Product Requirements Document (PRD)

Project Title: Invoice Financing

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Jira Board: https://kifiyaprod.atlassian.net/jira/software/c/projects/IF/boards/28/backlog

Status of PRD: Complete

Product Definition

Purpose

The Invoice Discounting product aims to provide businesses with a seamless, efficient way to unlock cash tied up in outstanding invoices. By allowing businesses to sell or take out a loan against their unpaid invoices at a discount to access immediate cash flow, enabling them to maintain liquidity, meet operational needs, and capitalise on growth opportunities without waiting for the typical 30–90-day payment cycles.

Scope

The scope of the Invoice Discounting product includes developing a user-friendly platform for businesses to submit and sell invoices, a marketplace for financiers to purchase discounted invoices, dynamic discounting and AI-driven risk assessment, seamless integration with payment systems, and robust security and compliance measures. It focuses on domestic(local) transactions, intuitive user experience, and scalable technology infrastructure, with ongoing support and enhancements post-launch.

Problem

Enterprises often face cash flow challenges due to the lengthy payment cycles of their outstanding invoices, typically ranging from 30 to 90 days. This delay in receiving payments can hinder their ability to meet operational expenses, invest in growth opportunities, and maintain financial stability. Traditional financing options, such as bank loans, are often inaccessible or too slow for these businesses, leaving them with limited options to improve liquidity. There is a need for a more accessible, efficient, and flexible solution that allows enterprises to unlock the cash tied up in their unpaid invoices, thereby enabling them to maintain steady cash flow and sustain their operations.

Product Configuration

To finance their invoice, the seller or buyer—depending on the initiator—must first onboard, complete their KYC/KYB forms, and obtain validation. Once validated, based on the invoice discounting product, the party can request financing by uploading the invoice along with supporting or complementary documentation, such as a Performa/Contract, Credit Purchase Order, Credit Invoice, and Delivery Note/GRN.

After submission, the initiator's KYC/KYB will undergo a credit scoring process, and a loan term will be generated and sent to a third-party financier (e.g., a bank) for approval or rejection. Then the seller or buyer is notified of the financier's decision. It is then up to them to accept the loan terms, after which the funds are disbursed into the entity's business account.

Objectives

- 1. **Improved cash flow**: Provide businesses, particularly SMEs, with a tool to improve their cash flow and reduce the waiting time for invoice payments.
- 2. **Ease of Use**: Create an intuitive platform that simplifies the process of submitting invoices, receiving offers, and obtaining funds.
- 3. **Risk Management**: Incorporate robust risk assessment tools to evaluate the creditworthiness and ensure the safety of funds for both sellers and investors.
- 4. **Scalability**: Design a product that can scale across different industries and geographies, with customization options to meet various business needs.

Personas

SME Finance Manager

- Goals: Improve liquidity, reduce receivables cycle.
- **Behaviours**: Seeks short-term loans, prefers automated financing.
- Pain Points: Manual paperwork, loan rejections, and cash flow bottlenecks.

Institutional Investor

- Goals: Maximize ROI on low-risk short-term investments.
- Behaviours: Compares discount rates, uses dashboards for monitoring.
- Pain Points: Lack of risk transparency, data inconsistency.

Banking Officer (Financier)

- Goals: Approve low-risk invoices, manage exposure.
- **Behaviours**: Reviews credit scores, makes bulk financing decisions.
- Pain Points: Limited scoring data, manual bid evaluations

Market Analysis

Customer Needs:

- Rapid access to working capital
- Transparent invoice tracking
- AI-based credit decisions

Industry Trends:

- Growth of embedded finance in B2B ecosystems
- Use of AI for risk profiling
- Rise of invoice marketplaces for liquidity management

Competitive Landscape:

- Platforms like MarketFinance, Fundbox, and Tradeshift offer invoice discounting.
- Gaps: Low localization, limited SME onboarding ease, manual bid processes.

Business Case & Commercials

Revenue Growth Potential: Earn from platform fees, lender commissions, and optional AI scoring services.

Cost Estimate: Development + infrastructure = \sim \$X annually

Monetization Strategy:

- Flat platform usage fees
- % of each funded invoice
- Premium analytics add-ons for financiers

ROI Projections: 18–24 month breakeven; 3x ROI in 3 years with financier network scaling

Success Metrics Dashboard (Template)

Metric	Target	Frequency	Owner
Platform Adoption Rate	200 active SMEs/month	Monthly	Product Team
Invoice Approval Rate	>75% of valid submissions	Weekly	Business Team
Average Bid Turnaround Time	<2 business days	Weekly	Business Team
Net Promoter Score (NPS)	>60	Quarterly	Product Team
Default Rate	<2% on funded invoices	Monthly	Risk & Credit
Revenue from Invoice Fees	\$X/month	Monthly	Finance

Regulatory Mapping

Data Compliance:

- National ID & TIN verification (Ethiopian regulations)
- GDPR-style opt-ins for data collection

Financial Compliance:

- Transparent audit trails of invoice transfers, bids, and fund flows
- AML (Anti-Money Laundering) compliant document checks

Document Controls:

- Verified KYC/KYB documents uploaded securely
- Integration with DARA and EIC for cross-verification

Functional Requirement

Feature Prioritization Matrix

Feature	Impact (1–5)	Effort (1–5)	Priority
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Landing Page	4	2	High
KYC/KYB Portal	5	2	High
Financier Portal	4	3	Medium
Operator Portal	4	5	Medium
Invoice Submission & Validation	5	5	High
AI Credit Scoring	5	4	High
Bid Management	4	4	Medium
ERP Integration	4	5	Medium
Securitization Module	3	4	Low

Home Page/Landing Page

Key Pages to Include:

- 1. **Home** Highlight your value propositions, benefits, and testimonials.
- 2. **How It Works** Step-by-step guide of the invoice discounting process, featuring illustrations or icons.
- 3. **About Us** Information on your company, mission, and values.
- 4. **Solutions** Detailed breakdown of core invoice discounting service we provide
- 5. **Support/FAQ** Common questions about invoice discounting, processes, and platform use.
- 6. **Sign Up/Login** Easy access to onboard new users and for current users to access their dashboards
- 7. **Contact Us** For inquiries, support, and potential partnerships.

Home

Hero Section:

Tagline:

"Effortlessly convert unpaid invoices and purchase order into immediate cash to power your business growth."

Subheading:

"Our platform connects you with competitive financing options to keep your business moving forward."

Call to Action (CTA) Buttons:

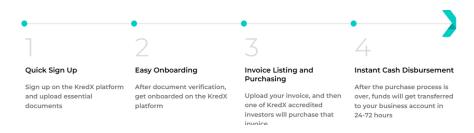
Local Purchase Orders (LPOs): Get cash against confirmed purchase orders, allowing you to fulfil orders without waiting for customer payments. "**Get Started CTA" – Directs to signup.**

Credit Invoices: Leverage your issued invoices to receive immediate funds while maintaining your customer relationships on flexible terms. "**Get Started CTA" – Directs to signup.**

Export Invoices: Convert export receivables into working capital, overcoming the delays of international payments and currency fluctuations. "**Get Started CTA" – Directs to signup.**

How It Works

"How It Works" – Scrolls down or opens a modal with a brief explanation.



About Us

Content

What we do

We construct state-of-the-art digital infrastructure for credit, insurance, and payments, empowering banks, and non-bank financial institutions to provide uncollateralized credit to MSMEs and consumers at scale we offer marketplace connecting MSMEs with larger business and consumers. Our solutions digitize agricultural value chains, connecting smallholder farmers with improved input, credit, and larger markets. We also streamline booking and ticketing systems for both short and long-distance travel.

Why Kifiya For Invoice Discounting?

Quick Verification and Cash Flow

Verify your business instantly on the Kifiya platform and get funds in a very short time*

Risk-free Assets

Get cash against your company's unpaid invoices. No need to pledge any assets

Avoid New Debt

Grow your business without impacting your balance sheet

Real-time Updates

Track your invoice status on the go through Kifiya self-serve module

Paperless Process

Upload your documents and invoices easily on the Kifiya platform

End-to-end Management

Smooth and transparent process from invoice listing to funds disbursal

Solutions

Title:

Our Financing Solutions

Content:

1. Invoice Financing

"Access upfront cash by borrowing against your unpaid invoices. Get working capital without impacting your customer relationships."

Learn More button – Directs to the summary table

2. Invoice Factoring

"Sell your outstanding invoices to us and receive immediate payment, allowing you to focus on growth instead of collections."

Learn More button – Directs to the summary table.

3. Reverse Factoring

"Strengthen supplier relationships with reverse factoring, where buyers support early payments to suppliers without impacting their own balance sheet."

Learn More button – Directs to the summary table.

Summary Table:

Solution	Control	Payer	Who Collects Payment	Best For
Invoice Financing	Borrowing against invoices	Business	Business	Businesses needing cash flow without affecting client relationships
Invoice Factoring	Selling invoices	Factoring company	Factoring company	Companies wanting fast cash and willing to outsource collections

Reverse Factoring	Financing initiated by buyer		• •	Buyers aiming to support their suppliers with cash flow stability
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Support/FAQ

Page Header:

Title:

"Support & FAQs"

Subheading:

"Find answers to your questions about invoice financing, factoring, reverse factoring, and platform features."

FAQ Categories:

1. Getting Started

- What is Invoice Discounting?
 Invoice discounting is a financing method where businesses use their unpaid invoices as collateral to obtain immediate funds.
- How do I create an account on the platform?

 Click "Get Started" on our homepage. Fill in your business information, submit the required documents, and complete the verification steps to start using our services.
- What types of invoices are eligible for discounting?

 Our platform accepts Local Purchase Orders, Credit Invoices, and Export Invoices.

2. Invoice Financing

- What is the difference between invoice financing and invoice factoring?

 Invoice financing involves borrowing against your invoices without transferring ownership, while factoring means selling your invoices to a third party who then collects payments from your customers.
- How quickly can I receive funds with invoice financing?

 Once approved, funds are typically transferred within 24-48 hours of invoice submission.
- Will my customers know I'm using invoice financing?
 No, our invoice financing service is confidential and does not impact your customer relationships.

3. Invoice Factoring

How does invoice factoring work on your platform?

You sell your unpaid invoices to us at a discounted rate. We advance a percentage of the invoice value and manage collections with your customers directly.

What are the fees for invoice factoring?

Fees vary based on invoice size, customer payment history, and other factors. Visit our Pricing page or contact our support team for an estimate.

• Is invoice factoring suitable for all businesses?

It's ideal for companies looking to outsource collections while securing upfront cash. Businesses with stable customer relationships benefit most.

4. Reverse Factoring

What is reverse factoring, and who initiates it?

Reverse factoring is initiated by the buyer, allowing suppliers to receive early payments on approved invoices. It's especially beneficial in buyer-supplier relationships.

• How does reverse factoring improve supplier relationships?

It enables faster payments to suppliers, enhancing their cash flow without affecting the buyer's balance sheet. This approach often results in better pricing or terms with suppliers.

Is there a minimum invoice amount for reverse factoring?

Minimum amounts vary based on supplier and buyer agreements. Contact us to discuss specific terms.

5. Account & Security

What documents are required to complete KYC for account verification?

Typically, we require a government-issued ID, business registration documents, and proof of address. Our support team will provide a detailed list during setup.

How secure is my information on your platform?

We use industry-standard encryption and data security measures to protect your information.

Can I change my account information?

Yes, account settings can be updated under the Profile section in your dashboard. For assistance, please reach out to our support team.

6. Payments & Fees

How do repayments work?

Repayments are automatically scheduled based on your agreement terms. Once the invoice is paid by your customer, any balance is forwarded to you after fees.

Are there any hidden fees?

Our fee structure is transparent, and all costs are outlined upfront. See our Pricing page for more information.

What if my customer doesn't pay?

If you're using non-recourse factoring, the lender assumes the risk. For recourse financing, the responsibility for repayment falls to your business.

Applicable Intertest Rate

TBD

7. Technical Support

How do I reset my password?

Click "Forgot Password" on the login page, and follow the prompts to reset your password.

What should I do if I encounter a technical issue?

Visit our Support page or contact our support team through live chat, email, or phone for assistance.

Is there a mobile app for the platform?

Yes, our platform is available as a mobile app for iOS and Android. Download it from the App Store or Google Play for on-the-go access.

Simplified User Registration & Integrated KYC/KYB Upload Portal

This feature combines user registration with the secure submission and manual verification of KYC/KYB documents during the onboarding process. It simplifies user onboarding while ensuring compliance with national regulations.

Simplified Registration Process:

- Account Creation: New users (buyers or sellers) can create an account by providing basic information, such as:
 - Sign up/Register

Title

Welcome to Kifiya Invoice financing

Please ensure that you provide accurate and complete personal information when filling out the registration form

System Account Creation Fields

- First Name
- Middle Name
- Last Name
- Gender
- Phone Number
- Email
- Business Name/Company Name
- Type of company (dropdown Sole Proprietorships, Partnerships, Private limited companies, Public limited companies, Cooperatives)
 - Add Spouse TIN in the KYC form (Not in the case of solo proprietorship)
 - If PLC is selected create a follow up field
 - Is shareholder Owner >10% (Yes/No)
 - If yes request the TIN of 21 shareholders plus there spouses in KYC form
- Create Password
- Confirm Password
- Mobile-Responsive Design: The registration page must be accessible on all devices.
- **Email Verification**: Users must verify their email via a confirmation link to activate their account.

KYC Upload Portal:

- **Secure Document Upload**: Users must securely upload KYC documents during the onboarding process, such as:
 - Company Name
 - Business Registration No.
 - Telephone
 - Email
 - Fax (optional)
 - Website (optional)
 - o TIN
- Add Spouse TIN (Not in the case of solo proprietorship)
- Year of Establishment (condition if YOE is less than 6 month, automatically reject application)
- Business Sector dropdown)
 - Manufacturing

- Agriculture and Agribusiness
- Construction and Real Estate
- Retail and Wholesale Trade
- Healthcare and Pharmaceuticals
- Transport and Logistics
- Textile and Apparel
 - Sector dependent Documents/license
 - Environment certificate, if any, and
 - DACA Drug Administration & control Authority, if any
 - COC, if any
 - A.A City Administration Heath Bureau, if any,
 - Licenses from Federal/Regional Bureau if any
- Starting Capital
- Current Capital
- Starting number of employees
- Current number of employees
- Source of initial income
- Annual Income
- Annual Profit

Business Address

- Region
- Citv
- Sub city/Zone
- o Woreda
- Kebele (optional)
- House No.

List of Business Documents

- Trade License
- Investment License (optional)
- Memorandum of association
- Article of association (optional)
- Minutes of association
- Commercial Credit Report
- Tax Clearance certificate from ERCA
 - Spouse Tax Clearance (Not in the case of solo proprietorship)
- Audited Financial statement (3 Years)
- Upload Photo of General Manager/Owner
- Bank statement (6 months)
- Upload management Profile

- Upload 3 month Water or Electricity Bill
- Rental lease agreement
- Signature of Bank account creator
- Other documents

Signatory Personal information

- First Name
- Middle Name
- Last Name
- Occupation/Position
- Gender
- Nationality
- Birth Date
- Phone number
- Email (optional)

Address Information

- Region
- City
- Sub city/Zone
- Woreda
- Kebele (optional)
- House No.

Personal ID upload

Upload Identification

- Passport
- Kebele ID
- Driving License
- National ID
- **File Formats**: The system must accept common file types (PDF, JPEG, PNG) with size limits.
- **Progress Tracking**: Users can save their progress and return later to complete document uploads.

Automated KYC Verification:

• **OCR and Data Extraction**: Uploaded documents are automatically scanned using Optical Character Recognition (OCR) technology to extract and verify key details like company name, registration number, and document expiration dates.

- External Integrations for KYC Validation:
 - National ID Integration: The system checks the seller's national ID against government databases to verify identity. (Optional)
 - Core Banking System (CBS) Integration: The system verifies bank customer profiles for further validation.
 - Etrade for TIN and Business Information: The platform verifies the seller's Tax Identification Number (TIN) and business information through the Etrade system.
 - EIC/DARA for Certificate Verification: The system verifies business registration certificates and Memorandums of Understanding (MOUs) with the Ethiopian Investment Commission (EIC) and the Documents Authentication and Registration Agency (DARA).

Onboarding & KYC Status Monitoring:

- Dashboard for Status Updates: Users must be able to monitor the progress of their onboarding and KYC verification through a dedicated dashboard. The dashboard will display the status of each uploaded document (e.g., "Pending," "Under Review," "Verified," or "Rejected").
- **SMS Notifications**: Users will receive notifications when:
 - KYC/KYB under review
 - KYC/KYB is verified.
 - o KYC is rejected (with rejection reasons and steps to resubmit).

Security & Compliance:

- Data Encryption: All KYC/KYB documents must be encrypted during upload and securely stored, ensuring compliance with data privacy regulations (e.g., GDPR).
- Audit Trail: The system logs all KYC/KYB-related actions for compliance purposes, including document submission timestamps and verification outcomes.

Invoice Submission Portal

- A user-friendly interface for businesses to upload their invoices and supporting documents
- Fields for the seller to indicate preferred discount criteria such as Discount Rate, Interest Rate, Disbursement Date (speed of funding).
- Optional: Integration with Seller ERP for seamless import of invoices.
- Automated invoice verification using AI to check for completeness and validity.

Admin Portal for Bank (Financier) onboarding and registration

Bank Registration Form

- The following are data points for bank registration with the following fields:
 - Bank name (Required)
 - Bank license number (Required)
 - Contact information (email and phone) (Required)
 - Bank headquarters address (Required)
 - List of branches (Optional)
 - Authorized representative name and ID (Required)
- The form must validate required fields and provide error messages if any mandatory information is missing or incorrectly formatted.

• Bank Document Upload

- The system must allow the upload of relevant documents for verification (e.g., banking license, KYC documents).
- The system should validate that files are in accepted formats (.pdf, .jpeg, .png) and within size limits (max 5MB per file).

Notification of Approval/Rejection

 Once registered, the system must send a confirmation email to the bank's representative, providing login credentials and access instructions.

Security Measures

- Passwords must meet security requirements (minimum 6 length, special characters).
- The system must log all registration attempts and email notifications for audit purposes.

• User Role Assignment

 The bank's representative must automatically be assigned the "Bank Admin" role, with permissions to manage the bank's profile, add more users, and view financing requests.

Data Integrity

 All registered banks must be stored in the central repository, and their data must be retrievable in the admin dashboard for system administrators.

Usability

- The registration process must be completed within 5 minutes under normal circumstances.
- The system must provide clear and concise success and error messages throughout the registration process.

Bid Management in Invoice Financing

1. Bid Submission

- **1.1**: The system shall allow financiers to submit bids for submitted invoices.
- **1.2**: The bid submission form shall require the following information:
 - Financier name (pre populated)

- Discount percentage
- Interest rate
- Total payable amount
- Payment terms
- Expiry date of the bid

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2. Bid Display

- **2.1**: The system shall display all active bids for a specific invoice to the seller/vendor in a consolidated view.
- **2.2**: The bid display shall include the following columns:
 - o Financier name
 - Discount percentage
 - Interest rate
 - Total payable amount
 - Payment terms
 - Selection button for the vendor to choose a bid

3. Bid Comparison

- **3.1**: The system shall provide a comparison view to allow vendors to compare bids side by side.
- **3.2**: The comparison view shall highlight differences in discount rates, interest rates, and payment terms for easy evaluation.

4. Bid Selection

- **4.1**: The system shall allow the vendor to select a bid and confirm their choice.
- **4.2**: Upon selection, the system shall notify the winning financier of the vendor's acceptance.

5. Bid Notifications

- **5.1**: The system shall send notifications to vendors when new bids are submitted for their invoices.
- **5.2**: The system shall notify all financiers when a bid they submitted has been accepted or rejected by the vendor.

6. Bid Expiration Management

- **6.1**: The system shall automatically expire bids after the specified expiry date.
- **6.2**: The system shall notify financiers when their bids are about to expire.

7. Bid History

- **7.1**: The system shall maintain a history of all bids submitted for each invoice
- **7.2**: The vendor shall have access to view past bids and their outcomes for reference.

8. Reporting and Analytics

- **8.1**: The system shall generate reports on bid activities, including:
 - o Number of bids submitted
 - Average discount rates offered
 - Accepted bids and their terms

9. User Access Control

9.1: The system shall enforce user roles and permissions to ensure that only authorized personnel can submit, accept, or modify bids.

10. Audit Trail

10.1: The system shall maintain an audit trail of all actions related to bid management, including submissions, selections, and modifications.

Al-driven credit scoring/Risk Assessment

This feature integrates AI-driven credit scoring models to evaluate the creditworthiness of both buyers and sellers within an invoice financing or factoring framework. It continuously monitors risk profiles through automated alerts, while offering invoice insurance options. The scoring models use key data points from various sources to calculate risk and optimize lending decisions.

Key Components:

AI-Driven Credit Scoring:

- Risk Evaluation: Al models assess the creditworthiness of both the seller and buyer, factoring in:
 - Seller's financial history, cash flows, and credit score
 - Buyer's financial health and debt levels
- Scoring for Decision-Making: The models determine key lending factors:
 - Interest rates
 - Loan terms (duration, collateral, etc.)
 - o Credit limits based on assessed risk levels
- **Risk Scorecard**: An individualized scorecard is generated for each seller and buyer, with detailed breakdowns on how risk scores were calculated based on data inputs.

Continuous Risk Monitoring:

- Automated Monitoring of Risk Profiles:
 - Seller Risk Profile (Invoice Financing): The system continuously tracks the seller's financial status, including changes in transaction volume, cash flow, or other red flags such as declining business activity.
 - Buyer Risk Profile (Factoring): The buyer's ability to pay invoices is continuously assessed, tracking financial indicators that could suggest potential defaults.
- Automated Alerts: Al-driven alerts are triggered if significant risk changes occur, such as:
 - o Potential defaults or overdue payments
 - Changes in debt levels or credit history
- **Early Warning System**: The platform sends notifications to both lenders and sellers, allowing for proactive intervention.

Key Data Points for the Risk Scorecard:

- KYC & KYB Information:
 - Seller and buyer identity verification and compliance with legal regulations.

• Comprehensive Business & Financial Assessment Framework:

- Invoice Quality
- Financial Health
- Financial Statement
- Credit History
- Business and Management Analysis

• Financial Health Data:

- Income Statement
- Balance Statement
- Cash flow Statement
- o Financial Health and Financial Statement Quality Indicators Analysis

• Core Banking System (CBS) Data:

- Transaction and Loan History: If the SMEs are customers of the partner bank, the platform integrates CBS data to extract historical transaction information, loan repayment history, and current liabilities.
- Non-Partner Bank SMEs: For SMEs without accounts in the partner bank, the system requests:
- Bank Statements: Last six months (L6M) of bank statements from their financial institution.
- Tele birr Transaction History: L6M transaction history for mobile payments via
 Tele birr, offering a cash flow overview for unbanked or underbanked SMEs.

Auxiliary Data:

- Water and Electricity Bills: The platform integrates utility data for the last three months (L3M) to gauge regular expense patterns, which serve as additional financial health indicators.
- Lease Agreements: The platform collects active lease agreements to assess rental obligations as part of the seller's financial commitments.
- Device and Browser Data: The system scrapes web portal usage data, capturing details on device types, browser history, and session behaviour, to identify patterns of trustworthy or risky digital behaviour.

Securitisation of Discounted Invoices by Bundling

1. Bundling by Due Date

- **1.1**: The system shall automatically group invoices with the same due date into a single "Discounting Unit" (DU).
- **1.2**: Each DU shall have a unique identifier assigned by the system.
- **1.3**: The system shall maintain the ability to add new invoices to an existing DU if they have the same due date.

2. Securitization Process

- **2.1**: The system shall facilitate the securitization of the bundled invoices by creating a financial product based on the DU.
- **2.2**: The securitization process shall involve creating legal documentation that outlines the rights and obligations associated with the DU.

3. Reporting and Analytics

3.1: The system shall generate reports on the performance of the securitized bundles, including metrics such as payment rates, default rates, and investor returns.

Integration with Loan Management System for Invoice Loan Settlement

1. Integration Setup

- **1.1**: The system shall establish a secure integration with the existing Loan Management System (LMS) to facilitate data exchange.
- **1.2**: The integration shall support real-time updates to ensure accurate tracking of loan statuses and settlements.

2. Invoice Loan Tracking

- **2.1**: The system shall automatically track all invoice financing loans and link them to their corresponding invoices in the LMS.
- **2.2**: Each invoice loan shall have associated details, including loan amount, interest rate, and payment schedule.

3. Settlement Tracking

- **3.1**: The system shall record and display the settlement status of each invoice loan, including:
 - Amount paid
 - Payment date
 - Remaining balance
- **3.2**: The system shall notify relevant stakeholders (vendors, financiers) when a payment is made or due.

4. Due Date Management

- **4.1**: The system shall automatically update due dates for invoice loans based on the original invoice due dates and any agreed payment terms.
- **4.2**: The system shall send reminders to stakeholders about upcoming due dates for invoice loan repayments.

5. Penalty Tracking

- **5.1**: The system shall track any penalties incurred due to late payments and automatically apply them to the corresponding invoice loan accounts.
- **5.2**: The system shall notify the vendor of any penalties applied and provide a breakdown of fees.

Analytics and Reporting

- Dashboard for sellers to track the status of their invoices, offers received, and cash flow
- Insights and analytics for investors to track performance and optimise their investment strategies.
- Customizable reports for accounting and financial planning purposes

Success Metrics

- **Adoption Rate**: Number of businesses and financiers using the platform.
- Invoice financing approval rate: Number of invoices approved for loan disbursement
- Customer Satisfaction: NPS (Net Promoter Score) and customer feedback.
- Settlement Rate: Percentage of defaults and losses compared to industry benchmarks.
- Revenue Growth: Profitability and revenue generated from transaction fees.

Technology Stack

- 1. **Frontend**: React.js for a dynamic and responsive user interface.
- 2. **Backend**: Java or Python (Django or Spring Boot)
- 3. **Database**: PostgreSQL for reliable and secure data storage.
- 4. **AI/ML Model**s: Python-based models for credit risk assessment and dynamic discounting.
- 5. **APIs**: Integration with accounting software and payment gateways.
- 6. **Security**: Advanced encryption protocols and multi-factor authentication (MFA) for secure transactions.

Compliance and Risk Management

- **Regulatory Compliance**: Ensure the product complies with relevant financial regulations in each operating region.
- **Data Security**: Implement robust data protection measures, including encryption and regular security audits.
- Fraud Prevention:
- Use AI and machine learning to detect and prevent fraudulent activities on the platform.
- Assign certified banker officer to liaise with the sellers and buyer to verify invoices
- Comprehensive list of required documents such as Invoice discounting, Performa/Contract, Credit Purchase order, Credit Invoice, Delivery note in to be uploaded.

Target Persona/Customer Target

Who are the target personas for this product, and which is the key persona?

The target market for the proposed invoice discounting solution includes **small and medium-sized enterprises (SMEs)**, **institutional investors**, and **financial institutions**, with a specific focus on businesses that regularly deal with delayed payment cycles and are seeking efficient ways to manage their cash flow. Below is a breakdown of each target segment:

Small and Medium-Sized Enterprises (SMEs)

- **Profile**: SMEs are a key target audience, especially those with a high volume of outstanding invoices and long payment cycles (30-90 days). These businesses often face cash flow challenges, making it difficult for them to meet operational costs, invest in growth opportunities, or maintain liquidity. They may find traditional financing options (like bank loans) inaccessible, slow, or costly.
- Industries: The platform is designed to serve SMEs across multiple industries, particularly in sectors like manufacturing, logistics, wholesale, retail, and services, where deferred payments are common. Companies involved in both local and international trade are prime candidates for invoice discounting.
- Needs: SMEs need a flexible, fast, and cost-effective way to convert receivables into immediate cash, without taking on traditional debt. This solution enables them to improve cash flow, maintain business continuity, and support day-to-day operations.
- Motivations: These businesses are motivated by liquidity improvement, reduced financial stress, and the ability to reinvest in growth without waiting for long payment terms. SMEs seek transparent processes, quick access to funds, and ease of use in managing their discounted invoices.

Institutional Investors and High-Net-Worth Individuals (HNWIs)

- Profile: Institutional investors, such as asset managers, hedge funds, private equity firms, and HNWIs, are a key target audience for the invoice marketplace. These investors are typically seeking low-risk, short-term investment opportunities with attractive yields.
- Opportunity: By purchasing discounted invoices, investors gain access to short-term
 assets with potential for high returns. The platform provides a diversified investment
 option where investors can buy either entire invoices or fractions of multiple invoices,
 mitigating risk while optimizing returns.
- Needs: Investors require detailed risk assessments, clear financial metrics, and transparent information about the creditworthiness of both sellers (SMEs) and buyers (customers of the SMEs). The platform caters to these needs through AI-driven risk profiling, credit rating tools, and real-time insights into invoice performance.
- Motivations: Investors are motivated by stable, predictable returns on investment with relatively low risk. They are also looking for new, innovative investment vehicles that align with their portfolio strategies.

Financial Institutions (Banks and Non-Banking Financial Companies)

- Profile: Banks and other financial institutions can use this platform to provide liquidity
 to their corporate clients. These institutions may be lenders who specialise in invoice
 factoring or trade finance, and are keen to grow their portfolios by adding invoicebacked loans.
- **Opportunity**: The platform allows banks to access a new pool of SME clients, offering invoice discounting as part of their **working capital solutions**. By purchasing invoices, financial institutions can quickly provide funding to SMEs in exchange for interest earned on the discount rates. The product offers them a way to deploy capital efficiently with lower risk, thanks to the robust credit assessment module.
- **Needs**: Financial institutions require tools to **evaluate the risk of discounted invoices**, fast-track approval processes, and ensure compliance with regulatory requirements. The platform's integration with Al-powered risk models and the inclusion of compliance features (e.g., KYC and AML verification) meet these requirements.
- **Motivations**: Financial institutions are motivated by the potential to expand their market share, increase profitability by offering competitive invoice discounting rates, and build strong relationships with SME clients. The platform also helps them manage risk better through real-time credit scoring and invoice monitoring.

Exporters and Global Trade Participants

• **Profile**: Companies that engage in cross-border trade face additional complexities, such as longer payment cycles and higher risks due to currency fluctuations and jurisdictional

- differences. Exporters dealing with offshore buyers or managing a large volume of international transactions can benefit from this solution.
- Opportunity: The platform can help exporters obtain immediate cash against invoices tied up in international markets, mitigating risks related to delayed payments or defaults.
- Needs: Exporters need quick access to working capital, especially when navigating long global supply chains. The platform's ability to handle transactions in different currencies and jurisdictions supports their need for a globally relevant solution

Use Cases

Instances where various personas will use the product, in context.

Actors

- **Banks (Financier)**: Provides loans to enterprises by purchasing their discounted invoices.
- **Finance Manager at Large Enterprise**: Takes out a loan against the invoices generated or sells the invoices to cover cash flow constraints.
- **Invoice Factoring Company**: Specialises in buying invoices at a discount and managing collections, offering businesses quick access to funds.

Preconditions

Finance Manager at Large Enterprise

- The enterprise has issued invoices that are pending payment from customers.
- The finance manager has access to the platform and is registered and verified.
- The creditworthiness of the invoice buyers has been evaluated by the platform.

Banks (Financier)

- The bank is registered on the platform and has access to the list of available invoices.
- The bank has criteria set for acceptable risk levels and discount rates.

Invoice Factoring Company

- The factoring company is registered and verified on the platform.
- The company has access to the platform's marketplace of invoices and the credit assessment data.

Postconditions

1. Finance Manager at Large Enterprise

- The enterprise receives immediate funds after selling the invoices.
- The sold invoices are transferred to the buyer (bank or factoring company), who will now collect payments from the original customers.

2. Banks (Financier)

- The bank acquires ownership of the purchased invoices and becomes responsible for collecting payments from the debtors (Seller)
- The bank earns returns based on the discount rate and the collected invoice amount.

3. Invoice Factoring Company

- The factoring company gains ownership of the purchased invoices.
- The company collects payments from the original debtor(seller) and earns a profit based on the difference between the purchase price and the invoice amount.

Seller/Buyer Onboarding:

Goal: Seller self-registration – account creation and KYC submission

Actors: Vendor/Seller, Buyer

Main Success Scenario:

Seller Initiates Registration

- Access Registration Portal: Seller or Buyer visits the platform's registration page.
- Select "Register as Seller or "Register as Buyer"

Account Creation

• Provide Basic Information:

- User Full name
- o Company Name
- o Phone Number
- o Email
- Password
- Agree to Terms: Accept terms of service and privacy policy.
- Submit Registration Form.

Phone Number Verification via OTP

- **Send OTP:** System sends an OTP to the provided phone number.
- **Enter OTP:** Applicant inputs the OTP to verify the phone number.
- Proceed to KYC Submission.

KYC Submission

Provide Business & Owner Details:

- Registration steps
 - 1. Personal information and Address Information
 - 2. Upload identification
 - 3. Business Information and Business Address
 - 4. Psychometric Test

Upload Documents:

- Business Documents
 - Proof of Address (Utility bill, etc.)
 - o Tax Identification Number (TIN) or equivalent
 - Company Bank Details (Bank statement)
 - Personal Identification Document (National ID, Passport, Driver License)
 - Trade License
 - Memorandum of association
 - Article of association
 - Minutes of association
 - Audited Financial statement
 - Bank statement (6 months)
 - o Photo of General Manager or Director
 - Upload 3 month Water or Electricity Bill
 - Rental lease agreement

Submit KYC Information.

KYC Verification

- Manual Checks: System and compliance team review submissions.
- Outcome Notification:
 - Approved: Account is verified and activated.
 - o **Rejected:** Applicant is notified to correct and resubmit.

Account Activation & Onboarding

- Welcome Notification: Send a welcome message and platform overview.
- Optional ERP Integration: Guide sellers or buyers on integrating their ERP systems.

Post-Registration Support

• Access Support: Provide resources like FAQs and customer support.

Bill/Invoice Discounting Process:

Goal: Vendors upload valid invoices and track the discounting process, with invoices of the same due date bundled together. Notifications keep the vendor informed throughout the process.

Actors:

- Vendor/Seller
- Bank (Financier)

Main Success Scenario:

1. Invoice Upload:

Vendors fill out the buyers details and uploads the invoice (preferably digitally signed PDF) along with the supporting documents, then inputs there preferred discount rate and payment details for loan disbursement.

2. Duplicate Invoice Check:

The system verifies if the invoice has already been discounted using a SHA256 hashing.

3. Rejection Handling:

If an invoice is flagged as a duplicate or rejected, the vendor is notified, and the hash is either removed or marked as rejected. Vendors can then upload new invoices.

4. Credit Assessment:

The system runs a credit assessment using AI on both the buyer and the vendor. If the assessment fails, the vendor is notified with reasons for rejection.

The Buyer is credit rated utilising public available details

Bank Review:

If the credit check passes, the invoice is sent to a banking officer, who reviews all details and conducts additional assessments if needed.

6. Deal Offer:

The banking officer offers discounting deals to the vendor, which include terms like interest rate, tenor, and margin percentage. The vendor can accept or reject the offer.

 When a vendor rejects the bank's offer, the bank is notified, and the invoice remains eligible for future discounting offers.

7. Final Steps:

- Once the vendor accepts the offer, they sign loan agreement, and the financier transfers the funds to their account.
- The system notifies the vendor about the successful discounting and payment details.
- Notifications are sent before the due date and on the due date for any second leg payments.

Bidding Management for Invoice Financing

Goal: To enable multiple financiers (banks or investors) to bid on submitted invoices, allowing vendors/sellers to choose the best offer.

Actors: Vendor/Seller, Bank/Financier, Kifiya Financial Technologies (KFT) (Platform Operator)

Main Success Scenario:

1. Vendor Submits Invoice for Financing:

The vendor uploads a valid invoice to the platform and requests discounting.

2. System Invites Bids:

The system notifies participating banks/financiers about the new discounting opportunity, including invoice details such as the amount, due date, and credit risk profile.

3. Banks/Financiers Place Bids:

Banks/financiers submit bids with their proposed discount rates, payment terms, and other conditions (such as interest rates and fees).

4. Bid Display to Vendor:

The system consolidates all bids and presents them to the vendor in a clear format, displaying each financier's offer, including key terms like discount percentage, interest rates, and total payable amount.

5. Vendor Reviews and Selects Bid:

The vendor reviews the bids and selects the one that best suits their needs. The system allows vendors to compare offers side by side.

6. Winning Financier is Notified:

Once the vendor selects a bid, the system notifies the chosen bank/financier that they have won the bid. Other bidders are notified that their bids were not selected.

7. Funds Transfer and Finalization:

The winning financier proceeds with the invoice discounting by transferring funds to the vendor's account through KFT's banking integration. The system updates the invoice status and notifies the vendor of the successful discounting.

8. Tracking and Monitoring:

The platform tracks the discounted invoice through to its payment maturity, notifying both the vendor and financier of key milestones like payment due dates.

Alternative Scenarios:

1. No Bids Submitted:

If no bids are submitted within the specified time, the system notifies the vendor and prompts them to re-upload the invoice for future bidding rounds.

2. Vendor Rejects All Bids:

If the vendor rejects all bids, they can either reinitiate the bidding process or withdraw the invoice from financing.

Extensions:

1. Auto-Acceptance of Bids:

Vendors can set specific criteria (e.g., a minimum discount rate) for automatically accepting bids that meet their requirements.

2. Notifications:

All participants (vendors and financiers) receive real-time notifications at key stages, such as bid submissions, bid selections, and fund transfers.

Integration for Screening and Loan Management System

Goal: To efficiently screen candidates (vendors/sellers) and streamline the invoice discounting process, including scoring, fund transfers, and validation of key details.

Actors: Kifiya Financial Technologies (KFT), Bank (Financier), External 3rd Organization

Main Success Scenario:

1. Integration with KFT AI Scoring Tool:

The system integrates with KFT's Al-based rating or scoring tool to evaluate the creditworthiness of sellers and buyers.

2. Integration with Partner Banking Systems:

The system connects with Partner's banking systems to manage fund transfers and loan processing, ensuring seamless financial operations.

3. External Integrations for KYC Validation:

a. National ID Integration:

The system verifies the seller's identity by checking their national ID against government databases.

b. Core Banking System (CBS) Integration:

The system verifies the seller's bank customer profile to ensure the account is active and valid.

c. Etrade Integration for TIN and Business Information:

The system checks the seller's Tax Identification Number (TIN) and business details using the Etrade platform.

d. EIC/DARA for Certificate Verification:

The platform verifies the seller's business registration certificates and Memorandums of Understanding (MOUs) through the Ethiopian Investment Commission (EIC) and the Documents Authentication and Registration Agency (DARA).

Security

Goal: Implementing advanced encryption protocols, multi-factor authentication (MFA), and regular security audits to protect user data.

Actors: Seller/Vendor, Bank(financier), Buyer, Kifiya

Main Success Scenario:

- 1. Ensure secure storage and transmission of sensitive data and documents.
- 2. Implement role-based access control mechanisms to safeguard user data and system integrity.
- 3. Encrypt data at rest and in transit to prevent unauthorised access.
- 4. Utilise robust authentication mechanisms to verify user identities and prevent unauthorised access.

Reporting and Analytics

Goal: Development of comprehensive dashboards for sellers and financiers to track invoice status, financial metrics, and generate reports.

Actors: Seller/Vendor, Bank(financier), Buyer, Kifiya

Main Success Scenario:

- 1. Incorporate reporting functionality to generate insights into bill discounting activities, including transaction volumes, trends, and performance metrics.
- 2. Implement analytics capabilities to monitor key performance indicators, identify potential risks, and make data-driven decisions to optimise system performance.

High-Level Overview of Features for Invoice Discounting

[M] denotes minimum viable experience requirement for Product X

(Note: Many of these features will have their own separate specs with more detailed prioritisation and requirement breakdown. This doc is keeping an overall higher-level view of prioritisation by just saying must have or not. In general, the categories are in priority order with the minimum requirements within each taking the highest priority.)

Features In

Epic: User Management System [M]

- Description: Manages user roles, permissions, and credentials for secure access.
- Features:
- Role Management: Define and assign roles to users based on their responsibilities.
- Permission Management: Control access to system features based on user roles.
- User Authentication: Securely manage user login and credentials.

Epic: Invoice Validation[M]

• **Description**: A system feature to ensure that submitted invoices are valid, authentic, and compliant before being processed for discounting or loans..

Features:

- Automatic Invoice Validation: Automatic checks invoices for completeness, authenticity, and format compliance.
- **Duplicate Detection**: Uses hashing to identify and prevent duplicate invoices from being submitted.
- **Cross-Reference with Buyer Details**: Validates the invoice against the buyer's profile to ensure accuracy.
- **Compliance Check**: Ensures that the invoice adheres to local and international regulations.
- **Invoice Status Monitoring**: Tracks and displays the validation status of each submitted invoice in real-time.

Epic: User Seller, Buyer, Financer Onboarding System [M]

• **Description**: Facilitates company profile creation, verification, and maintenance.

Features:

- Profile Creation: Allow companies to create and submit their profiles for onboarding.
- Company Verification: Verify company information for authenticity and compliance.
- Profile Maintenance: Enable companies to update and maintain their profiles.

Epic: Bill Discounting Module [M]

Description: Manages the processing of bill submissions and the discounting workflow.

Features:

- **Bill Submission**: Allow vendors to submit bills for discounting.
- **Duplicate Check**: Verify if bills have been previously discounted.
- Bill Bundling: Group bills with the same due date for streamlined processing.
- **Discounting Workflow**: Manage the end-to-end process of bill discounting.

Epic: Credit Assessment Module [M]

• **Description**: Evaluates the creditworthiness (credit rating) of buyers and credit scores of the vendors.

Features:

- **Risk Profiling:** Generates detailed risk profiles for each buyer and seller, by credit scoring the seller and credit rating the Buyer
- **Credit Rating Dashboard**: Displays credit scores and risk profiles for each invoice, making it easy for financial institutions to evaluate potential returns and risks.
- **Automated Alerts**: Notifies users if the credit score or rating of a buyer or seller drops significantly, alerting them to potential risks.
- **Credit Score Impact on Discount Rates**: Links credit scores to discount rates, enabling sellers with higher credit ratings to access better financing terms.

Epic: Notification System [M]

 Description: Sends notifications to users at various stages of the onboarding and discounting processes.

Features:

- Onboarding Notifications: Notify users about the status of their onboarding process.
- Discounting Process Alerts: Send alerts during key stages of the bill discounting process.
- **Custom Notifications**: Allow users to customise notification preferences.

Epic: Reports and Analytics Module [M]

• **Description**: Generates reports and analytics for buyers, sellers, and KFT users.

Features:

- **Report Generation**: Create various reports based on transaction data.
- Analytics Dashboard: Provide users with insights and trends in their activities.
- Custom Report Templates: Allow users to design and save custom report formats.

Epic: Fund Settlement Module [M]

• **Description**: Handles payment transactions and fund settlements.

Features:

- Payment Processing: Manage the execution of payment transactions.
- **Settlement Tracking**: Track the status of payments and settlements.
- **Reconciliation**: Ensure all transactions are accurately reconciled and documented.

Features Out

Epic: Marketplace for Investors

Description: A platform enabling institutional investors and high-net-worth individuals to purchase discounted invoices.

Features:

- **Invoice Listing Platform**: Display discounted invoices available for purchase with detailed information.
- **Risk Profiling:** Provide detailed risk profiles and expected returns for each listed invoice.
- **Portfolio Diversification**: Allow investors to purchase fractions of multiple invoices to diversify their portfolio.

Epic: Instant Payouts

Description: Facilitates immediate disbursement of funds to sellers once their invoices are purchased.

Features:

- **Immediate Fund Disbursement:** Automatically disburse funds to sellers once an invoice is sold.
- **Multiple Payout Options:** Offer various payout methods including bank transfers, digital wallets, and fintech solutions.

Epic: Bidding Management

Description: A module that enables competitive bidding between investors for purchasing discounted invoices or loan offers, maximising returns for sellers.

Features:

- **Bid Submission**: Allows financial institutions to submit bids on invoices or loans with their preferred discount rates or interest terms.
- **Dynamic Bidding**: Enables real-time bidding where multiple investors can compete to offer better rates.
- **Bid Notifications**: Sends notifications to sellers and financial institutions about new bids, bid updates, or winning bids.
- **Bid Comparison Tool**: Provides a feature for sellers to compare multiple bids based on rate, terms, and risk profiles.
- Automatic Bid Acceptance: Allows sellers to set predefined criteria for automatically accepting the best bids.
- Bid History Tracking: Tracks all submitted bids for transparency and review purposes.
- **Winner Confirmation**: Notifies the winning bidder and initiates the transaction or loan process once a bid is accepted.

Design UI/UX

Seller Invoice Discounting Process flow: here

Seller Registration Process Flow: here

Operator/Bank Process Flow: here

Technical Considerations - (optional)

TBD - Link to engineering technical approach document here

GTM Strategy

1. Target Audience:

- Small to medium-sized enterprises (SMEs) with significant outstanding receivables.
- Institutional investors and high-net-worth individuals looking for short-term investment opportunities.

2. Marketing Channels:

- Digital marketing campaigns targeting SMEs on platforms like LinkedIn, Google, and industry-specific forums.
- Partnerships with accounting firms and financial advisors to promote the product to their clients.
- Webinars and educational content to inform potential users about the benefits of invoice discounting.

3. Sales Strategy:

- Direct sales outreach to high-potential businesses and investors.
- Offering introductory discounts or incentives for early adopters.
- Building a referral program to leverage word-of-mouth marketing.

4. Customer Support:

- Dedicated support team to assist with onboarding and ongoing usage.
- 24/7 customer service with a focus on resolving issues quickly and efficiently.

Feature Timeline and Phasing

Marco Roadmap

Quarter 4 2024 - Quarter 1 2025

Initiative List initiative that feature belongs to	Feature List feature	Type /date to add a date range	Priority High /Medium /Low	Effort High /Medium /Low	Status In progress /not started /Shipped	Goals looking to accomplish
Vendor/Buyer Onboarding	Sign up/ Registration		High	Low	In Progress	Portal for registration
Vendor/Buyer Onboarding	КҮС		High	Low	In Progress	Means of uploading documents

Vendor/Buyer Onboarding	KYC validation	High	Low	In Progress	Means of reviewing and approving KYC Documents
Document Management System	Store and Retrieval of uploaded documents	High	Low	In Progress	Storage and retrieval of uploaded documents
Discounting Module	Processes bill submissions	High	High	Not Started	Portal for uploading and sharing invoices with financiers
Bill Discounting Module	Checks for duplicates and bundles bills with the same due date	Mid	High	Not Started	Identify invoice duplicates and bundle invoice with same due dates
Credit Assessment Module	Integrate credit scoring algorithm	High	Mid	Not Started	Integrate with KFT credit scoring module for the purpose of assess buyer creditworthiness
Notification System	Notification configuration	High	Low	In Progress	Notification system setup for status update communication
Notification System	SMS Notification	High	Mid	In Progress	SMS communication channel
Notification System	Email Notification	High	Low	In Progress	Email communication channel

Quarter 2

Feature List feature	Initiative List initiative that feature belongs to	Type /date to add a date range	Priority High /Medium /Low	Effort High /Medium /Low	Status In progress /not started /Shipped	Notes Link to project pages and epics
Wallet	Receiving loan payout		High	High	Not Started	Loan or Payment disbursement tool
Wallet	Making loan payment		High	High	Not Started	Means of making a payment
Seller ERP Integration	Integration with Seller and Buyer ERP Systems		High	High	Not Started	Ensure seamless tracking of invoice origination by sellers and approval by buyers through integration with ERP systems.
Buyer ERP Integration	Integration with Seller and Buyer ERP Systems		High	High	Not Started	Ensure seamless tracking of invoice origination by sellers and approval by buyers through integration with ERP systems.

Architecture for the central repository	Central Invoice Repository for Ethiopia	High	High	Not Started	Create a central repository to record all discounted invoices, ensuring an immutable record and preventing multidiscounting.
Utilise Blockchain for records integrity	Central Invoice Repository for Ethiopia	High	High	Not Started	Create a central repository to record all discounted invoices, ensuring an immutable record and preventing multidiscounting.

Open Issues

What factors do we still need to figure out? What problems may arise and how do we plan on addressing them?

Q&A

What are common questions about the product along with the answers we've decided?

Asked by	Question	Answer