

# Software Requirements Specification (SRS) Version 1.0

## Prodaio Core Platform

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## 1 Introduction

### 1.1 Purpose

This document outlines the software requirements for Version 1.0 of Prodaio, the core release of a product-first social marketing SaaS platform. This version focuses on key features enabling agencies and their brand clients to manage product catalogs, create content, approve designs, and schedule social media posts in a multi-tenant architecture.

### 1.2 Scope

Prodaio V1 will provide a centralized web platform for marketing agencies and product-based businesses to:

- Upload and manage product catalogs
- Create and assign design tasks for media
- Manage approval workflows
- Schedule and publish content to social platforms(Instagram).
- Track basic campaign performance

## 1.3 Audience

- Internal development team
- Project stakeholders at Cogent Marketing
- Future integration partners and product managers

## 2 Overall Description

### 2.1 System Perspective

Prodaio is a SaaS application with a two-level multi-tenant architecture:

- **Agency Level** (Admin manages multiple brands)
- **Brand Level** (Each brand manages its own products and campaigns)

### 2.2 User Roles

- **Agency Admin:** Manages agencies, brands, and team members
- **Brand Admin:** Manages products, campaigns, and tasks
- **Product Manager:** Manages products, data , images
- **Designer:** Receives tasks, uploads media
- **Approver:** Reviews and approves content

### 2.3 Constraints

- Web-based (responsive UI for desktop)
- MVP will support only Instagram publishing
- Limited to English in V1
- Cloud storage for media assets (e.g. AWS S3)

## 3 System Architectuer

## 4 Functional Requirements

### 4.1 Authentication & Multi-Tenant Setup

#### 4.1.1 User registration

Use Case ID	UC.0001
actor	New User (Agency Admin or Brand Admin)
Description	The user registers a new account by providing required personal and business details.
Pre- Condition	<ol style="list-style-type: none"><li>1. User is not logged in.</li><li>2. Registration page is accessible.</li><li>3. Required fields (name, email, password) are displayed.</li></ol>
Post- Conditio	<ol style="list-style-type: none"><li>1. Valid user account is created in database.</li><li>2. User is assigned initial role.</li><li>3. User session is started and redirected.</li></ol>
Normal flow	<ol style="list-style-type: none"><li>1. User clicks "Register."</li><li>2. Enters required details (name, email, password, agency/brand name).</li><li>3. Accepts terms and submits.</li><li>4. System validates and creates user profile.</li><li>5. User is logged in automatically and redirected.</li></ol>
Alternative flow	<ol style="list-style-type: none"><li>1. If the email is already registered, the system displays an error: "Email already in use. Please log in or reset your password."</li><li>2. If required fields (like password or name) are left empty, the system highlights them and prevents submission.</li><li>3. If password does not meet complexity rules, a validation message is shown.</li></ol>

## Flow diagram

## 4.1.2 User login

Use Case ID	UC.0002
actor	Registered User
Description	Authenticates user credentials to access the system.
Pre- Condition	<ol style="list-style-type: none"> <li>1. User account exists and is verified.</li> <li>2. Login form is available.</li> <li>3. Email and password fields are filled.</li> </ol>
Post- Conditio	<ol style="list-style-type: none"> <li>1. User is authenticated.</li> <li>2. Session token is generated.</li> <li>3. User is redirected to correct dashboard.</li> </ol>
Normal flow	<ol style="list-style-type: none"> <li>1. User enters email and password.</li> <li>2. System verifies credentials.</li> <li>3. User is logged in and redirected to dashboard.</li> </ol>
Alternative flow	<ol style="list-style-type: none"> <li>1. If email or password is incorrect, the system displays: "Invalid credentials. Please try again."</li> <li>2. After multiple failed attempts (e.g., 5), the system locks the account for a short duration or presents a CAPTCHA.</li> <li>3. If the user has not verified their email, a message is shown with a "Resend verification link" option.</li> </ol>
Flow diagram	

### 4.1.3 Reset password

Use Case ID	UC.0003
actor	Registered User
Description	Allows users to reset their password via a secure email link.
Pre- Condition	<ol style="list-style-type: none"> <li>1. User has a registered email.</li> <li>2. Reset page is available.</li> <li>3. Reset request is not throttled.</li> </ol>
Post- Conditio	<ol style="list-style-type: none"> <li>1. Reset link is sent via email.</li> <li>2. Password is updated after valid token.</li> <li>3. User can log in with new password.</li> </ol>
Normal flow	<ol style="list-style-type: none"> <li>1. User clicks “Forgot Password.”</li> <li>2. Enters email address.</li> <li>3. System sends a reset link.</li> <li>4. User opens the link and sets a new password.</li> </ol>
Alternative flow	<ol style="list-style-type: none"> <li>1. If the email is not registered, the system shows: “Email not found.”</li> <li>2. If the password reset link is expired or already used, the system displays: “Invalid or expired link. Please request a new one.”</li> <li>3. If the user tries to set the same old password, a warning is displayed: “New password cannot be the same as previous password.”</li> </ol>
Flow diagram	

## 4.1.4 Agency creation

Use Case ID	UC.0004
actor	Agency Admin
Description	After registration, the agency admin sets up the agency profile and invites team members.
Pre- Condition	<ol style="list-style-type: none"><li>1. User is logged in as Admin.</li><li>2. Agency name does not already exist.</li><li>3. Required fields (name, industry, etc.) are filled.</li></ol>
Post- Conditio	<ol style="list-style-type: none"><li>1. Agency profile is saved to system.</li><li>2. Admin is linked to agency.</li><li>3. Setup moves to brand onboarding.</li></ol>
Normal flow	<ol style="list-style-type: none"><li>1. Admin provides agency name, industry, and branding info.</li><li>2. System creates agency record.</li><li>3. Admin is taken to brand onboarding.</li></ol>
Alternative flow	<ol style="list-style-type: none"><li>1. If the agency name already exists in the system, a message is shown: "Agency name already in use. Please choose a different one."</li><li>2. If any mandatory field (e.g., industry or logo) is missing, the form highlights the issue and prevents submission.</li><li>3. If session expires during agency creation, the user is logged out and redirected to login.</li></ol>
Flow diagram	



## 4.1.5 brand onboarding

Use Case ID	UC.0005
actor	Agency Admin or Brand Admin
Description	Sets up the brand profile including logo, products, and users.
Pre- Condition	<ol style="list-style-type: none"><li>1. Agency exists and is active.</li><li>2. Admin has permission to create brands.</li><li>3. Brand name is unique within agency.</li></ol>
Post- Conditio	<ol style="list-style-type: none"><li>1. Brand is registered under the agency.</li><li>2. Team roles are created or assigned.</li><li>3. Brand dashboard becomes accessible.</li></ol>
Normal flow	<ol style="list-style-type: none"><li>1. Admin enters brand name, logo, default language, and timezone.</li><li>2. Adds initial team members and roles.</li><li>3. System creates brand instance within the agency.</li></ol>
Alternative flow	<ol style="list-style-type: none"><li>1. If the brand name is already taken within the agency, a message is shown: "This brand name already exists."</li><li>2. If the admin skips essential setup fields (e.g., timezone), the system shows an inline warning.</li><li>3. If invitation emails to team members fail to send, a retry prompt is displayed and failure is logged.</li></ol>
Flow diagram	

## 4.1.6 Assign Role to User

Use Case ID	
actor	
Description	Assigns and enforces access based on user roles (Agency Admin, Brand Admin, Designer, Approver).
Pre- Condition	<ol style="list-style-type: none"><li>1. User is authenticated.</li><li>2. Role definitions exist in system.</li><li>3. Permissions mapping is defined.</li></ol>
Post- Conditio	<ol style="list-style-type: none"><li>1. User actions are restricted or granted by role.</li><li>2. Unauthorized access is denied.</li><li>3. Logs are updated with role activity.</li></ol>
Normal flow	<ol style="list-style-type: none"><li>1. Admin assigns role during user creation or invite.</li><li>2. System maps role to permissions.</li><li>3. User logs in and sees features based on their role.</li></ol>
Alternative flow	<ol style="list-style-type: none"><li>1. If role is not defined, system shows error.</li><li>2. Unauthorized access attempt is blocked with error message.</li><li>3. Role conflict (e.g., dual roles) triggers admin notification.</li></ol>
Flow diagram	

## 4.2 Product Catalog Management

#### 4.2.1 Create/edit/delete products

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.2.2 Refresh products from e-commerce

Use Case ID	UC.0007
actor	Brand Admin , Product Manager
Description	Allows brand to manage products in catalog.
Pre- Condition	<ol style="list-style-type: none"> <li>1. Brand account is active.</li> <li>2. User has edit permissions.</li> <li>3. Product names are unique within brand.</li> </ol>
Post- Conditio	<ol style="list-style-type: none"> <li>1. Product list is updated.</li> <li>2. Changes reflected in linked tasks/campaigns.</li> <li>3. Deleted products are soft-deleted or archived.</li> </ol>
Normal flow	<ol style="list-style-type: none"> <li>1. Admin opens product module.</li> <li>2. Adds/edits/deletes product data (name, image, price).</li> <li>3. System saves and updates catalog.</li> </ol>
Alternative flow	<ol style="list-style-type: none"> <li>1. Duplicate name triggers validation error.</li> <li>2. Deletion of linked product prompts warning.</li> <li>3. Missing mandatory fields prevent save.</li> </ol>
Flow diagram	

#### 4.2.3 Add design task

Use Case ID	UC.0008
actor	Brand Admin
Description	Admin creates a design task that contains multiple specific requests. Each request defines a content type and one or more linked products, resulting in a single media output per request.
Pre- Condition	<ol style="list-style-type: none"> <li>1. Products exist in catalog.</li> <li>2. At least one designer is active.</li> <li>3. Admin has permission to assign design work.</li> <li>4. Content types and task statuses are predefined.</li> </ol>
Post- Conditio	<ol style="list-style-type: none"> <li>1. Task with all sub-requests is saved and visible to designer.</li> <li>2. Each request is independently trackable (draft/submitted/approved).</li> <li>3. Notifications sent to assigned designer.</li> </ol>
Normal flow	<ol style="list-style-type: none"> <li>1. Admin clicks "Create Task."</li> <li>2. Enters task title, notes, deadline (task-level).</li> <li>3. Adds one or more <b>requests</b> inside the task. For each request: <ul style="list-style-type: none"> <li>• Chooses content type (e.g., Reel, Carousel, Post).</li> <li>• Selects linked products.</li> <li>• Adds specific notes (if needed).</li> </ul> </li> <li>4. Assigns designer and clicks "Create."</li> <li>5. System saves the task with all requests and notifies the designer.</li> </ol>

<b>Alternative flow</b>	<ol style="list-style-type: none"> <li>1. If no request is added, task creation is blocked.</li> <li>2. If a request lacks products or content type, system shows error.</li> <li>3. If designer is unavailable, task creation is postponed or reassigned.</li> <li>4. If deadline is invalid (past date), error is shown.</li> </ol>
<b>Flow diagram</b>	

#### 4.2.4 Custom Fields creation

Use Case ID	
<b>actor</b>	
<b>Description</b>	
<b>Pre- Condition</b>	
<b>Post- Conditio</b>	
<b>Normal flow</b>	
<b>Alternative flow</b>	
<b>Flow diagram</b>	

#### 4.2.5 Bulk CSV import

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

### 4.3 Designer Task Page

#### 4.3.1 Create tasks

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.3.2 Submit task

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.3.3 Assign to designers with due date and notes

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	



#### 4.3.4 Edit submission

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.3.5 Track task status: Draft, Submitted, Approved, Needs Edits

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

### 4.4 Media Asset Library

#### 4.4.1 Central media storage per brand

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.4.2 Tag media by product, campaign, type

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.4.3 Search and filter functionality

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.5 Approval Workflow

##### 4.5.1 Designer submits task for review

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.5.2 Approver can accept, reject, or comment

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.5.3 View version history (of unfinished task)

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.6 Publishing Scheduler

#### 4.6.1 Calendar view

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.6.2 Schedule approved media to publish to Instagram

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

4.6.3 Basic preview of post (image + caption)

4.6.4 Chose caption template

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.7 Caption Templates

4.7.1 Create Text-based caption templates with variables

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

#### 4.7.2 Edit templates per brand

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

### 4.8 Basic Analytics

#### 4.8.1 Link posts to product

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.8.2 View mock engagement metrics (manually input for now)

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 4.8.3 Simple dashboard: Reach, Likes, Comments per post

Use Case ID	
actor	
Description	
Pre- Condition	
Post- Conditio	
Normal flow	
Alternative flow	
Flow diagram	

## 5 Non-Functional Requirements

- Secure multi-tenant SaaS architecture
- RESTful API for frontend-backend communication
- Responsive UI (React-based)
- Data storage: PostgreSQL
- File storage: AWS S3 or similar



## 6 Out of Scope for V1

- AI-powered caption generation
- Real-time API analytics integrations (e.g., Instagram Insights)
- Multi-language support
- Deep Shopify, WooCommerce, or ERP integrations
- Power BI dashboards
- Marketplace plugins

## 7 Future Enhancements

### 7.1 Version 2

- Multi-platform publishing (TikTok, Facebook)
- Power BI dashboards
- Real-time API analytics integrations on Instagram Insights

### 7.2 Version 3

- AI-powered caption generation
- Insights as a Product (PDF reports, raw data export)
- Multi-platform scheduling (TikTok, Facebook)
- Divsuite

### 7.3 Version 4

- Real-time API analytics integrations(multiple social media)
- AI-powered suggestions and media tagging
- White label branding per agency
- Deep Shopify, WooCommerce, or ERP integrations

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