INDEPENDENT BA PORTFOLIO

Digital Banking Customer Onboarding Enhancement

Requirements, traceability, UAT design and synthetic performance dashboard

Scope — Stories — GWT — RTM — Test — UAT — Defects — Dashboard

CASE SNAPSHOT

8	8	26	15	300
in-scope onboarding steps	user stories	acceptance criteria	UAT test cases	synthetic applications

Synthetic data created solely for this independent case study. Proposed targets are not actual bank results.

21 AUG 2026

Project overview and business problem

Frame the opportunity, constraints and measurable outcomes

EXECUTIVE SUMMARY

This independent case study proposes a clearer, recoverable and testable digital onboarding journey for Hong Kong retail-banking applicants. It focuses on the customer-facing path from eligibility through status tracking, plus the operations hand-off for exceptions.

Business problem

- Applicants may discover eligibility or document constraints too late, after investing time.
- Identity failures can become dead ends when error messages do not explain the next action.
- Interrupted sessions, duplicate submissions and opaque status increase avoidable support demand.
- Operations teams need reason-coded, auditable exception routing instead of unstructured hand-offs.

Case-study objectives

- Control scope around eight onboarding steps.
- Translate needs into testable GWT criteria.
- Demonstrate requirement-to-test coverage.
- Define a practical UAT and defect process.
- Use synthetic data to surface priorities.

Proposed measures of success

COMPLETION	DOCUMENT FAILURE	COMPLETION TIME	MANUAL REVIEW
UP	**DOWN**	**DOWN**	**CONTROL**
submitted / started	failed / attempts	minutes to submit	risk-appropriate

EVIDENCE BOUNDARY

The deliverables prove analytical structure, not real bank performance. Business rules, personas, defects, test results and the 300 application records are illustrative. Production security, regulatory interpretation and integration feasibility require bank-owned validation.

Stakeholders and persona

Balance customer clarity, control ownership and operational evidence

Primary persona

MC

Mei Chan

29 | Hong Kong resident

Mobile-first | Time-poor

Job to be done
Open an account remotely with confidence that progress is saved and the next action is always clear.

Pain points
Late eligibility rejection; unclear photo errors; repeated data entry; uncertainty after submission.

Stakeholder map

Applicant
Completes journey; needs clarity, privacy and recovery

Product owner
Owns outcome, priorities and business sign-off

Business analyst
Owns scope, requirements, traceability and triage

Operations
Owns manual review, evidence and turnaround

Compliance / Risk
Validates declarations and exception controls

Technology / QA
Builds, integrates, executes and fixes

Vendors
Provide OTP, OCR and liveness capabilities

Customer service
Supports status and action-required queries

Lean RACI for UAT

Activity	BA	Product	QA	Ops / Compliance	Business owner
Scope and criteria	R	A	C	C	I
Test design	R	C	A/R	C	I
Execution and evidence	C	I	A/R	R	I
Defect triage	R	A	R	C	I
UAT sign-off	C	R	C	C	A

R = Responsible | A = Accountable | C = Consulted | I = Informed

Current-state journey

Illustrative baseline: where friction, uncertainty and rework can accumulate

Baseline assumption. The current journey is represented as a plausible composite for analysis; it is not a reverse-engineered bank process. The aim is to identify testable improvement hypotheses.

Journey and friction

#	Step	Friction
1	Eligibility check	Late rule discovery
2	Mobile/email verification	OTP expiry ambiguity
3	HKID or passport upload	Image dead end
4	Identity and liveness verification	No clear escalation
5	Personal information confirmation	OCR rework
6	Tax-residency declaration	Declaration uncertainty
7	Application submission	Duplicate risk
8	Application-status tracking	Opaque next action

Problem hypotheses to validate

- Earlier eligibility clarity reduces avoidable starts and frustration.
- Specific image-quality guidance improves retry success and completion.
- Save/resume plus idempotent submission reduces rework and duplicate cases.
- Status plus next action reduces uncertainty and support contacts.

Proposed future-state journey and scope

Make decisions explicit, recovery actionable and exceptions observable

Future-state journey

Eligibility → Verify contact → Capture ID → Liveness → Confirm data → Tax → Submit once → Track status

Progressive disclosure

Collect only what is needed for the next decision.

Actionable recovery

Explain failure, corrective action and retry path.

Persistent progress

Save completed steps and resume after secure re-verification.

Controlled exceptions

Route reason-coded cases to a visible review queue.

Scope boundary

IN SCOPE

- Eligibility check
- Mobile/email verification
- HKID or passport upload
- Identity and liveness verification
- Personal information confirmation
- Tax-residency declaration
- Application submission
- Application-status tracking

OUT OF SCOPE

- Credit approval and underwriting decisions
- Core-banking system redesign or migration
- AML model development or tuning
- Production deployment and operational cutover
- Penetration testing and security certification

Scope-control principle: a change is accepted only when it supports one of the eight steps, can be traced to a business need and has an owner plus test impact. Credit, core banking, AML model design, deployment and penetration testing remain separate workstreams.

User stories

Eight stories connect customer outcomes to operational control

US-01 Eligibility Check

PROSPECTIVE CUSTOMER

As a prospective customer, I want to confirm my eligibility before starting so that I do not waste time on an application I cannot complete.

HIGH PRIORITY

US-02 OTP Verification

APPLICANT

As an applicant, I want to verify my phone number and email so that the bank can securely contact me.

HIGH PRIORITY

US-03 Identity Document Capture

APPLICANT

As an applicant, I want to upload or photograph my identity document and complete liveness verification so that my identity can be verified digitally.

HIGH PRIORITY

US-04 Information Review

APPLICANT

As an applicant, I want to review and correct extracted personal information and declare tax residency so that accurate information is submitted.

HIGH PRIORITY

US-05 Save and Resume

APPLICANT

As an applicant, I want to save my progress and resume later so that I do not lose completed information.

MEDIUM PRIORITY

US-06 Error Guidance

APPLICANT

As an applicant, I want clear instructions when a step fails so that I know how to correct the problem.

HIGH PRIORITY

US-07 Application Status

APPLICANT

As an applicant, I want to submit once and see my application status so that I know whether further action is required.

HIGH PRIORITY

US-08 Manual Review Escalation

OPERATIONS REVIEWER

As an operations reviewer, I want incomplete or high-risk cases routed to a review queue so that exceptions can be handled efficiently.

HIGH PRIORITY

Backlog note. All eight stories are kept at portfolio level. The 26 acceptance criteria in the Excel attachment carry the detailed business rules, negative scenarios and verification evidence required for refinement and UAT.

Acceptance criteria

26 Given / When / Then scenarios, including negative and recovery paths

Testable structure

GIVEN starting context	WHEN action or event	THEN observable outcome

Selected coverage examples

AC-01.2 | US-01 | Negative

Given the applicant is below the minimum age, when date of birth is evaluated, then the journey stops with a specific eligibility reason and no account application is created.

AC-02.3 | US-02 | Recovery

Given a code has expired, when the applicant requests a new code, then the old code is invalidated and a new five-minute verification window starts.

AC-03.2 | US-03 | Negative

Given the uploaded document is blurred, cropped or glare-obscured, when required information cannot be verified, then a clear error and retake guidance are displayed.

AC-04.3 | US-04 | Mandatory

Given the applicant reaches tax residency, when any required declaration is missing, then submission is blocked and the missing declaration is highlighted.

AC-05.2 | US-05 | Security

Given a saved application exists, when the applicant returns and re-verifies a registered channel, then the journey resumes at the first incomplete step.

AC-06.3 | US-06 | Accessibility

Given required fields are missing, when Continue is selected, then a validation summary appears and focus moves to the first invalid field.

AC-07.2 | US-07 | Negative

Given a submission is already being processed, when Submit is selected again, then no duplicate application is created and the existing reference is returned.

AC-08.1 | US-08 | Routing

Given a case meets a configured exception rule, when automated checks complete, then the case is placed in the manual-review queue with a reason code and risk indicators.

Quality bar. Criteria use observable outcomes, do not prescribe unnecessary implementation, and include age ineligibility, OTP expiry, poor document quality, missing tax declarations, resume security, mobile validation, duplicate submission and manual-review routing.

Requirements traceability

Show that every business need reaches executable test evidence

Business need → REQ → User story → Acceptance criteria → Test case → Defect / evidence

Coverage summary

REQUIREMENTS	STORIES	CRITERIA	TEST CASES	AC LINKED
15	8	26	15	100%

Matrix sample

REQ	Business need	US	AC	TC	Status
REQ-001	Reduce ineligible application effort	US-01	AC-01.1	TC-001	Covered
REQ-002	Establish secure contact channels	US-02	AC-02.1	TC-003	Covered
REQ-004	Reduce document-verification dead ends	US-03	AC-03.2	TC-006	Covered
REQ-007	Capture complete tax-residency declarations	US-04	AC-04.3	TC-015	Covered
REQ-008	Support interruption without data loss	US-05	AC-05.1	TC-010	Covered
REQ-010	Provide accessible field validation	US-06	AC-06.3	TC-014	Covered
REQ-011	Create complete applications exactly once	US-07	AC-07.2	TC-011	Covered
REQ-013	Route exceptions for efficient handling	US-08	AC-08.1	TC-012	Covered

CHANGE-IMPACT EXAMPLE

If the acceptable OTP window changes, the BA can trace REQ-002 to US-02, update AC-02.1 and AC-02.3, then identify TC-003 and TC-004 for regression. The RTM turns a rule change into a visible, bounded test impact.

Test plan (1 of 2)

Objectives, coverage, environment, data and responsibilities

Objectives and coverage lenses

Functional

All eight steps and manual-review hand-off

Negative

Ineligible, wrong OTP, blur, unsupported format

Recovery

OTP resend, retry, save/resume, session expiry

Control

Duplicate prevention, audit trail, review routing

Experience

Mobile error visibility and actionable guidance

Environment and test data

PROPOSED UAT ENVIRONMENT

- Responsive web/mobile prototype
- Stubbed mobile and email OTP service
- Document/OCR sandbox and liveness simulator
- Mock operations queue and notification service
- No production data or production integrations

SYNTHETIC TEST DATA

- Eligible and ineligible profiles
- Correct, incorrect and expired OTPs
- Clear, blurred, rotated and unsupported files
- OCR corrections and tax-residency combinations
- Pass, fail and inconclusive review flags

Roles and responsibilities

Role	Primary responsibility
Business analyst	Scope, criteria, traceability, triage and sign-off recommendation
Product / business owner	Priority decisions, risk acceptance and UAT approval
QA analyst	Execution, evidence, regression and defect retest
Operations / compliance SMEs	Exception routing, declarations and operational acceptability
Delivery squads / vendors	Build fixes, technical analysis and controlled release candidate

Assumption: external-service timing and some failure modes may be simulated. Device coverage is representative, not exhaustive; usability findings still need research with real applicants.

Test plan (2 of 2)

Entry, exit, schedule, selected cases and defect-management process

Entry and proposed exit criteria

ENTRY CRITERIA

- Scope and criteria baselined
- UAT build and stubs available
- Synthetic data approved
- Testers briefed; triage agreed

EXIT TARGETS

- 100% critical cases executed
- No open Severity 1 defects
- >=95% overall pass rate
- Business owner approval

Five-day illustrative schedule

D1
Smoke, eligibility, OTP

D2
Document and OCR

D3
Liveness, data, tax

D4
Resume, submit, status

D5
Regression and sign-off

Selected test cases

TC	Scenario	Expected result	Status
TC-002	Underage customer is stopped	Journey stops with age-specific reason; no application created	Pass
TC-004	Incorrect or expired OTP	Attempts are counted; expired code rejected; resend invalidates old code	Pass
TC-006	Blurred identity image	Processing stops; specific blur guidance and Retake action appear	Fail
TC-011	Duplicate submission prevented	Exactly one application and one reference are created	Pass
TC-014	Mobile error guidance	Validation summary is visible and focus moves to the missing field	Blocked

Defect-management process

Log + evidence → Daily triage → Assign + fix → Retest → Regression → Close / accept risk

S1 is release-blocking. An open S2 requires explicit business risk acceptance. Closure requires retest evidence; a status change alone is insufficient.

UAT and defect management

Illustrative execution evidence: useful precisely because the exit gate is not yet met

Current illustrative UAT result

PASS	FAIL	BLOCKED	NOT RUN	RATE
12	1	1	1	80%

EXIT RECOMMENDATION

NOT READY. The case has no open S1 defects, but one test is blocked, one is not run, the 80% overall pass rate is below the proposed 95% target and business-owner approval is not obtained.

Open defect position

Defect	Linked test	Issue	Severity	Status
DEF-001	TC-006	Blurred document upload remains on a loading spinner and gives no corrective message.	S2 Major	Open
DEF-004	TC-010	Save and resume does not retain the second tax-residency selection.	S2 Major	Open
DEF-005	TC-013	Status page omits the next-action due date for manual-review requests.	S3 Minor	In Progress
DEF-007	TC-014	On a 390 x 844 viewport the validation banner appears below the visible area.	S3 Minor	Open

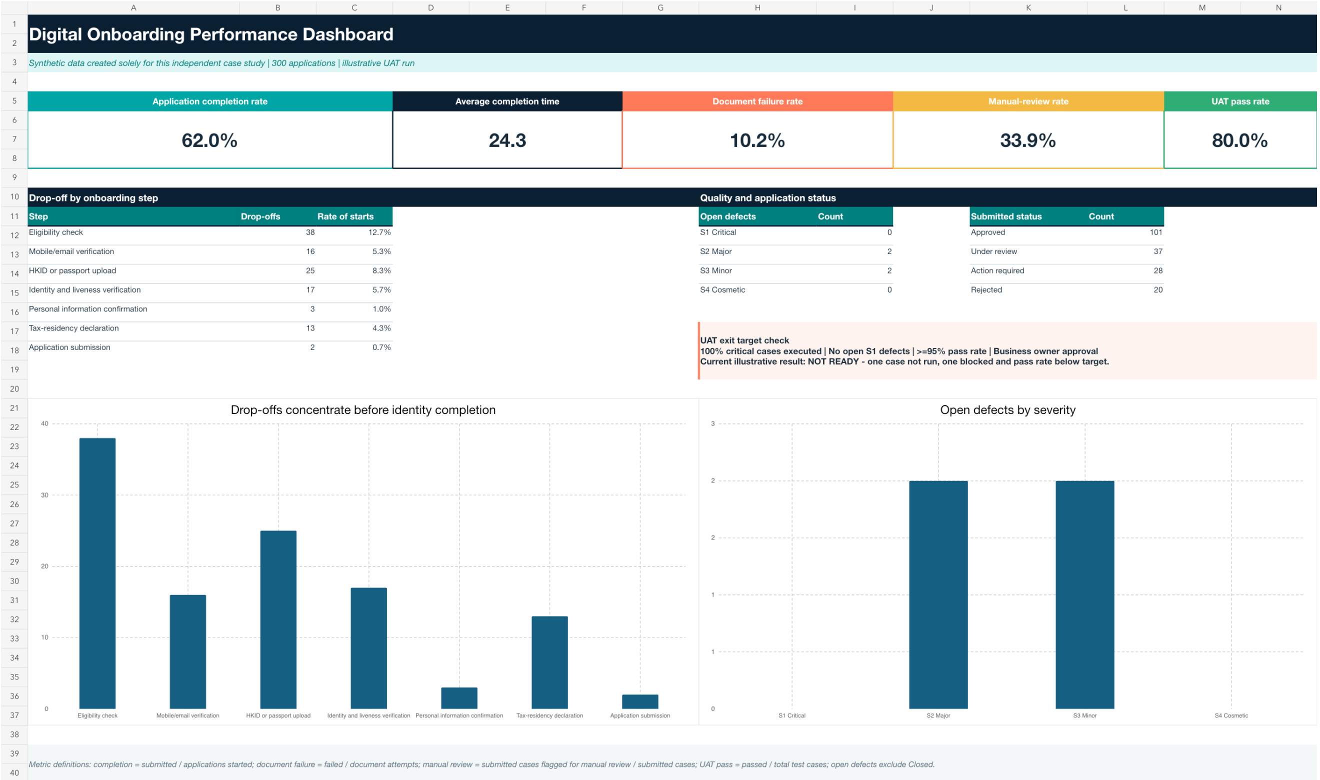
Next UAT actions

- Resolve DEF-001 and retest TC-006 with blur, crop and glare variants.
- Fix or workaround DEF-007, then execute the blocked mobile validation test.
- Restore the environment and execute TC-015 for mandatory tax declaration.
- Regression-test save/resume and status next-action defects before sign-off.
- Recalculate exit metrics and obtain explicit business-owner approval.

Dashboard, recommendations and limitations

Use synthetic evidence to prioritize discovery and design validation

One-page Excel dashboard



Digital Onboarding Performance Dashboard

Synthetic data created solely for this independent case study | 300 applications | illustrative UAT run

Application completion rate	Average completion time	Document failure rate	Manual-review rate	UAT pass rate
62.0%	24.3	10.2%	33.9%	80.0%

Drop-off by onboarding step

Step	Drop-offs	Rate of starts
Eligibility check	38	12.7%
Mobile/email verification	16	5.3%
HKID or passport upload	25	8.3%
Identity and liveness verification	17	5.7%
Personal information confirmation	3	1.0%
Tax-residency declaration	13	4.3%
Application submission	2	0.7%

Quality and application status

Open defects	Count
S1 Critical	0
S2 Major	2
S3 Minor	2
S4 Cosmetic	0

Submitted status	Count
Approved	101
Under review	37
Action required	28
Rejected	20

UAT exit target check
100% critical cases executed | No open S1 defects | >=95% pass rate | Business owner approval
Current illustrative result: NOT READY - one case not run, one blocked and pass rate below target.

Metric definitions: completion = submitted / applications started; document failure = failed / document attempts; manual review = submitted cases flagged for manual review / submitted cases; UAT pass = passed / total test cases; open defects exclude Closed.

What the sample suggests. Completion is 62.0%; the largest observed drop-off is eligibility (38 cases, 12.7% of starts), followed by document upload (25 cases, 8.3%). Document failure is 10.2%, while 33.9% of submitted cases are flagged for review. These are discovery signals, not causal proof.

Recommendations

- Validate eligibility wording and pre-start document guidance with users.
- Prioritize image-quality feedback and assisted retry patterns.
- Tune manual-review rules only after reason-code and outcome analysis.
- Instrument step events, retry success, review ageing and status contacts.

Limitations

- Synthetic sample; no inference about a real bank or customer population.
- Illustrative rules, environment, defects and UAT outcomes.
- No credit, core-banking, AML-model, production or penetration-testing scope.
- Needs legal, compliance, security, accessibility and user-research validation.

Full evidence pack: Excel workbook with complete RTM, criteria, test plan, 15 test cases, UAT checklist, defect log, 300 application records and formula-driven dashboard.