ ]" denote optional arguments.* • *Pointed brackets "<>" denote mandatory arguments.* • *Slash symbol "/" denotes the "OR" logical operator.>*
Priority	<Indicate the level of priority attributed to this market requirement: "Shall" directive conditioning – critical functionality. "Should" directive conditioning – desirable functionality (high, medium, low).>
Rationales	<Provide a list of all possible rationales, the reasons that support the introduction of this market requirement.>
Sources	<Each rationale must be supported by a source. Sources are a list of references and information origins that validate the market requirement.>
Constraints	<Provide a list of all possible constraints, the limitations imposed on the solution relevant to this particular market requirement. Each constraint should be supported by its own rationale and source.>
Rationales	<Provide a list of all possible rationales, the reasons that support the introduction of this constraint.>
Sources	<Each rationale must be supported by a source. Sources are a

Field	Description
	list of references and information origins that validate the market requirement.>
Persona	<List names of all personas applicable to this market requirement.>
Use Case	<Provide a use case statement or use case identifiers applicable to this market requirement. Entry of use case information is applicable only if a product or product concept actually exists.>
Buying Criterion	<Indicate via this Boolean indicator (Yes/No/NA) whether this market requirement will foster a product feature used as a buying criterion.>
Differentiator	<Indicate via this Boolean indicator (Yes/No/NA) whether this market requirement will foster a product feature that is a key differentiator, relative to competing products.>

<Comment: Recommended name convention is product initials followed by .MR. (e.g., SLC.MR200) and followed by other market requirement component initials. Introduce numerical gaps into the identifiers so that future market requirements can be inserted without renumbering. Following is an example of a functional market requirement. Note the identifier name convention used for the rationales and constraints.

Field	Description
MR Identifier	*MGL.MR200*
MR Name	*Dropped Flashlight*
Directive	*User shall be able to find dropped flashlight.*
Priority	*Critical Functionality*
Rationales	*MGL.MR200.R10 – loss of flashlight impairs critical navigational abilities and limits spotting by rescue force in 75% of cases.*
Sources	*MGL.MR200.R10.S10 – Red Cross report, 2001*
Constraints	• *MGL.MR200.C10 – terrain: snow (one foot deep)* • *MGL.MR200.C20 – recovery time: ten seconds* • *MGL.MR200.C30 – visibility: darkness*
Rationales	• *MGL.MR200.C10.R10 – 20% of users have lost their flashlight in snow.*
Sources	• *MGL.MR200.C10.R10.S10 – USFS Survey, 2001*
Persona	*John Pro (professional hiker), Tim Easy (weekend hiker)*
Use Case	*MGL.UC500 (weekend travel), MGL.UC900 (wilderness survival)*
Buying Criterion	*Yes. Buyers: Mike Slide (Ski Patrol), John Fire (Rescue Force). This is a buying criterion because individuals in these organizations rely on flashlights to save lives.*
Differentiator	*Yes. Functionality not found in any other commercially available flashlight.*

>

6.4.   Development Category

<Provide a list of the engineering demands placed by the user on the solution. These market requirements constitute the solution's development environment. Regarding software, these are often the development tools and API sets. Write each market requirement separately in its own table.>

### 6.5.	Compatibility Category

<Provide a list of the conformance demands placed by the user on the solution. These can be conditions that support the solution and constitute the environment in which the solution will operate. Regarding software, these are elements such as: operating system platforms, GUI interfaces, or supported standards. Write each market requirement separately in its own table.>

### 6.6.	Performance Category

<List the quantitative and qualitative demands placed by the user on the solution. These market requirements reflect the need for certain levels of speed, usability, capacity, or scalability. These market requirements are sometimes referred to as non-functional market requirements. Write each market requirement separately in its own table.>

### 6.7.	Internationalization Category

<List the language and cultural demands placed by the user on the solution. These market requirements reflect the need to tailor the solution to the nuances imposed by different global markets. These market requirements impact the solution's design to accommodate culturally diverse markets. Write each market requirement separately in its own table.>

### 6.8.	Documentation Category

<List the written support demands placed by the user on the solution. Write each market requirement separately in its own table.>

### 6.9.	Physical Category

<If applicable, provide a list of market requirements that detail the solution's desired physical attributes such as size, weight, color, dimensions, or construction materials. Write each market requirement separately in its own table.>

### 6.10.	Distribution Category

<List the market requirements that are based on implications that affect the solution's distribution channels. These market requirements deal with how the solution is transported to the customer's possession. They include elements such as: regulatory barriers, legal restrictions on export, or transport limitation (e.g., land only). Write each market requirement separately in its own table.>

### 6.11.	Support and Training Category

<List the market requirements that are based on implications that affect the need for user support and training structures because of the solution. Write each market requirement separately in its own table.>

### 6.12.	Miscellaneous Product Category

<List all market requirements not covered in other sections. Write each market requirement separately in its own table.>

6.13.   Solution Overview
<Only if truly applicable, provide a very general description of the solution, its purpose, and functionality. Explain how the solution fits into the overall corporate product strategy. This section is relevant only if a product or product concept already exists.>

6.14.   Solution Technology Overview
<Only if truly applicable, provide a general description of the technology and innovation found in the solution itself, and in the technology which will be employed in producing the solution. This section is relevant only if a product or product concept already exists.>

6.15.   Market Requirements Summary Table
<The table below is a summary of all market requirements. It provides an overview of the problem that will be solved by the proposed functional solution. Enter the various market requirements into the table in concise form and sort the table by Category (primary) and Priority (secondary).>

Identifier	Directive	Constraints	Rationales	Persona	Category	Priority

7.   Supporting Data

7.1.   Section Objective
This section provides data supporting claims, assertions, assumptions, and statements made throughout this document.

7.2.   MRD Assumptions
<Describe any assumptions made while preparing this document. Be specific about the assumptions that, if changed, will alter the direction of the MRD and the resulting solution.>

7.3.   Research Information
<If relevant, describe and list the type and scope of research conducted while preparing this document.>

7.4.   Product Diagram/Architecture
<If relevant, describe the solution's architecture and modules accompanied by a schematic diagram.>