**Product Requirements Document**

**for**

**BFSI Onboarding Software**

**Introduction**

**Project Overview:**

This document outlines the functional product requirements for a Digital Customer Onboarding Solution tailored for the BFSI sector. The solution is designed to streamline the onboarding of customers for financial products such as savings accounts, credit cards, personal loans, and insurance services. It will integrate digital identity verification, eKYC, and real-time status tracking to ensure a fast, secure, and compliant onboarding experience.

**Project Goals:**

The primary objective of this project is to develop a robust, secure, and customer-friendly onboarding platform that:

* **Enhances Customer Experience**: Enables paperless, mobile-friendly onboarding with real-time support and communication.
* **Ensures Regulatory Compliance:** Incorporates RBI/KYC norms, automated verification, and audit logs.
* **Reduces Operational Costs:** Automates manual processes, reduces paperwork, and minimizes in-branch efforts.
* **Improves Processing Speed:** Accelerates onboarding through integrations (Aadhaar, PAN, CKYC, etc.) and workflow automation.
* **Increases Conversion Rates:** Offers a guided, transparent onboarding journey that reduces drop-offs and delays.

**Target Audience:**

* **Retail Customers**: Individuals who want to open bank accounts or access financial products online through a fast and convenient digital process.
* **Bank Employees:** Frontline staff responsible for handling customer queries, providing onboarding support, and guiding users through product selection.
* **Relationship Managers and Agents:** Professionals who assist multiple clients with onboarding, manage customer portfolios, and ensure timely completion of account opening.
* **Compliance Officers:** Personnel who monitor KYC/AML compliance by reviewing flagged applications and ensuring adherence to regulatory standards.
* **IT and Operations Teams:** Teams responsible for maintaining the onboarding platform, managing system integrations, and ensuring smooth backend operations.

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**Key Features:**

The BFSI will incorporate the following key features:

* **Application Forms:** Customers can apply for savings, credit, or loan products digitally through a simple, guided interface.
* **Digital Identity Verification:** Verifies customer identity using uploaded documents, facial recognition, and liveness detection.
* **Automated KYC Compliance:** Validates customer data against regulatory databases to ensure compliance.
* **Secure Document Management:** Stores documents safely with OCR to auto-extract and validate information.
* **Risk Profiling:** Assesses the risk level of applicants based on personal and financial data.
* **Instant Account Setup:** Automatically creates and activates accounts once verification is complete

**Problems**

1. **Manual and Paper-Heavy Processes:** Traditional onboarding involves physical forms and in-person visits, causing delays.
2. **High Drop-Off Rates:** Customers often abandon onboarding due to complexity and lack of real-time support.
3. **Regulatory Risk Exposure:** Manual verifications may lead to incomplete or incorrect compliance checks.
4. **Fragmented Systems:** Disconnected tools and channels lead to poor tracking and user experience.
5. **Limited Accessibility:** Customers in rural or remote areas face challenges with branch-based onboarding.

**Opportunities**

1. Expand market reach by onboarding remote and unbanked customers.
2. Increase conversions through simplified and guided digital processes.
3. Improve compliance with automated KYC/AML workflows and audit trails.
4. Enhance customer experience with real-time onboarding, status tracking, and personalization.
5. Gain business insights through analytics on onboarding trends and customer behaviour.
6. Boost operational efficiency by reducing manual labour and paperwork.

**User Personas**

**Persona 1: The New-to-Banking Customer**

* **Needs:**
  + Simple, guided onboarding process
  + Multilingual support
  + Digital identity verification (eKYC)
  + Mobile-first user interface
* **Behaviours:**
  + Unfamiliar with banking terms and digital systems
  + Uses mobile devices more than desktops
  + Likely to drop off if the process is lengthy
* **Pain Points:**
  + Confusion about required documents
  + Frustration with slow or manual verification
  + Security and privacy concerns

**Persona 2: The Tech-Savvy Urban Professional**

* **Needs:**
  + Fast and seamless onboarding (auto-fill, OCR, Aadhaar/PAN-based eKYC)
  + Real-time status tracking of applications
  + Omnichannel access (web + app)
* **Behaviours:**
  + Prefers self-service, avoids calls/support unless necessary
  + Quick to adopt digital wallets, investment tools, and apps
  + Compares onboarding experience across financial institutions
* **Pain Points:**
  + Delay in verification or approval
  + Lack of real-time updates or progress tracking
  + Poor UI/UX or non-intuitive flows

**Persona 3: The Business Owner or SME Applicant**

* **Needs:**
  + Onboarding for business accounts or corporate users
  + Upload options for multiple documents (business registration, GST, etc.)
  + Role-based access for employees and admins
* **Behaviours:**
  + Frequently uploads bulk or structured documents
  + Needs help from relationship managers or onboarding agents
  + Prefers desktop over mobile
* **Pain Points:**
  + Complex documentation requirements
  + Lack of integration with GST, ROC, etc.
  + Confusion about access roles or business account options

**Persona 4: The Support Agent (Internal User)**

* **Needs:**
  + Admin dashboard with customer details
  + Tools for manual verification and exception handling
  + Audit trail and ticket management system
* **Behaviours:**
  + Acts on flagged/verifications failed applications
  + Communicates with customers via email or calls
  + Escalates or resolves onboarding issues
* **Pain Points:**
  + Incomplete customer data
  + Lack of unified customer view
  + Delayed approvals due to unclear system alerts

**Persona 5: The Compliance Officer**

* **Needs:**
  + Access to full KYC documents and audit logs
  + Ability to mark exceptions or approvals
  + Reports for regulatory filings (RBI, SEBI, IRDAI)
* **Behaviours:**
  + Reviews documents post-onboarding
  + Ensures AML, FATCA, and KYC regulations are met
  + Escalates suspicious accounts for enhanced due diligence
* **Pain Points:**
  + Lack of flagging or risk-scoring in onboarding
  + Manual effort to track incomplete KYCs
  + No alerts for recurring compliance violations

**User list from the User Persona**

**Primary Users:**

1. **Retail Customer  
   • Needs:** Easy banking, secure transactions, personalized offers  
   **• Behaviour:** Uses mobile banking, checks interest rates, values support
2. **Small Business Owner  
   • Needs:** Business loans, current accounts, payment solutions  
   **• Behaviour:** Manages cash flow online, tracks invoices, prefers transparency
3. **Investor  
   • Needs:** Mutual funds, SIPs, advisory tools **• Behaviour:** Tracks performance, uses robo-advisors, seeks expert tips

**Secondary Users:**

1. **Family/Joint Account Users  
   • Needs:** Shared access, linked services **• Behaviour:** Co-manages funds, tracks expenses
2. **Corporate Clients  
   • Needs:** Bulk transactions, payroll, cash management  
   **• Behaviour:** Needs secure, scalable, fast services

**User Stories**

**For the New-to-Banking Customer:**

* **As a new-to-banking customer,** I want step-by-step guidance throughout the onboarding process so that I can complete it easily without confusion.
* **As a new-to-banking customer,** I want to upload my identity and address documents directly from my mobile so that I can finish onboarding conveniently.
* **As a new-to-banking customer,** I want to receive multilingual support during onboarding so I can understand all instructions clearly.
* **As a new-to-banking customer,** I want real-time notifications about my application status so I stay informed throughout the process.

**For the Tech-Savvy Urban Professional:**

* **As a tech-savvy user,** I want to auto-fill onboarding forms using Aadhaar/PAN APIs so that I can save time.
* **As a tech-savvy user,** I want to complete the entire onboarding process via mobile without visiting a branch.
* **As a tech-savvy user,** I want to digitally sign consent forms using OTP-based eSign so that the process is seamless.
* **As a tech-savvy user,** I want to track the status of my onboarding in real-time via the dashboard or mobile app.

**For the SME/Business Owner:**

* **As a business owner,** I want to onboard my business account by uploading company documents like registration and GST certificates.
* **As a business owner,** I want to assign roles (admin/viewer) to employees so that they can access the account based on their responsibility.
* **As a business owner,** I want to save progress and resume the onboarding later if I don't have all the required documents immediately.
* **As a business owner,** I want to see clear instructions on which documents are required for different business account types.

**For the Support Agent:**

* **As a support agent,** I want to view and validate customer-submitted onboarding data so that I can assist them effectively.
* **As a support agent,** I want to flag errors or missing documents and notify the customer for corrections.
* **As a support agent,** I want to contact customers via email or phone when support tickets are raised.
* **As a support agent,** I want to escalate complex or high-risk onboarding cases to the compliance team with remarks.

**For the Compliance Officer:**

* **As a compliance officer,** I want to access and review full KYC documentation to ensure regulatory compliance.
* **As a compliance officer,** I want to flag suspicious profiles for Enhanced Due Diligence (EDD).
* **As a compliance officer,** I want to generate reports and audit logs for internal review and external audit.
* **As a compliance officer,** I want to receive alerts when system validations fail or when documents do not meet RBI/SEBI norms.

**For the General User:**

* **As a user,** I want to securely complete my onboarding journey without worrying about data misuse.
* **As a user,** I want to contact support or use a chatbot in case I face issues during onboarding.
* **As a user,** I want to download a confirmation or receipt after completing onboarding for my records.
* **As a user,** I want to receive a welcome message or account activation confirmation once the process is complete.

**Use Cases**

**Customer Use Cases:**

1. **Digital Onboarding Initiation**
   * User accesses website or app
   * Selects product (Savings Account, Credit Card, Loan)
   * Starts onboarding flow with basic personal details
2. **Document Upload & Verification**
   * Uploads PAN, Aadhaar, income proof, etc.
   * System validates formats (OCR or API-based)
   * KYC verification is triggered via third-party integration
3. **eKYC and eSign Integration**
   * System fetches Aadhaar-based KYC
   * User receives OTP and completes Aadhaar eSign
   * Consent is recorded and audit trail generated
4. **Status Tracking**
   * User checks onboarding status: Pending, Verified, Rejected
   * System sends real-time updates via email/SMS
5. **Assisted Support & Escalation**
   * User raises ticket or requests callback
   * Support agent contacts user and updates ticket status
6. **Account Creation Confirmation**
   * Upon verification, system creates customer ID
   * Welcome email/SMS is sent with product details and next steps

**Admin Use Cases**

1. **Customer Application Management**
   * Admin views pending/verified/rejected applications
   * Admin updates application status manually when required
2. **Document Validation**
   * Admin reviews documents uploaded by customers
   * Flags suspicious documents or requests re-submission
3. **Compliance and Risk Review**
   * Admin verifies flags
   * Generates audit trails and risk assessment reports
4. **Reporting & Analytics**
   * Admin generates onboarding funnel reports (drop-offs, conversions)
   * Dashboard shows region-wise performance and product-wise uptake
5. **User & Access Management**
   * Admin assigns roles (e.g., Support Agent, Compliance Officer)
   * Manages permissions and system access logs
6. **Configuration and Settings**
   * Admin updates product list, interest rates, form fields
   * Controls app UI/UX flow and third-party integration settings

**Feature List**

1. **User Management:**
   * Allows new customers to initiate account opening online via web or mobile.
   * Includes user-friendly digital forms for entering personal and financial details.
   * Captures mobile/email and sends OTP for verification.
   * Supports multiple product types (Savings, Current, Credit, etc.).
2. **Onboarding & KYC Process Management**
   * Handles collection and verification of identity documents (e.g., PAN, Aadhaar).
   * Performs real-time KYC validation via integration with government/regulatory databases.
   * Shows KYC status (Pending, Verified, Rejected) to users and admins.
   * Ensures compliance with RBI and AML regulations.
3. **Risk Assessment**

* Collects financial and behavioral information through a questionnaire.
* Automatically assesses the customer’s risk level (Low/Medium/High).
* Supports rules-based or AI-based scoring mechanisms.
* Flags high-risk profiles for enhanced due diligence.

1. **Document Management**

* Allows secure upload of identity and address proof documents.
* Stores documents in encrypted digital format.
* Uses OCR to extract relevant data from uploaded documents.
* Enables reviewers to approve/reject or request re-upload of documents.

1. **Account Setup & Activation**

* Triggers automatic account creation after KYC and risk checks are cleared.
* Generates account number and links it to selected banking services.
* Send welcome messages, account details, and next steps via SMS/email.
* Allows customers to choose preferences (debit card, cheque book, etc.).

1. **Personalized Onboarding Journey**
   * Tailors onboarding experience based on customer demographics and behavior.
   * Displays personalized product recommendations (e.g., credit cards, loans).
   * Dynamically adjusts messaging and offers shown during onboarding.
   * Improves cross-selling and customer satisfaction.
2. **Omnichannel Support**

* Provides helpdesk access through chat, email, and phone.
* Tracks and logs all customer support interactions.
* Enables agents to respond using a unified dashboard.
* Sends resolution updates and allows feedback collection from users.

1. **Integration Capabilities**

* Connects with Core Banking System (CBS) for real-time data sync.
* Integrates with third-party APIs (e.g., credit score providers, DigiLocker).
* Ensures seamless flow of customer data across systems.
* Supports plug-and-play integration with minimal development effort.

1. **Reporting and Analytics**

* Tracks key metrics like onboarding time, completion rates, and drop-offs.
* Generates dashboards for business users to monitor performance.
* Identifies bottlenecks and areas for process improvement.
* Helps compliance and operations teams make data-driven decisions.

**Enhanced Features**

**1. E-Signature Integration**

* Allows customers to digitally sign application forms and agreements.
* Legally valid under Indian IT Act and global standards (e.g., eIDAS).
* Reduces paperwork and speeds up processing.

**2. Biometric Authentication**

* Uses fingerprint or facial recognition for identity verification.
* Especially useful for mobile-first and rural customers.
* Enhances security and convenience.

**3. Real-Time Status Tracker**

* Lets customers see progress of their application (e.g., "In Review", "KYC Pending", "Approved").
* Reduces inbound support queries.
* Improves transparency and trust.

**4. Cross-Platform Compatibility**

* Optimized for use across mobile, tablet, desktop, and kiosk devices.
* Ensures seamless onboarding experience regardless of platform.

**5. Document Reusability**

* Allows existing customers to reuse previously submitted documents.
* Speeds up re-onboarding or applying for additional products.

**6. Fraud Detection System**

* Uses AI to detect suspicious behavior (e.g., mismatched photos, duplicate documents).
* Triggers alerts for manual review.
* Prevents account misuse and identity theft.

**Feature Description**

**User Management:**

1. **User Registration and Profile Management**

* Enable customers to register via mobile or web applications.
* Collect personal details like name, contact, PAN, Aadhaar, etc.

1. **Role-Based Access Control**

* Define roles: Customer, Admin, Support Agent, Compliance Officer.
* Assign access based on role responsibilities.

1. **Secure Authentication**

* Enable multi-factor authentication (OTP, password, biometrics).
* Support for Single Sign-On (SSO) for internal users.

**Onboarding & KYC Process Management**

1. **Online Application Submission**

* Intuitive digital forms supporting multiple account types (Savings, Current, Credit, etc.).
* Real-time validation of entered data.

1. **KYC Document Upload & Verification**

* Upload documents via mobile/web.
* Integration with OCR to auto-extract data.
* Digital identity checks using APIs (Aadhaar, PAN, DigiLocker).

1. **KYC/AML Compliance Checks**

* Auto-verification against government databases, sanctions lists.
* Flag suspicious profiles for manual review.

**Risk Assessment**

1. **Financial & Risk Profiling**

* Collect income, expenses, and occupation data.
* Risk questionnaire for customer profiling.
* Categorize customers as Low, Medium, or High risk.

1. **Automated Scoring & Alerts**

* Generate risk scores.
* Trigger alerts for reassessment or high-risk patterns

**Document Management**

1. **Secure Document Handling**

* Store user documents securely with encryption.
* Preview, download, and re-upload options for users.

1. **Admin Document Actions**

* Request re-upload, verify document integrity, audit trails.

**Account Setup & Activation**

1. **Automated Account Creation**

* Post-verification, auto-create account and assign account number.

1. **Communication**
   * + Send welcome emails/SMS with account details.
2. **Account Personalization**
   * + Allow customers to set preferences, PIN, and access modes.

**Personalized Onboarding Journey**

1. **Dynamic Content Delivery**
   * + Show tailored messages, services based on customer profile.
2. **Product Recommendations**
   * + Suggest financial products (loans, credit cards) using AI/ML.
3. **Segmentation Logic**
   * + Use demographic/behavioural data to guide content and services.

**Omnichannel Support**

1. **Support Access**
   * + Chatbot, live chat, WhatsApp, email, and SMS-based help.
2. **Query Resolution**
   * + Agent dashboard to manage and close customer queries.
3. **Support Analytics**
   * + Monitor query volumes, resolution time, and CSAT ratings.

**Integration Capabilities**

1. **Core Banking System (CBS)** 
   * + Integration Real-time data syncing for accurate records.
2. **API Integration**
   * + Connect with third-party tools for identity verification, credit scoring, fraud detection.
     + Plug-and-play support for services like DigiLocker, UIDAI, etc.

**Reporting and Analytics**

1. **Operational Reports**
   * + Application completion, KYC approval rates, onboarding turnaround time.
2. **Customer Insights**
   * + Segment-wise behaviour analysis, channel usage.
3. **Custom Reports**
   * + Downloadable reports for audit, compliance, and management decisions.

**Assumptions**

**Business Assumptions**

* **Regulatory Readiness:** We assume that all necessary regulatory guidelines (e.g., KYC, AML) will be clearly defined and accessible during development.
* **Third-Party Services:** We assume reliable availability of third-party services like identity verification APIs, document verification tools, and SMS/email gateways.
* **Stakeholder Support:** We assume that all key stakeholders will be engaged throughout the project lifecycle and will provide timely approvals and feedback.
* **Training and Support:** We assume that sufficient training and onboarding materials will be provided to staff to operate and manage the system effectively.
* **Operational Continuity:** We assume uninterrupted support from internal teams (e.g., IT, compliance, legal) for integration and deployment.

**User Assumptions**

* **Digital Literacy:** We assume that users have a basic understanding of using online forms and submitting documents digitally.
* **Device & Browser Compatibility:** We assume users will access the platform via supported and updated browsers or mobile devices.
* **Reliable Connectivity**: We assume users have stable internet access to complete the onboarding process without interruptions.

**Open Questions and Risks**

**Open Questions**

**1. Customer Disputes and Chargebacks**

* What is the formal policy for handling transaction disputes or chargebacks raised by customers?
* How will cases of unauthorized transactions or service dissatisfaction be managed?
* What is the process and timeline for resolving complaints and issuing refunds or reversals?

**2. Cross-Border Services and Compliance**

* Will the BFSI platform support cross-border banking, remittances, or investments?
* How will foreign exchange rates, fees, and regulatory compliance (FEMA, FATCA, etc.) be handled?
* How will international KYC/AML norms be enforced for global customers?

**3. Transaction and Payment Security**

* What encryption and security protocols (e.g., TLS, tokenization, PCI-DSS) will be used for safeguarding transactions?
* How will the platform detect and prevent fraud, phishing, or identity theft?
* Will there be integration with RBI-mandated fraud monitoring systems (e.g., EFRM)?

**4. System Scalability and Uptime**

* How will the platform ensure high availability during peak periods such as IPOs, tax filing deadlines, or salary credit dates?
* What load balancing, cloud scaling, or disaster recovery strategies are in place?
* Are there SLAs for uptime and response time during transaction surges?

**5. Customer Data Privacy and Regulatory Compliance**

* How will sensitive customer data (PAN, Aadhaar, bank account, credit score) be securely stored and transmitted?
* What measures are in place for compliance with data protection laws like RBI guidelines, GDPR, or India's DPDP Act?
* How will consent management and data retention policies be implemented and monitored?

**Risks**

**1. Cybersecurity Risks**

* **Risk of data breaches, phishing, or ransomware attacks** during the digital onboarding process.
* **Potential exposure of sensitive customer information**, such as PAN, Aadhaar, income documents, and financial data.
* **Regulatory non-compliance** and reputational damage due to poor data security measures.

**2. Regulatory and Compliance Risks**

* **Risk of non-compliance** with evolving KYC/AML regulations, RBI/SEBI mandates, and data privacy laws (like DPDP Act).
* **Delays in onboarding** due to incomplete regulatory checks or manual compliance bottlenecks.
* **Penalties or audit issues** due to poor audit trails or document verification failures.

**3. System Integration Risks**

* **Failure in integration** with third-party services such as credit bureaus, Aadhaar/PAN validation APIs, or eSign providers.
* **Data mismatches or latency issues** during real-time validations and consent-based data pulls.
* **Impact on customer onboarding flow**, leading to abandonment or delays.

**4. Operational Risks**

* **Inconsistencies in document processing** or system errors in form validations.
* **Lack of support readiness** to handle large volumes of onboarding cases or manual escalations.
* **Errors in automated decision-making**, such as wrongful rejections or duplications.

**5. Fraud and Identity Theft Risks**

* **Risk of onboarding fraudulent users** using forged or manipulated documents.
* **Deepfake or AI-generated KYC documents** could bypass weak verification systems.
* **Impact on risk profile and compliance posture** of the financial institution.

**6. User Experience Risks**

* **Complex or lengthy onboarding journey** leading to high user drop-off rates.
* **Mobile responsiveness or accessibility issues** affecting rural or differently-abled users.
* **Low adoption rates** due to non-intuitive UI/UX or lack of language support.

**7. Technology and Infrastructure Risks**

* **Website or app downtime** during peak hours or maintenance.
* **System crashes or lag** during document uploads, form submissions, or API responses.
* **Loss of trust or negative brand impact** due to technical instability.

**8. Data Quality and Duplication Risks**

* **Incomplete or inconsistent customer data** due to manual entries or failed validations.
* **Duplicate customer profiles** created due to insufficient deduplication mechanisms.
* **Impact on backend systems**, fraud detection, and analytics.

**GLOSSARY**

* **BFSI**: Banking, Financial Services, and Insurance sector, which includes organizations providing financial products and services.
* **Digital Onboarding**: The process of acquiring new customers through digital channels by verifying their identity, collecting required documents, and activating services online.
* **KYC (Know Your Customer)**: A regulatory process that requires financial institutions to verify the identity of customers before providing services.
* **AML (Anti-Money Laundering)**: Laws and procedures aimed at preventing criminals from disguising illegally obtained funds as legitimate income.
* **CKYC (Central KYC)**: A centralized repository managed by the government of India to store KYC records of customers, reducing the need for repeated verifications.
* **eKYC**: Electronic Know Your Customer process using Aadhaar-based authentication to verify identity digitally.
* **Video KYC**: A remote method of KYC where the customer is verified via a live video interaction, adhering to RBI-approved guidelines.
* **Aadhaar eSign**: A digital signature service that allows users to sign documents using Aadhaar-based authentication through OTP.
* **OTP (One-Time Password)**: A unique password sent to the user’s phone or email used for secure verification during onboarding or transactions.
* **PAN (Permanent Account Number)**: A unique identifier issued by the Income Tax Department in India used for financial and tax-related identification.
* **Credit Bureau**: An agency that collects and maintains records of individuals' credit histories and provides credit scores to financial institutions.
* **API (Application Programming Interface)**: A set of tools and protocols used to allow different systems (e.g., bank systems and UIDAI) to communicate securely during onboarding.
* **RBI (Reserve Bank of India)**: The central banking authority of India that regulates the financial system and issues compliance guidelines for digital onboarding.
* **DPDP Act (Digital Personal Data Protection Act)**: A regulation in India that governs the collection, processing, and storage of personal data.
* **NBFC (Non-Banking Financial Company)**: A financial institution that offers banking services without holding a banking license.
* **CRM (Customer Relationship Management)**: A platform used by BFSI institutions to manage customer relationships, onboard status, follow-ups, and communication.
* **Risk Profiling**: The process of assessing a customer’s financial background, behavior, and documentation to categorize risk levels during onboarding.
* **CDD (Customer Due Diligence)**: A critical process of verifying a customer’s identity and evaluating their risk profile as part of KYC norms.
* **EDD (Enhanced Due Diligence)**: An extended verification process for high-risk customers that requires additional documentation and review.
* **LMS (Lead Management System)**: A system used to track, manage, and follow up with customer leads through the onboarding funnel.
* **Onboarding Funnel**: The step-by-step digital journey a user follows from initial interest to full account activation.
* **eMandate**: A digital authorization that allows automatic recurring payments from a customer’s bank account.
* **Dashboard**: A user interface panel that displays status updates, onboarding progress, and performance metrics for users, agents, and admins.
* **Audit Trail**: A secure log that records every action taken by users or systems during the onboarding process, used for compliance and investigations.