

PRODUCT 05



BRINK (MSME Financing Guidance)

REQUIREMENT DOCUMENT



Contents

00	Document Control
01	Executive Summary
02	Context, Problem and Strategy
03	Users, Stakeholders and Governance
04	Scope, Releases and Journeys
05	Functional Requirements
06	Business Rules and Decision Logic
07	Data and Content Requirements
08	Responsible AI Requirements
09	Non-Functional Requirements
10	Architecture and Integration
11	Experience and Accessibility
12	Acceptance and Release Readiness
13	Risks, Assumptions and Decisions
14	Traceability
A	Appendices

00 Document Control

Attribute	Value
Document	BRINK AI Funding Navigator: Product Requirements Document
Version	1.0
Status	Retrospective PRD and governed production target
Owner	Nicolaas Heru Dreandachrista
Prepared	20 August 2026
Source basis	Portfolio case study, working application repository, interface copy, routes, components and public-source references
Product type	Independent explainable fintech prototype for Indonesian MSMEs
Repository	github.com/nicolaasheru/brink-funding-navigator
Affiliation	Independent portfolio work; not affiliated with or endorsed by BRI, Bank Indonesia, OJK or the Government of Indonesia

Requirement writing convention

1. Each requirement uses one independently verifiable obligation: condition or trigger, responsible system, shall, observable response and applicable constraint.
2. Acceptance criteria use Given / When / Then to define the test setup, action and expected result; they do not claim the test has been executed.
3. Priority is metadata. Implemented describes current behavior, Partial identifies incomplete behavior and Target identifies future behavior.
4. Readiness weights, band thresholds, source freshness, device fixtures and evaluation thresholds require approval before pilot release.

01 Executive Summary

BRINK helps Indonesian micro, small and medium enterprises understand funding readiness, compare suitable capital pathways and convert documentation gaps into a practical preparation plan. The prototype earned second place in the Tech in Asia and Bank Rakyat Indonesia FutureMakers Product Development Challenge, among more than 940 participants.

Product boundary

BRINK may	BRINK may not
Explain readiness, show evidence, compare pathways and recommend preparation actions	Predict approval, determine creditworthiness, provide financial advice, submit applications or replace a licensed provider

Current evidence and target state

Capability	Current prototype	Production target
Assessment	Four-step guided questionnaire	Versioned questions, validation, consent and resumable sessions
Readiness	Illustrative 72/100 result and five dimensions	Deterministic scoring with reason codes, tests and version history
Recommendations	Three illustrative pathways	Rules-based ranking over verified, current provider data
Coach	Three curated responses	Retrieval-based explanations with citations and escalation
Quality	Illustrative quality console	Live ingestion, freshness, review, blocking and publication workflow
Data handling	Front-end only; no identity, banking or document upload	Minimal-data service with encryption, retention controls and audit

02 Context, Problem and Strategy

Problem statement

MSME operators often face fragmented eligibility information, unclear trade-offs and a documentation burden that is difficult to translate into next actions. Product marketing can obscure cost, ownership and repayment implications. BRINK creates a neutral, evidence-visible decision aid before a user approaches a provider.

Goals

1. Explain readiness in plain language without implying an approval probability.
2. Compare relevant funding pathways on consistent dimensions.
3. Turn gaps into a sequenced 30-day preparation plan.
4. Keep every material recommendation traceable to a current source.
5. Demonstrate that deterministic rules retain decision authority while AI is limited to explanation.

Non-goals

1. Origination, underwriting, pricing, approval or disbursement.
2. Collection of national identity, bank credentials or financial documents in the prototype.
3. Provider endorsement or guaranteed eligibility.
4. Autonomous financial advice or unreviewed generative recommendations.

Product principles

Principle	Operational meaning
Explainability before prediction	Show why, evidence, caveats and uncertainty before any score or rank.
Rules decide; AI explains	Eligibility and ranking are deterministic and testable.
Evidence stays visible	Every pathway and claim exposes its source and freshness state.
Preparation over persuasion	The main outcome is informed preparation, not conversion pressure.

03 Users, Stakeholders and Governance

Primary users

User	Need	Success signal
MSME owner	Understand readiness and the first practical action	Completes assessment and can explain the preferred pathway trade-off
Business adviser	Use a consistent preparation conversation	Can review answers, reasons and evidence with the owner
Content reviewer	Keep product terms correct and current	No stale or unsupported pathway is ranked
Risk and compliance reviewer	Verify boundaries and controls	Disclaimers, logs and decision authority are demonstrable

Governance

Decision	Accountable role	Required evidence
Question and scoring change	Product and risk owner	Versioned rule change, tests, bias review and approval
Pathway publication	Content owner	Primary source, review date, normalized fields and reviewer sign-off
Coach release	Responsible AI owner	Evaluation set, citation checks, refusal and escalation tests
Production release	Product owner	Acceptance evidence, security review, monitoring and rollback plan

04 Scope, Releases and Journeys

Release model

Release	Included
R0: current portfolio prototype	Home, four-step assessment, illustrative results, pathway comparison, curated coach, 30-day roadmap and illustrative quality console.
R1: governed pilot	Accounts optional, deterministic scoring, verified pathway catalog, evidence links, content workflow, analytics and no sensitive uploads.
R2: controlled production	Secure document support if approved, provider integrations, monitored retrieval coach and operational service levels.

Primary journey

1. User opens BRINK and reviews its independent, non-advisory boundary.
2. User answers business maturity, funding goal, available records and financing preference.
3. System validates completion and displays a readiness profile with dimension-level explanations.
4. System ranks eligible pathways using deterministic rules and exposes why, caveats and sources.
5. User compares up to two pathways across the same dimensions.
6. User asks a supported preparation question and receives a cited explanation.
7. User saves or exports the 30-day roadmap and verifies provider terms externally.

Exception journeys

1. Insufficient evidence: show what is missing and do not rank a pathway.
2. Stale source: keep the pathway visible for context but exclude it from ranking.
3. Conflicting sources: block publication and route to human review.
4. No suitable pathway: return preparation steps without forcing a recommendation.

05 Functional Requirements

ID	Pri.	Status	Requirement	Acceptance criteria
FR-001	Must	Partial	The interface shall display independent-prototype and non-advice notices before assessment and on results.	Given a new session, when assessment and results open, then both notices are visible on each view.
FR-002	Must	Implemented	The assessment interface shall allow users to start without an account.	Given an anonymous session, when Start is selected, then the first question opens without an account request.
FR-003	Must	Implemented	The assessment interface shall display the current step and total number of steps.	Given each assessment step, when displayed, then its number and total match the four-step sequence.
FR-004	Must	Implemented	The assessment interface shall capture exactly one of the four supported business-maturity ranges.	Given the maturity question, when an option is selected, then one valid maturity value is stored.
FR-005	Must	Implemented	The assessment interface shall capture exactly one supported funding goal.	Given working capital, equipment, second location or digital expansion, when selected, then exactly one goal is stored.
FR-006	Must	Implemented	The assessment interface shall capture the selected financial-record option.	Given transaction history, income statement, tax records or all three, when selected, then the corresponding option is stored.
FR-007	Must	Implemented	The assessment interface shall capture the selected financing preference.	Given fixed repayments, revenue-based funding, shared ownership or show trade-offs, when selected, then that preference is stored.

ID	Pri.	Status	Requirement	Acceptance criteria
FR-008	Must	Implemented	When the user returns to an earlier step, the assessment interface shall display the answer previously selected during the session.	Given a completed earlier step, when the user returns, then its previous answer remains selected.
FR-009	Must	Implemented	If a required question is unanswered, the assessment interface shall prevent results submission.	Given an unanswered required question, when submission is attempted, then results are not generated.
FR-010	Must	Target	The scoring service shall calculate overall readiness using the approved versioned deterministic rule set.	Given identical answers and rule version, when scoring is repeated, then both results match the approved fixture.
FR-011	Must	Partial	The results interface shall display maturity, records, documentation, debt-readiness and investor-readiness dimensions.	Given a result, when its profile opens, then all five dimensions display score, band and reason code.
FR-012	Must	Implemented	The results interface shall identify readiness as preparation state rather than approval probability.	Given result copy and fields, when inspected, then none presents the score as an approval probability.
FR-013	Must	Target	The catalog service shall store pathway records according to the versioned pathway contract.	Given a record missing a required field, when publication validation runs, then publication is rejected.
FR-014	Must	Target	The rule service shall evaluate hard eligibility before pathway ranking.	Given an ineligible pathway, when recommendations run, then that pathway is absent from ranked results.

ID	Pri.	Status	Requirement	Acceptance criteria
FR-015	Must	Target	The ranking service shall rank only eligible pathways whose evidence is current.	Given eligible, ineligible and stale fixtures, when ranking runs, then only eligible current records are ranked in reproducible order.
FR-016	Must	Partial	The recommendation card shall display pathway type, match, explanation, caveat and source.	Given a recommendation record, when its card opens, then all five fields match the record and its evidence.
FR-017	Must	Partial	The catalog service shall support KUR working-capital credit records with source and effective date.	Given a KUR record, when publication validation runs, then the record passes only with the required provenance fields.
FR-018	Must	Partial	The results interface shall display repayment obligations and documentation for commercial investment loans.	Given a commercial loan record, when displayed, then both fields match its verified terms.
FR-019	Must	Partial	The results interface shall display ownership and investor implications for securities crowdfunding.	Given an SCF record, when displayed, then both implications match its verified terms.
FR-020	Must	Implemented	The comparison interface shall permit selection of at most two pathways.	Given two selected pathways, when a third is selected, then the third is not added.
FR-021	Must	Implemented	The comparison interface shall display capital structure, repayment, ownership, documentation and best-use dimensions in a consistent order.	Given two selected pathways, when compared, then the same five dimensions appear in the same order.

ID	Pri.	Status	Requirement	Acceptance criteria
FR-022	Must	Implemented	The coach interface shall offer the three supported curated preparation questions.	Given no live model connection, when each prompt is selected, then its corresponding curated response is returned.
FR-023	Must	Target	The coach service shall link each material funding claim to its supporting published source.	Given an answer containing funding claims, when citation validation runs, then every material claim resolves to current evidence.
FR-024	Must	Target	When a user requests approval prediction or personalized financial advice, the coach service shall return a boundary response with a provider-verification step.	Given an advice or prediction request, when submitted, then no prediction or advice is returned and a verification step is shown.
FR-025	Must	Target	The roadmap service shall generate a sequenced 30-day preparation plan from assessed gaps.	Given a gap profile, when the plan is generated, then each action includes rationale, completion state and applicable dependency.
FR-026	Must	Target	The roadmap service shall select account separation, use-of-funds planning, income-statement preparation and term verification according to the approved action rules.	Given gap fixtures, when planning runs, then selected actions match the rule fixture without unrelated tasks.
FR-027	Should	Target	The export service shall produce a summary containing assessment date, rule version, source references and disclaimer.	Given completed results, when export is requested, then all four fields are present and no prohibited sensitive data is included.

ID	Pri.	Status	Requirement	Acceptance criteria
FR-028	Must	Target	The quality console shall display published count, completeness, freshness and review-queue measures calculated from the live catalog.	Given a known catalog fixture, when the console loads, then all four measures reconcile to that fixture.
FR-029	Must	Target	The quality console shall display ingest, normalize, validate, review and publish stage counts.	Given a processing run, when its stages are inspected, then counts reconcile through accepted, excluded and queued records.
FR-030	Must	Target	The quality console shall display the affected field, source, severity and workflow state for each content issue.	Given an issue fixture, when displayed, then all four fields match the issue record.
FR-031	Must	Implemented	The pathway interface shall provide a link to the referenced primary evidence.	Given a pathway card, when its source link is selected, then the recorded source URL opens.
FR-032	Must	Target	The catalog interface shall label each published pathway with its freshness or blocking state.	Given current, review-due, stale and blocked fixtures, when rendered, then each displays its correct state.
FR-033	Must	Target	The audit service shall append an immutable event for each accepted rule, content or publication change.	Given an accepted change, when audit history is inspected, then actor, time, before, after and reason appear without altering earlier events.
FR-034	Should	Target	The analytics service shall record approved funnel and error events without user identity or assessment-answer content.	Given a completed session, when event payloads are inspected, then approved events are present and prohibited content is absent.

ID	Pri.	Status	Requirement	Acceptance criteria
FR-035	Must	Implemented	The interface shall support home, assessment, results and quality views at supported phone and desktop widths.	Given the supported viewport matrix, when each view opens, then required content and controls are available without horizontal overflow.
FR-036	Should	Target	When a session is refreshed, the session service shall restore unexpired assessment state.	Given unexpired and expired sessions, when refreshed, then unexpired answers restore and expired sessions show an expiry notice.
FR-037	Must	Target	If a required answer is missing, the assessment interface shall identify the unanswered question.	Given one missing answer, when submission is attempted, then the affected question receives field-level guidance.
FR-038	Must	Target	The ranking service shall apply financing preference only after hard eligibility checks pass.	Given a preferred but ineligible pathway, when ranking runs, then preference does not make the pathway eligible.
FR-039	Must	Target	When a comparison field is missing, the comparison interface shall display unavailable rather than infer a value.	Given a missing term, when comparison opens, then that cell displays unavailable.
FR-040	Must	Target	If a pathway is blocked, the publication service shall reject its publication.	Given a blocked issue, when publication is attempted, then the active catalog remains unchanged.
FR-041	Must	Target	When a source link fails its health check, the monitoring service shall create a content-review issue.	Given a broken link, when monitoring runs, then an issue identifies the pathway and URL.

06 Business Rules and Decision Logic

Readiness model

Rule	Specification
BR-01	The scoring service shall aggregate the five readiness dimensions using versioned weights and rounding rules.
BR-02	The results interface shall apply Early, Developing and Established bands using approved thresholds.
BR-03	If a required answer is missing, the scoring service shall reject calculation.
BR-04	The results interface shall describe readiness as preparation state rather than repayment capacity or approval probability.

Recommendation sequence

1. Validate input completeness.
2. Evaluate hard eligibility against current rules.
3. Exclude blocked and stale pathway records.
4. Calculate transparent fit factors for the remaining pathways.
5. Apply preference as a bounded tie-breaker.
6. Return reasons, caveats, evidence and confidence.

Publication rules

State	Ranking behavior
Draft	The catalog service shall hide draft records from end users.
Review	The catalog service shall expose review records only to authorized reviewers.
Published and current	The ranking service shall evaluate current published records for eligibility.
Review due	The ranking service shall evaluate review-due records only during the approved grace period.
Stale	The ranking service shall exclude stale records from ranking.
Blocked	The recommendation service shall exclude blocked records from user recommendations.

07 Data and Content Requirements

Pathway data contract

Field	Rule
pathway_id	Stable, unique and never reused.
name and category	Controlled terminology with localized display copy.
capital_structure	Debt, revenue-linked or equity-like structure.
eligibility_rules	Machine-readable predicates plus user-facing explanations.
repayment and ownership	Explicit values or verified not applicable.
documentation	Normalized list with required and conditional items.
source_url	Primary authoritative source where available.
effective_date and reviewed_at	Required for publication and freshness calculation.
status and reviewer	Required workflow fields.
why and caveat	Evidence-linked explanation, never promotional copy.

Data minimization

1. Do not collect identity numbers, bank credentials or uploaded financial documents in R1.
2. Store assessment answers under a random session identifier and expire them by policy.
3. Separate operational logs from user answers.
4. Treat any future document feature as a separate privacy and security approval.

Quality controls

Control	Pass condition
Completeness	All required fields populated.
Provenance	Every material claim has a resolvable source.
Freshness	Review date is within category threshold.
Consistency	Terms and eligibility agree across normalized fields and display copy.
Link health	Evidence URL resolves and has not unexpectedly changed.
Review	Named reviewer approves before publication.

08 Responsible AI Requirements

Authority model

Layer	Authority
Eligibility and ranking	Deterministic rules only.
Explanation	Curated content or retrieval-grounded language generation.
Financial decision	User and authorized provider.
Content publication	Human reviewer.

Controls

ID	Pri.	Status	Requirement	Acceptance criteria
AI-01	Must	Target	The coach shall cite the published pathway record and source for every material funding claim.	Given an answer, when claims are audited, then each resolves to a published record and source.
AI-02	Must	Target	The coach shall limit funding terms and eligibility claims to retrieved published evidence.	Given a question about an unsupported term, when answered, then no invented rate, limit or eligibility is returned.
AI-03	Must	Target	When evidence is missing, conflicting or stale, the coach shall disclose the evidence gap with a verification step.	Given each gap fixture, when answered, then the gap and verification step are explicit.
AI-04	Must	Target	The retrieval service shall use only published, versioned sources.	Given draft and published records, when retrieval runs, then only published versions are returned.
AI-05	Must	Target	The coach audit service shall record prompt, source identifiers, rule version and output outcome under the approved privacy policy.	Given a coach interaction, when logs are inspected, then all required fields are present without prohibited personal data.
AI-06	Must	Target	The coach evaluation suite shall test grounding, citations, refusal, financial safety, clarity and subgroup consistency.	Given a candidate, when evaluated, then all six dimensions have retained results against approved thresholds.
AI-07	Must	Target	When the generation kill switch is active, BRINK shall disable generated responses while retaining deterministic results and curated help.	Given the active switch, when coach and results are used, then no generated answer is returned and fallback content remains available.

ID	Pri.	Status	Requirement	Acceptance criteria
AI-08	Must	Target	The coach interface shall label generated text.	Given a generated response, when displayed, then its generated-text label is visible.
AI-09	Must	Target	The coach interface shall provide a problem-reporting action for generated answers.	Given a generated answer, when Report is selected, then a report is accepted and associated with its response identifier.

09 Non-Functional Requirements

ID	Pri.	Status	Requirement	Acceptance criteria
NFR-001	Must	Target	The R1 service shall achieve at least 99.5% monthly availability excluding announced maintenance.	Given monthly health checks and maintenance records, when availability is calculated, then it is at least 99.5%.
NFR-002	Must	Target	The core pages shall become usable within 2.5 seconds at p75 on the approved mid-tier mobile device over 4G.	Given the approved device and network fixture, when page timings are measured, then p75 is at most 2.5 seconds.
NFR-003	Must	Target	The scoring service shall return a deterministic result within one second at p95 after valid submission.	Given the approved load fixture, when valid submissions are timed, then server-side p95 is at most one second.
NFR-004	Must	Target	The core journeys shall conform to WCAG 2.2 AA.	Given the core journeys, when automated and manual checks run, then all applicable AA criteria pass.
NFR-005	Must	Target	The interface shall support viewport widths from 320 to 1,440 CSS pixels without loss of required content or controls.	Given the viewport matrix, when core journeys run, then no required content or control is lost.
NFR-006	Must	Target	Production endpoints shall encrypt data in transit using TLS 1.2 or later.	Given each production endpoint, when protocol support is inspected, then connections below TLS 1.2 are rejected.
NFR-007	Must	Target	The data inventory shall define purpose, retention and deletion rules for each collected field.	Given collected fields, when the inventory is inspected, then every field has all three rules.

ID	Pri.	Status	Requirement	Acceptance criteria
NFR-008	Must	Target	Production data stores shall encrypt retained data at rest.	Given each production store, when its configuration is inspected, then encryption at rest is enabled.
NFR-009	Must	Target	The audit service shall retain publication and rule-change history for the approved retention period.	Given events within that period, when history is queried, then all are retrievable and unchanged.
NFR-010	Must	Target	If a catalog refresh fails, the catalog service shall retain the last successful published version.	Given a failed refresh, when the active version is checked, then it equals the previous successful version.
NFR-011	Must	Target	The R1 recovery process shall restore catalog and audit services within four hours with at most 24 hours of data loss.	Given a simulated outage, when recovery runs, then measured RTO is at most four hours and RPO at most 24 hours.
NFR-012	Must	Target	The telemetry service shall report errors, latency, stale sources, ranking exclusions and coach refusals.	Given a fixture for each event type, when telemetry is inspected, then the corresponding measure is present.
NFR-013	Must	Target	The release process shall version rules, catalog content and interface code independently.	Given a release manifest, when inspected, then each artifact has its own immutable revision.
NFR-014	Must	Target	The rule test suite shall cover positive, negative and boundary cases for each deterministic rule.	Given the rule inventory, when coverage is inspected, then each rule maps to all three case types.
NFR-015	Must	Target	The core journeys shall operate on current and previous major Chrome, Edge, Firefox and Safari versions.	Given the approved browser matrix, when journeys are tested, then each completes without functional loss.

ID	Pri.	Status	Requirement	Acceptance criteria
NFR-016	Must	Target	The interface shall support externalized Bahasa Indonesia and English content and number formats.	Given each locale, when selected, then core labels and numeric values use its approved resources.
NFR-017	Must	Target	Core interface copy shall pass the approved plain-language review checklist.	Given core copy, when reviewed, then no unexplained financial jargon remains and review approval is recorded.
NFR-018	Must	Target	The R1 service shall support 100 concurrent assessment sessions within its performance targets.	Given 100 concurrent sessions, when load testing runs, then NFR-002 and NFR-003 thresholds pass.
NFR-019	Must	Target	The catalog service shall publish pathway versions atomically with verifiable checksums.	Given a new version, when publication occurs, then no partial version is served and its checksum matches.
NFR-020	Must	Target	The R1 environment shall have approved service budgets and cost alerts before pilot activation.	Given proposed activation, when configuration is inspected, then both budget and alerts exist.
NFR-021	Must	Target	The deployment process shall reproduce the environment from version-controlled configuration.	Given a clean environment, when deployment runs, then the resulting configuration matches the approved revision.
NFR-022	Must	Implemented	The interface shall exclude approval, rejection and creditworthiness determinations from user results.	Given generated results, when fields and copy are inspected, then none declares the user approved, rejected or creditworthy.

ID	Pri.	Status	Requirement	Acceptance criteria
NFR-023	Must	Target	The catalog service shall support configurable source-review thresholds for each pathway category.	Given two categories with different thresholds, when freshness is calculated, then each uses its own configured threshold.
NFR-024	Must	Target	If the coach or analytics service fails, BRINK shall retain assessment and deterministic-results functionality.	Given either service unavailable, when the core journey runs, then assessment and scoring complete successfully.
NFR-025	Must	Target	Production interfaces shall implement the approved security-header policy.	Given production responses, when headers are inspected, then all required headers match the policy.
NFR-026	Must	Target	The release process shall scan dependencies before production deployment.	Given a release candidate, when scanning runs, then unresolved release-blocking findings prevent deployment.
NFR-027	Must	Target	The authorization service shall enforce the approved least-privilege role matrix.	Given each role and action, when permission tests run, then unauthorized actions are denied.

10 Architecture and Integration

Current architecture

The current application is a front-end Next.js and React prototype with TypeScript, CSS motion and responsive routes for home, assessment, results and quality. It has no production backend and no live language model.

Target components

Component	Responsibility
Web client	Accessible assessment, results, comparison, coach and quality views.
Assessment API	Session validation and deterministic score orchestration.
Rule service	Versioned readiness, eligibility and ranking evaluation.
Catalog service	Published pathway records, provenance and freshness.
Content workflow	Ingest, normalize, validate, review, block and publish.
Coach service	Retrieval, citation enforcement, safety and fallback.
Audit and telemetry	Immutable changes, operational metrics and privacy-safe events.

Integration boundaries

1. Primary public regulator, ministry and provider sources supply pathway evidence.
2. No provider application submission is in R1 scope.
3. A future provider API requires contractual, security and semantic validation.
4. All external failures use timeouts, retries and a last known-good catalog.

11 Experience and Accessibility

Information hierarchy

1. State the boundary and purpose before asking questions.
2. Use one decision per assessment screen with visible progress.
3. Lead results with explanation, not a promotional call to action.
4. Show why and caveat next to every recommendation.
5. Keep source and freshness accessible without hiding them in fine print.

Interaction requirements

ID	Pri.	Status	Requirement	Acceptance criteria
UX-01	Must	Target	The core controls shall support keyboard operation with visible focus in logical order.	Given a core journey, when completed by keyboard, then every control is reachable with visible focus.
UX-02	Must	Target	The interface shall provide semantic labels for questions, errors, scores and comparison tables.	Given assistive technology, when each element is read, then its name and relationship are announced.
UX-03	Must	Target	The interface shall communicate state through text or symbols in addition to color.	Given colors removed, when states are inspected, then their meaning remains identifiable.
UX-04	Must	Target	The interface shall honor the reduced-motion preference.	Given reduced motion enabled, when the interface loads, then optional animation is reduced.
UX-05	Must	Target	When validation fails, the interface shall display guidance beside the affected field.	Given an invalid answer, when submitted, then the field has an associated error message.
UX-06	Must	Target	At phone widths, the comparison interface shall stack pathways while preserving dimension labels and order.	Given two pathways at 320 CSS pixels, when compared, then labels and sequence remain intact without overflow.
UX-07	Must	Target	When validation fails on submission, the interface shall display an error summary.	Given multiple invalid fields, when submitted, then the summary identifies each affected field.

Content voice

Use calm, specific and non-judgmental language. Say what evidence exists, what is missing and what the user can do next. Avoid claims such as best loan, guaranteed fit, approved or low risk.

12 Acceptance and Release Readiness

End-to-end acceptance

Test	Pass condition
AT-01 Complete assessment	All four answers persist; deterministic score and five dimensions reproduce from rule version.
AT-02 Missing answer	Submission is blocked and the missing question is identified.
AT-03 Stale source	Pathway is visible as stale and absent from ranked recommendations.
AT-04 Hard ineligibility	Pathway is not ranked and a plain-language reason is displayed.
AT-05 Comparison	One or two pathways render; a third cannot be selected.
AT-06 Unsupported coach question	Coach refuses advice or prediction and directs the user to verified help.
AT-07 Catalog failure	Last known-good version remains active and an operator alert is raised.
AT-08 Accessibility	Automated and manual keyboard, screen reader and zoom checks pass.
AT-09 Mobile	Core journeys complete at 320-pixel width without horizontal overflow.
AT-10 Audit	A content change records actor, time, before, after, reason and approval.

Release gates

1. Product owner approves scope and user-facing boundary.
2. Risk owner approves scoring meaning, exclusions and disclaimers.
3. Content owner confirms all ranked pathways are current and sourced.
4. Security and privacy reviews close all critical findings.
5. Responsible AI evaluation meets approved thresholds if generation is enabled.
6. Operational dashboards, alerts, recovery test and rollback are ready.

13 Risks, Assumptions and Decisions

Risks

Risk	Control
Users interpret readiness as approval probability	Prominent wording, dimension explanations and copy tests.
Funding terms become stale	Effective dates, freshness thresholds, monitoring and ranking exclusion.
Provider coverage creates bias	Coverage reporting, neutral ordering and explicit catalog limitations.
Generated coach invents terms	Published-source retrieval, citation validation, refusal and kill switch.
Simplified answers misrepresent a business	Explain limits, allow review and avoid high-stakes conclusions.
Prototype metrics appear operational	Label current quality figures as illustrative until live calculation exists.

Assumptions

1. Initial users can complete the four questions without uploading evidence.
2. Authoritative public sources expose enough information for pathway comparison.
3. R1 remains a preparation tool, not a regulated application channel.
4. Bahasa Indonesia localization receives native-language and financial-domain review.

Open decisions

1. Approve readiness weights and band thresholds.
2. Set freshness periods by category and define the review grace period.
3. Choose whether sessions remain local-only or may be saved under optional accounts.
4. Define the minimum provider coverage for pilot launch.
5. Approve the R2 case for document handling and provider integrations.

14 Traceability

Outcome	Requirements	Verification
Understand readiness	FR-003 to FR-012; FR-037; NFR-002 to NFR-005; UX-01 to UX-07	AT-01, AT-02, accessibility review
Compare pathways	FR-013 to FR-021; FR-038 to FR-039; BR-01 to BR-04	AT-03 to AT-05, rule unit tests
Prepare next actions	FR-022 to FR-027; AI-01 to AI-09	AT-06, coach evaluation, export test
Trust evidence	FR-028 to FR-033; FR-040 to FR-041; NFR-009, NFR-019, NFR-023	AT-07, AT-10, content audit
Operate safely	FR-034 to FR-036; NFR-006 to NFR-027	Security, privacy, load, recovery and monitoring tests

A Appendices

A.1 Prototype content snapshot

Element	Illustrative value in current interface
Sample profile	Ayu
Overall readiness	72/100
Dimension scores	Maturity 82; records 64; documentation 58; debt readiness 78; investor readiness 43
Pathways	KUR Working Capital 91%; Commercial Investment Loan 76%; Securities Crowdfunding 62%
Quality console	14 published pathways; five categories; 93.4% field completeness; 12 of 14 sources fresh; two require review
Pipeline	18 sources; 246 normalized fields; 31 controls; two queued reviews; 14 published

These values are interface examples. They are not evidence of a live scoring engine, live provider catalog or production data-quality pipeline.

A.2 Reason-code convention

Prefix	Use
RDY	Readiness dimension and band.
ELG	Eligibility inclusion or exclusion.
RANK	Ranking factor or tie-breaker.
SRC	Source, freshness or conflict state.
SAFE	Advice, prediction or evidence safety boundary.

A.3 Glossary

Term	Definition
MSME	Micro, small or medium enterprise.
Readiness	Preparation state based on supplied answers; not approval likelihood.
Pathway	A category or product route for obtaining capital.
Hard eligibility	A condition that must be satisfied before ranking.
Freshness	Whether evidence remains within its approved review period.
SCF	Securities crowdfunding.
KUR	Indonesian people's business credit program.

A.4 Disclaimer

BRINK is an independent portfolio prototype. It is not financial advice and is not affiliated with, endorsed by or operated by Bank Rakyat Indonesia, Bank Indonesia, OJK or the Government of Indonesia. Users must verify current terms, eligibility and obligations with the relevant provider or authority before acting.