

AI Video Production Assistant: Business Analysis Portfolio

A comprehensive business analysis baseline for an AI Video Production Assistant MVP, detailing the progression from problem hypothesis to solution validation.

Rawan Alghashmari | August 19, 2026 | Project Status: BRD Baselined

PORTFOLIO PHASE: INTRODUCTION

Portfolio Introduction and Project Status

Project Identity

PROJECT NAME
AI Video Assistant

ROLE & OWNER
Rawan Alghashmari

BASELINE DATE
August 15, 2026

ARCHITECTURE
Front-End MVP

CURRENT STATUS

Business Case & BRD approved as baselines. Solution Analysis is finalized and ready for implementation and planned validation stages.

MVP VISION

A front-end-only guidance hub designed to help beginner AI creators select appropriate tools and assemble personalized production workflows before execution begins.

Business Case

Strategic alignment, MVP scope, and success criteria definition.

Business Requirements (BRD)

Functional/non-functional requirements and logic prioritization.

Solution Analysis & Validation

User journey, recommendation logic, and UAT planning.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Business Problem & Market Opportunity

WORKING HYPOTHESIS

Beginner creators experience significant time inefficiency and financial uncertainty when manually navigating the fragmented AI tool landscape.

Discovery Friction

Manual searching and comparing multiple separate AI tools consumes excessive hours.

Resource Waste

Risk of inefficient AI-token use and unnecessary subscriptions during trial-and-error.

Workflow Complexity

Difficulty in structuring a cohesive production sequence across different AI platforms.

Selection Doubt

High uncertainty regarding which tools best match specific budget and quality needs.

Opportunity: A low-friction planning hub providing structured starting points before production investment begins.

AS-IS / TO-BE Process Comparison

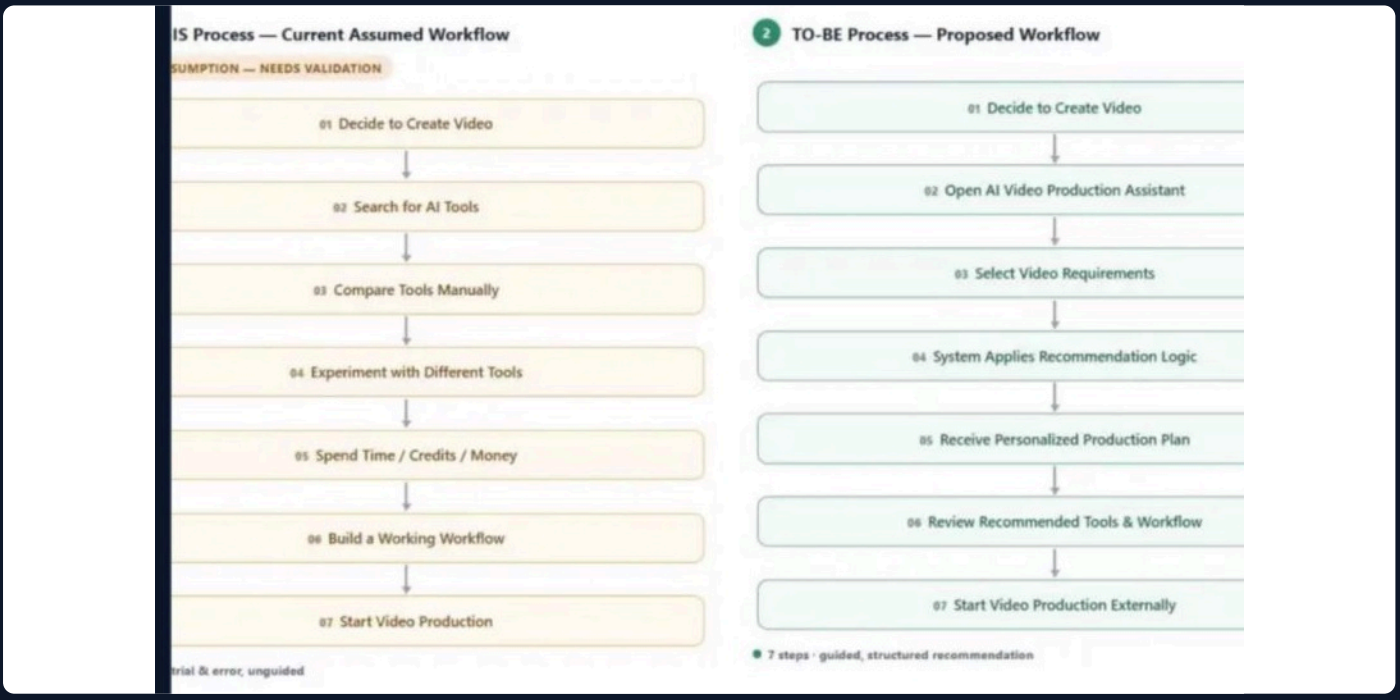


Fig 2.1: Transitioning from manual tool experimentation to automated workflow assembly.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Business Need & Value Proposition

CORE VALUE PROPOSITION

Help users move from uncertainty about AI video tools to a clear, personalized, cost-aware production starting point through a structured guidance solution.

Strategic Business Objectives

BO-01

Rapid MVP Launch

Deploy a usable front-end MVP quickly to capture and analyze initial market feedback.

BO-02

Personalized Planning

Convert user-specific requirements into tailored production blueprints automatically.

BO-03

Structured Decision-Making

Reduce trial-and-error by providing informed guidance before production investment.

Assumed Expected Benefits

Efficiency Gains

Significantly reduced time spent researching disparate tools and manual comparison.

Resource Optimization

Better budget and token utilization through suitable free or low-cost recommendations.

Execution Confidence

Greater clarity in navigating the cohesive video-creation workflow from start to finish.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Target User Persona: The Beginner AI Creator

THE BEGINNER CREATOR

Non-technical early-stage creators seeking structured, cost-aware guidance.

Primary Goal

Generate AI videos efficiently without wasting credits, time, or unnecessary subscription costs.

Pain Points

Tool Choice Overload | Credit Waste Anxiety | Workflow Uncertainty

Fear of wasting resources on trial-and-error due to multi-tool assembly complexity.

Critical Needs

Clear, step-by-step production guidance and **budget-friendly tool mapping** that ensures a cohesive sequence.

Expected Value

A **Personalized Blueprint** that removes guesswork and provides a structured starting point for creative execution.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

MVP Scope and Delivery Boundaries

Approved Inclusions

Landing Page: Introduction & Guest Access

Requirements Form: 7 Structured Inputs

Logic Engine: Client-side Recommendation Logic

Validation: Input completion & list restriction

Output: Personalized Production Plans

Results View: Dedicated Plan & Guidance Page

Approved Exclusions

Identity: No Auth, Login, or Accounts

Storage: No Backend, DB, or Persistence

Export: No Email Delivery or PDF Export

Commerce: No Payments or Admin Dashboards

Media: No Video Generation or Processing

Hosting: No Video or Media Cloud Storage

STAKEHOLDERS

Internal: PM, BA, and Front-End Developer

External: Beginner and early-stage creators

CONSTRAINTS

- Rapid time-to-market requirement
- Strictly client-side architecture
- Free or low-cost development stack

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Requirements Baseline

Core Directives

STRATEGIC / BUSINESS

BR-001

Personalized plan delivery to reduce research time and minimize trial-and-error.

BR-002

Frictionless guest-only access model without mandatory user registration.

NON-FUNCTIONAL

NFR-001

Full responsiveness across desktop, tablet, and mobile browsers.

NFR-002

All recommendation logic must execute locally in the client browser.

Functional Specs (I)

FR-001

Display inputs for Type, Goal, Platform, Duration, Experience, Budget, and Needs.

FR-002

Restrict all user selections to approved and validated option lists.

FR-003

Validate completion of all required inputs before allowing submission.

FR-004

Trigger client-side recommendation engine upon successful form submission.

Functional Specs (II)

FR-005

Filter output to include recommendations, rationale, tips, and token-saving guidance.

FR-006

Prioritize suitable, currently usable tools that strictly match the selected budget.

FR-007

Generate the final production blueprint using approved v1.1 recommendation logic.

FR-008

Render personalized results dynamically on a dedicated client-side Results Page.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Business Rules and Recommendation Logic

Business Rules

Budget Priority RULE-001

Free prioritizes free options; Low prioritizes freemium/low-cost; Flexible prioritizes suitability over price.

Need Relevance RULE-002

Only recommend tool categories explicitly selected by the user under Production Needs input.

No Persistence RULE-003

Front-end MVP requirement: do not permanently store user inputs, plans, or history.

Logic Hierarchy

1. Production Needs
2. Budget
3. Video Type and Goal
4. Target Platform
5. Video Duration
6. Experience Level
7. Tool-Specific Rules

Routing Intelligence

EXPERIENCE LOGIC

Beginner
Simpler Workflows

Intermediate
Advanced Controls

SPECIFIC ROUTING RULES

Veo 3.1	Native Audio
Seedance 2.0	Multi-Reference
Runway Gen-4.5	High Control
Luma Ray 3.2	Transformation

Note: Tool availability, pricing, and features require validation before launch due to rapid market changes.

PORTFOLIO PHASE: SOLUTION ANALYSIS

End-to-End Solution and User Flow

Mapping the user journey from landing page requirements to the final personalized production blueprint.

1 REQUIREMENTS

2 LOGIC

3 TOOL SELECTION

4 PRODUCTION PLAN

5 RESULTS

Detailed Execution Process

01 Access guest landing page and enter seven structured project inputs.

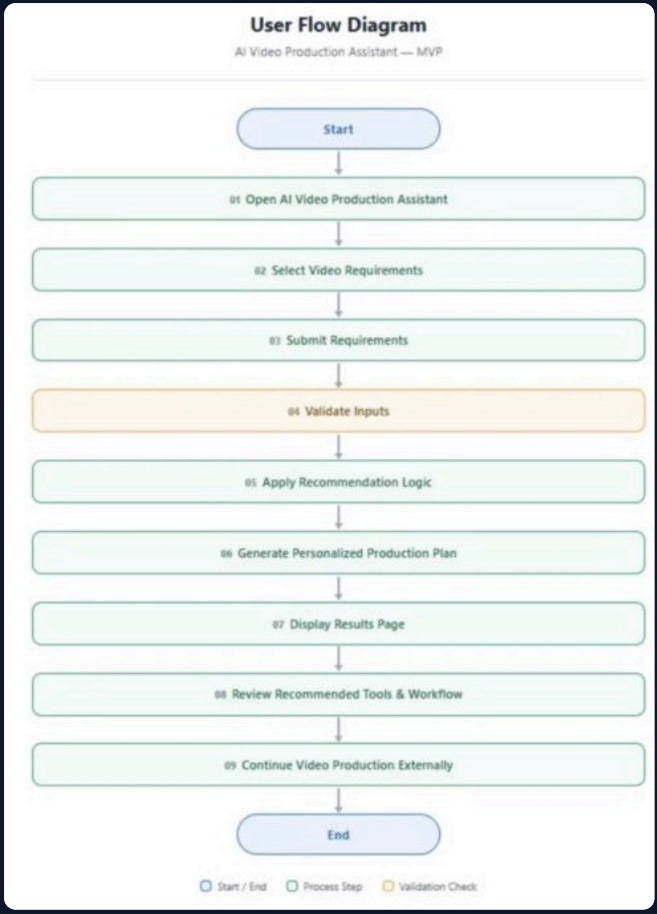
02 Validate inputs to ensure complete data before triggering recommendation engine.

03 Execute client-side logic to map requirements to the approved AI toolset.

04 Generate personalized production plan with sequential workflow instructions.

05 Display final results page; user proceeds to external tools with a clear plan.

Architecture Focus: The solution is a client-side single-page application. It does not generate video, but prepares users for production with an actionable plan.



VISUAL REFERENCE: END-TO-END MVP USER FLOW DIAGRAM

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Core User Stories

US-01

Enter Requirements

As a user, I want to enter project requirements so the system understands my video goal.

ACCEPTANCE CRITERIA
All seven approved input fields are available and functional.

US-02

Guest Submission

As a guest, I want to submit inputs without creating an account so I can receive a plan quickly.

ACCEPTANCE CRITERIA
Clear submission and validation that blocks incomplete entries.

US-03

Personalized Plan

As a user, I want a tailored plan so I know where to start my production process.

ACCEPTANCE CRITERIA
Results page dynamically renders relevant tools and sequential steps.

US-04

Needs Filtering

As a user, I want recommendations that match my budget and needs so I avoid irrelevant tools.

ACCEPTANCE CRITERIA
Outputs strictly obey logic rules for budget and selected needs.

US-05

Workflow Guidance

As a user, I want clear guidance so I can follow the production sequence logically.

ACCEPTANCE CRITERIA
Results include sequential instructions alongside tool recommendations.

These core stories translate high-level business objectives (BO-01, BO-02) into actionable development requirements for the MVP.

PORTFOLIO PHASE: REQUIREMENTS & PRIORITIZATION

Acceptance Criteria and MoSCoW Prioritization

MoSCoW Framework

MUST HAVE

Input Form, Validation Logic, Recommendation Engine, Results View, Approved Tool Mapping.

SHOULD HAVE

Mobile-Responsive Layout, Alternative Tool Recommendations.

COULD HAVE

Interactive Prompt-Structuring Tips (Post-MVP enhancement).

WON'T HAVE (MVP)

Backend Database, User Accounts, PDF Export, Video Rendering Engine.

Validation Rules

AC-01 Input Validation

Submission is blocked with a clear error if required fields (e.g., Target Platform) are missing.

AC-02 Budget Prioritization

"Free" budget prioritizes free options; if unavailable, the system flags the need for paid access.

AC-03 Needs Filtering

Specific category deselection (e.g., Music) excludes related tools (e.g., Suno/Udio) from output.

AC-04 No Persistence

Guests complete the flow without registration, account creation, or permanent data storage.

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Traceability: Strategy to Validation

01. STRATEGIC INTENT

Problem Hypothesis

Beginner creators experience time inefficiency and tool uncertainty.

Business Need

Structured guidance hub converting requirements to production plans.

Business Objectives

BO-01 Speed to market & feedback.

BO-02 Personalized planning.

BO-03 Informed decision-making.

02. REQUIREMENTS ARCHITECTURE

Business Requirements

BR-001 Tailored production plans.

BR-002 Frictionless guest-only access.

Functional Specs

FR-005 Needs-based filtering.

FR-006 Budget-aware prioritization.

User Stories

US-01 Requirement entry.

US-03 Personalized blueprint.

03. QUALITY & VALIDATION

Acceptance Criteria

AC-02 Budget Logic Check.

AC-03 Production Needs Filtering.

UAT Scenarios

UAT-02 Verify Free vs Paid Logic.

UAT-04 Logic Personalization Test.

Success Metrics

Accurate input reflection and understandable workflow output.

Traceability Chain: Strategy → Requirement → Validation

PORTFOLIO PHASE: SOLUTION VALIDATION

Planned UAT Scenarios & Validation Protocol

Detailed testing framework designed to verify the MVP baseline. These scenarios ensure that the recommendation engine, business rules, and guest-access architecture function according to the approved BRD and Solution Analysis.

UAT-01 — Planned

Successful Input Flow

- Verify all 7 requirement fields accept valid input and trigger the recommendation engine.
- Confirm validation blocks incomplete forms with clear error messaging.

UAT-02 — Planned

Budget Prioritization Logic

- Test "Free" budget selection prioritizes usable free tools (RULE-001).
- Identify paid-access requirements if no suitable free alternatives exist.

UAT-03 — Planned

Needs Filtering (Category Logic)

- Verify that unselected categories (e.g., Script, Music) are omitted from results (RULE-002).
- Ensure no irrelevant tool recommendations appear in the final production plan.

UAT-04 — Planned

Personalized Workflow Logic

- Confirm "Beginner" users receive simplified instructions vs "Intermediate" controls.
- Validate platform-specific tailoring (e.g., TikTok vs YouTube workflow).

UAT-05 — Planned

Guest & No-Persistence Access

- Verify full flow completion without any login or registration requirement.
- Confirm no inputs or plans are stored permanently in the client-side session (RULE-003).

NEXT PHASE

Validation Priorities

- Confirm tool pricing and free-tier availability.
- Verify commercial-use restrictions for recommended tools.

Note: All User Acceptance Testing (UAT) scenarios are planned for the post-development phase and have not yet been executed.

PORTFOLIO PHASE: SOLUTION DESIGN

Prototype Experience and Screen Design

Screen 1: Landing Page

Introduces the core value proposition: "Plan your AI video workflow faster." Facilitates frictionless guest entry to the planning hub without registration.

VALUE PROP | GUEST ACCESS | BR-002

Screen 2: Requirements Form

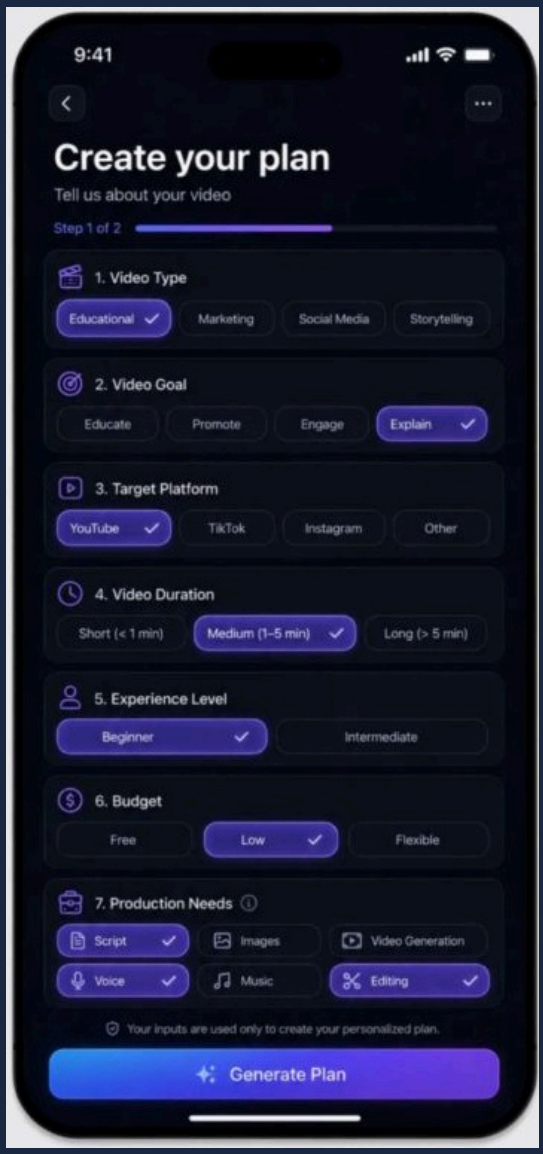
Structured input interface capturing 7 approved project parameters. Features controlled selection lists and real-time input validation.

DATA ENTRY | VALIDATION | FR-001

Screen 3: Results Page

Dynamic blueprint displaying sequential tool recommendations (e.g., ChatGPT, ElevenLabs, CapCut), rationale, cost guidance, and expert workflow tips.

PERSONALIZED OUTPUT | LOGIC V1.1 | US-03



Mobile-Responsive Prototype: Requirements Form Interface

PORTFOLIO PHASE: ANALYSIS & STRATEGY

Risks, Success Criteria, and Next Steps

Baseline requirements are validated and ready for technical implementation within a front-end-only MVP architecture.

- User completes structured input flow without friction.
- Generated plan accurately reflects user-selected inputs.
- Recommendations match specific production needs.
- Workflow guidance is clearly understandable to beginners.

CRITICAL RISKS & ASSUMPTIONS

- AI tool specifications and pricing tiers change rapidly, requiring constant logic updates.
- Beginner-focused guidance may not capture the needs of rapidly evolving intermediate creators.
- Assumption: A client-side only architecture is sufficient to capture initial user market feedback.

Strategic Roadmap

MVP Implementation

Build the front-end application against approved requirement baselines and tool mapping.

UAT & User Validation

Execute planned UAT scenarios and conduct direct testing with beginner content creators.

Strategy Reassessment

Refine assumptions, scope, and recommendation logic using evidence-based feedback.