Smart Insight

Current banking systems deliver raw transaction data but offer little practical guidance. Without intelligent analytics, users struggle to understand spending patterns, spot trends, and forecast financial outcomes making processes manual, time-consuming, and less effective.

Data Overload
- Large volume of transaction data makes analysis difficult

Limited Insights
- Traditional bank statements lack meaningful categorization

Manual Analysis
- Users must manually track and interpret spending patterns
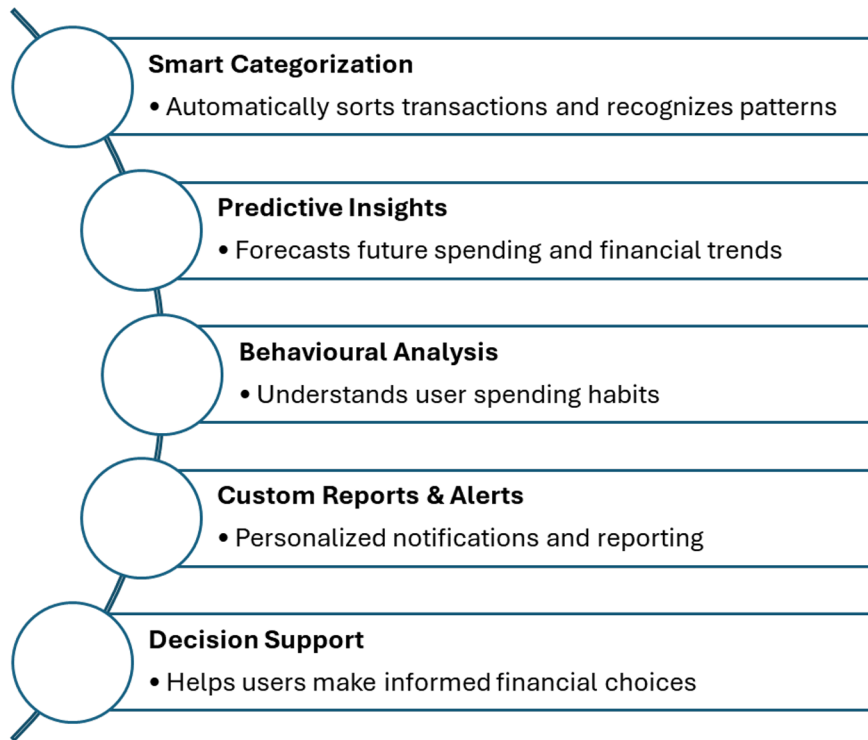
Low Trend Visibility
- Financial trends and anomalies are hard to detect

No Smart Intelligence
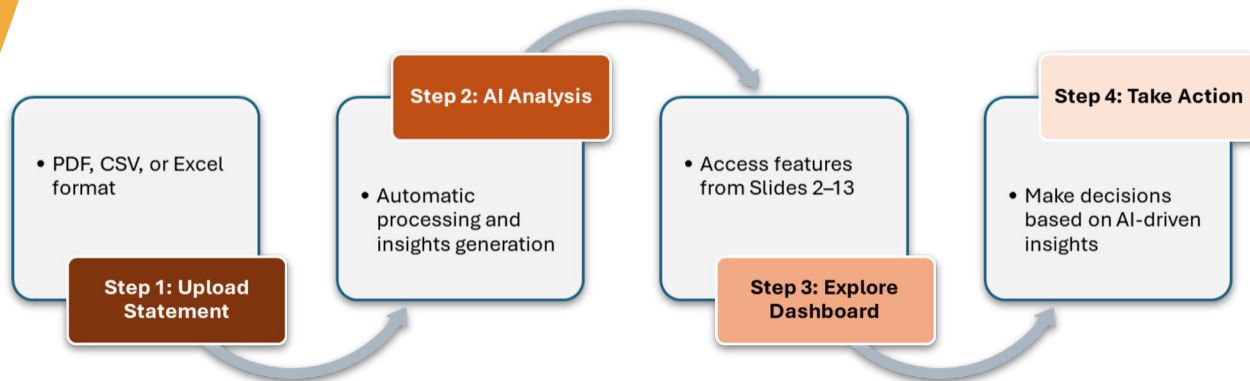- Absence of forecasting and behavioral spending analysis

Trend Forecast

Smart Categorization
- Automatically sorts transactions and recognizes patterns

Predictive Insights
- Forecasts future spending and financial trends

Behavioural Analysis
- Understands user spending habits

Custom Reports & Alerts
- Personalized notifications and reporting

Decision Support
- Helps users make informed financial choices

With the help of AI, Bank statement will transform into clear, actionable insights. It automates categorisation, predicts spending trends, analyses behavior, and delivers customisable alerts empowering smarter, faster financial decisions with confidence.

Work Flow

Step 1: Upload Statement
- PDF, CSV, or Excel format

Step 2: AI Analysis
- Automatic processing and insights generation

Step 3: Explore Dashboard
- Access features from Slides 2–13

Step 4: Take Action
- Make decisions based on AI-driven insights

The platform follows a clear four-step process: start by submitting a bank statement file, let AI automatically analyse the data, explore insights through the interactive dashboard, and take informed action based on the result for faster investigations and smarter financial decisions.
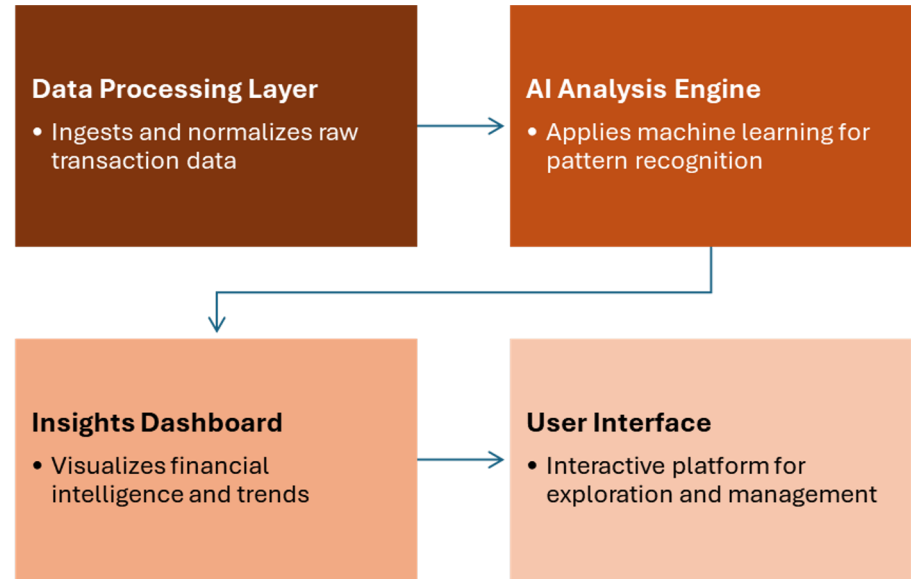
Original Data

Raw Documents
Unprocessed sources

Extracted
Raw Extracted
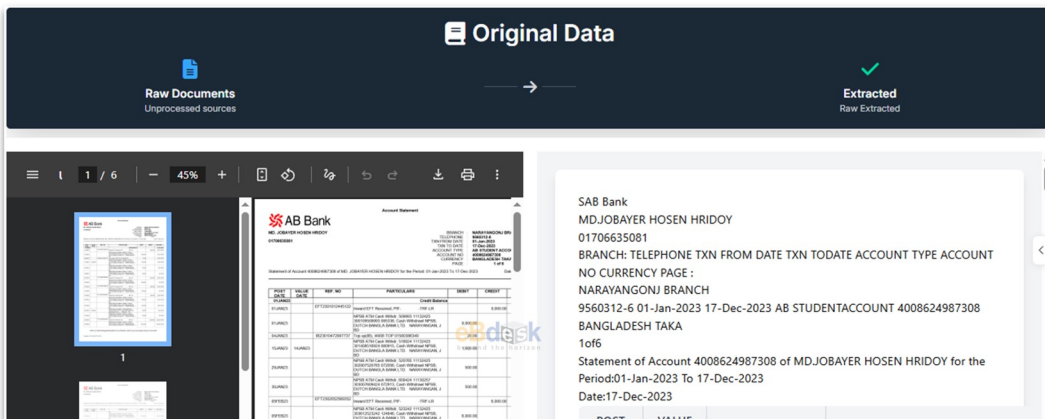
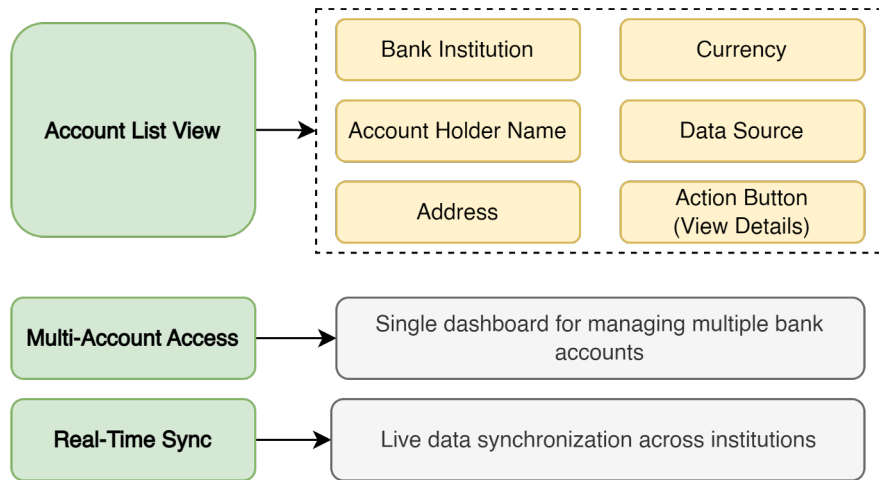*Powered by eikdesk Big Data and Artificial Intelligence*

Core Architecture

The system uses a three-tier design: first, data is processed and standardised; next, AI algorithms analyse it to detect patterns; and finally, results are displayed through an interactive dashboard making financial management clear, engaging, and easy to use.

Data Processing Layer
- Ingests and normalizes raw transaction data

AI Analysis Engine
- Applies machine learning for pattern recognition

Insights Dashboard
- Visualizes financial intelligence and trends

User Interface
- Interactive platform for exploration and management

Account List View

Bank Institution	Currency
Account Holder Name	Data Source
Address	Action Button (View Details)

Multi-Account Access → Single dashboard for managing multiple bank accounts

Real-Time Sync → Live data synchronization across institutions

AI-powered banking brings multiple accounts into one streamlined dashboard. Users can view account details such as bank name, holder, currency, and source in a single interface. With real-time synchronisation across institutions and instant access to account data, financial management becomes faster, clearer, and more efficient.
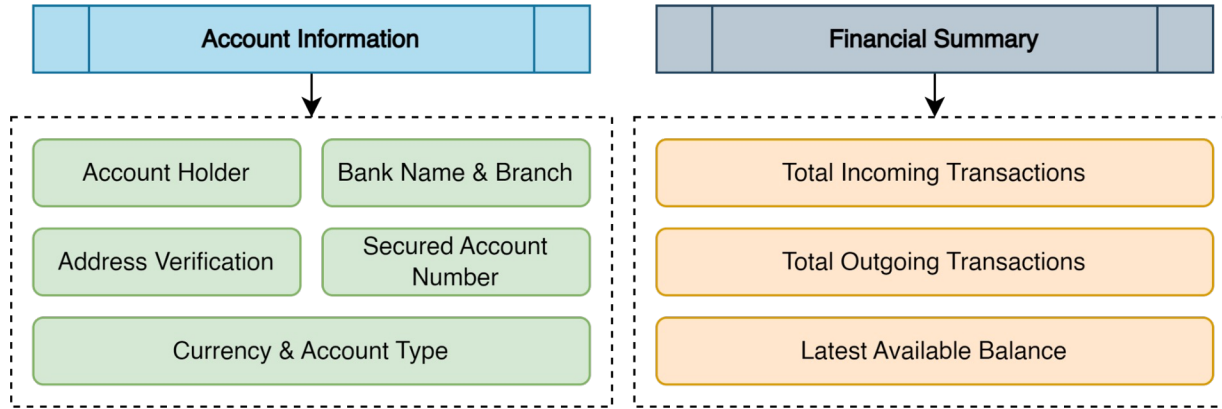
Unified Access

BANK	HOLDER NAME	ADDRESS	CURRENCY	SOURCE	ACTION
AB Bank	MD. JOBAYER HOSEN HRIDOY		BANGLADESH TAKA	bank_statement_01	View Details
AmBank Group	ENCIK MUHAMMAD NAQIB DANIAL HAZIQ BIN MOHD	FELDA LEPAR UTARA 1 BANDAR JENGKA 26400 PAHANG DARUL MAKMUR	MYR	ambank_statement	View Details
AXIS BANK	SANTHOSH J	KU INDUSTRIES PRIVATE LIMITED, UNIT-II S F NO 473, 474, 466, 468, SENTHAMPALAYAM ROAD, PG PUDUR PO, SS KULAM VIA.	INR	bank_statement_83	View Details
AXIS BANK	ASIF SHAIKH	FLAT NO 207 2ND FLOORKEMPS GREEN VIEW APARTMENT NTAYYAPANAGARROPP. SRIKRISHNA COMMUNITY HALL BENGALURU KARNATAKA-INDIA 560036	INR	bank_statement_69	View Details
Bank Asia	KHANDAKAR OLIUR RAHMAN OLI	Ward No 09, Monrejpur, Kulaura, Kulaura Moulvibazar.	BDT - BANGLADESH TAKA	bank_statement_22	View Details
BANK ISLAM	PUAN NURUL HAYAT BINTI ABD JALAL	NO 593 JLN PULAI JAYA 30, BANDAR PULAI JAYA, 81110 JOHOR BAHRU	MYR	bank_islam_statement_2	View Details
BANK ISLAM	ENCIK MOHAMAD HAIRUDIN BIN HASHIM	215 KAMPONG SUNGAI BUAYA, 48050 RAWANG	MYR	bank_islam_statement_4	View Details
BANK ISLAM	ENCIK MOHAMD HAKIM BIN ABD RAHMAN	NO 50 JALAN IMAM KAMPUNG GUDANG GARAM 85000 SEGAMAT	MYR	bank_islam_statement	View Details
BANK ISLAM	Mr Ciaran Paul O Connell	16-18 Wild Goose Drive, London, SE14 5LL	GBP	hsbc_bank_statement	View Details

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Secure Snapshot

Account Information

- Account Holder
- Bank Name & Branch
- Address Verification
- Secured Account Number
- Currency & Account Type

Financial Summary

- Total Incoming Transactions
- Total Outgoing Transactions
- Latest Available Balance

Bank Account Details

ACCOUNT HOLDER
MD. JOBAYER HOSEN HRIDOY

ADDRESS
Unknown Address

AB Bank

BANK Name
AB BANK

ACCOUNT NUMBER
4008624987308

CURRENCY
BANGLADESH TAKA

ACCOUNT TYPE
AB STUDENT ACCOUNT

BANK BRANCH
Unknown

Incoming
246,130 BANGLADESH TAKA

Outgoing
257,194 BANGLADESH TAKA

Latest Balance
6.96 BANGLADESH TAKA

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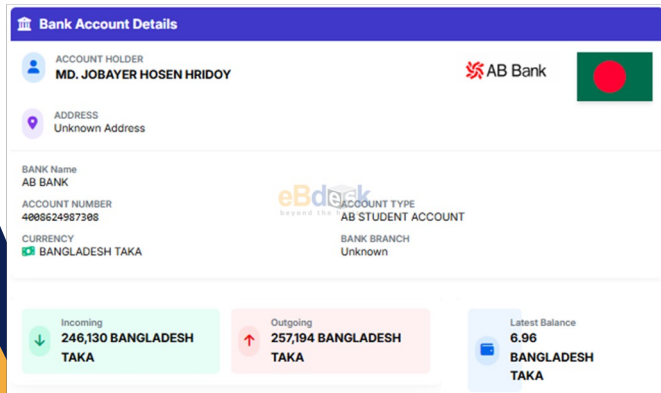
AI provides a secure and complete view of each bank account. Verified details such as holder name, bank branch, currency, and account type are paired with a clear financial summary of inflows, outflows, and current balance. By consolidating essential information in one place, AI simplifies financial tracking and supports confident decision-making.

End Of Day Balance

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Balance Intelligence
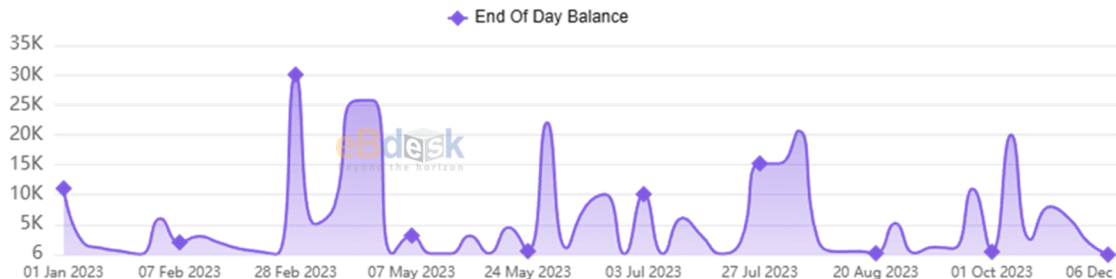
AI continuously monitors account balances by analysing daily trends and historical patterns. It delivers predictive alerts and smart recommendations helping users avoid low balances, forecast future outcomes, and maintain financial stability with confidence.

End-of-Day Balance Tracking

Daily balance trend visualization

Average balance calculation

Minimum / maximum balance alerts

Predictive Balance Analysis

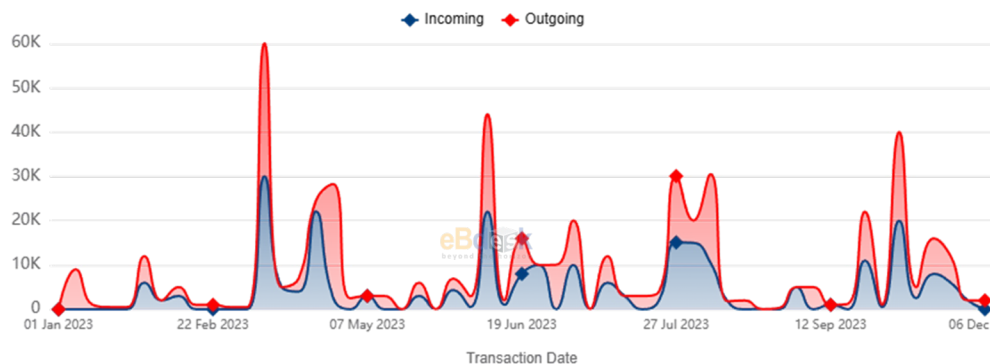Balance forecasting using historical patterns

Low-balance early warnings

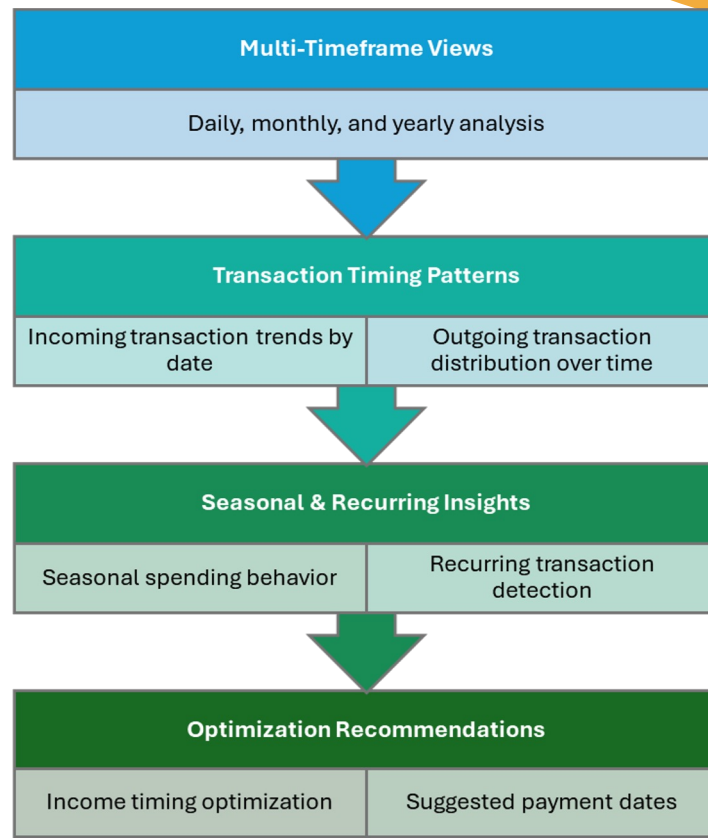Optimal balance maintenance suggestions

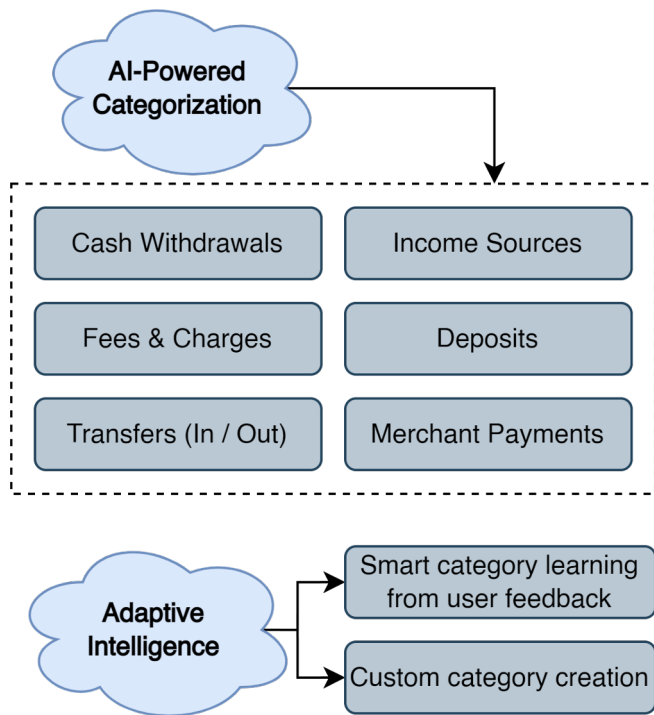Powered by eBdesk Big Data and Artificial Intelligence

Timing Insight

AI analyses financial activity across daily, monthly, and yearly views to uncover transaction patterns, seasonal trends, and recurring behaviours. These insights help users plan better, optimize cash flow, and schedule payments more effectively.

Multi-Timeframe Views

Daily, monthly, and yearly analysis

Transaction Timing Patterns

| Incoming transaction trends by date | Outgoing transaction distribution over time |

Seasonal & Recurring Insights

| Seasonal spending behavior | Recurring transaction detection |

Optimization Recommendations

| Income timing optimization | Suggested payment dates |

Smart Categorization

AI-Powered Categorization

- Cash Withdrawals
- Income Sources
- Fees & Charges
- Deposits
- Transfers (In / Out)
- Merchant Payments

AI automatically organises financial transactions into clear, meaningful categories such as income, fees, transfers, and payments. With adaptive learning from user feedback and support for custom categories, it continuously improves accuracy and delivers more relevant financial insights.
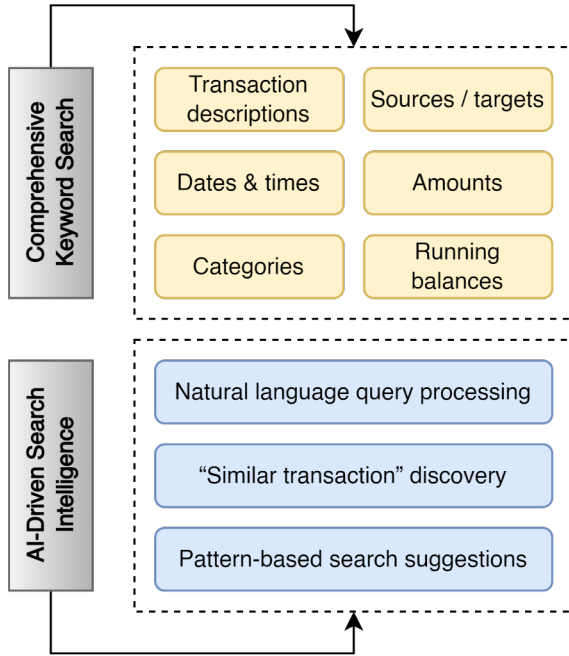
Adaptive Intelligence

- Smart category learning from user feedback
- Custom category creation

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Search Intelligence

Comprehensive Keyword Search

- Transaction descriptions
- Sources / targets
- Dates & times
- Amounts
- Categories
- Running balances

AI-Driven Search Intelligence

- Natural language query processing
- "Similar transaction" discovery
- Pattern-based search suggestions

AI enhances transaction history search with smart filters and natural language understanding. Users can quickly find relevant entries by description, amount, date, or category and discover hidden patterns through intelligent suggestions and similarity detection. This makes financial tracking faster, clearer, and more insightful.

T...	Description	Dateti...	Category	Source/Target	N...	Amount	Balance
↑	Inward EFT Received, PIF-TRF-LR	01-01-2023	Income	To: MD. JOBAYER HOSEN HRIDOY		BANGLADESH TAKA 0	BANGLADESH TAKA 11,070.79
↑	Top up(IB), I4008 TOP 01580386349	04-01-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -9,020	BANGLADESH TAKA 2,050.79
↑	NPSB Cash Withdr, 516924 11132425 301408516924 080915, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	15-01-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -1,000	BANGLADESH TAKA 1,050.79
↑	NPSB ATM Cash Withdr, 520765 11132425 302907520765 072056, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	29-01-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -500	BANGLADESH TAKA 550.79
↑	NPSB ATM Cash Withdr, 609424 11130257 303007609424 072913, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	30-01-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -500	BANGLADESH TAKA 50.79
↓	Inward EFT Received, PIF-TRF-LR	05-02-2023	Income	From:		BANGLADESH TAKA 6,000	BANGLADESH TAKA 6,050.79
↑	NPSB ATM Cash Withdr, 523242 11132425 303612523242 124846, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	05-02-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -6,000	BANGLADESH TAKA 50.79
↓	Inward EFT Received, PIF-TRF-LR	07-02-2023	Income	From:		BANGLADESH TAKA 2,000	BANGLADESH TAKA 2,050.79
↑	NPSB ATM Cash Withdr, 618843 11130257 305008618843 080139, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	19-02-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -2,000	BANGLADESH TAKA 50.79
↓	Inward EFT Received, PIF-TRF-LR	19-02-2023	Income	From:		BANGLADESH TAKA 3,000	BANGLADESH TAKA 3,050.79
↑	NPSB ATM Cash Withdr, 530048 11132425 305107530048 072019, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD	20-02-2023	Cash Withdrawal	To: AB Bank		BANGLADESH TAKA -1,000	BANGLADESH TAKA 2,050.79

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Income Insights

Top Receiver Tracking
- Source identification (employer, client, etc.)
- Transaction frequency and amount consistency
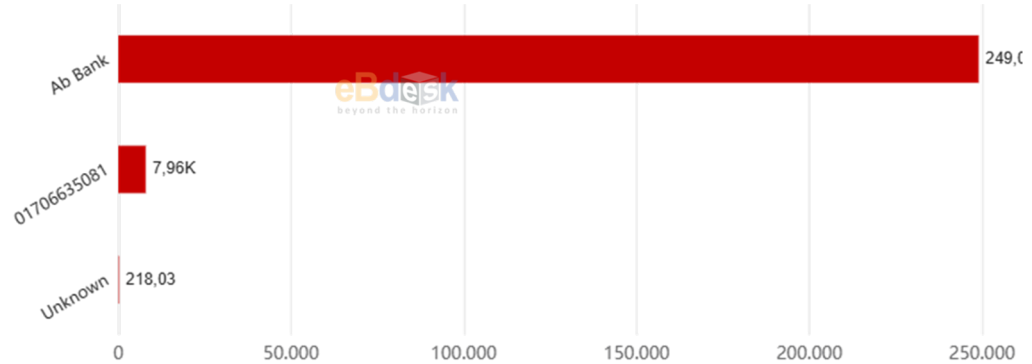- Income timing patterns

Income Quality Assessment
- Reliability scoring of income sources
- Income diversification analysis

Predictive Insights
- Expected income projection

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AI help to tracks top income sources by analysing consistency, timing, and reliability. It helps assess diversification and projects future earnings giving users a clearer view of income patterns for smarter financial planning.
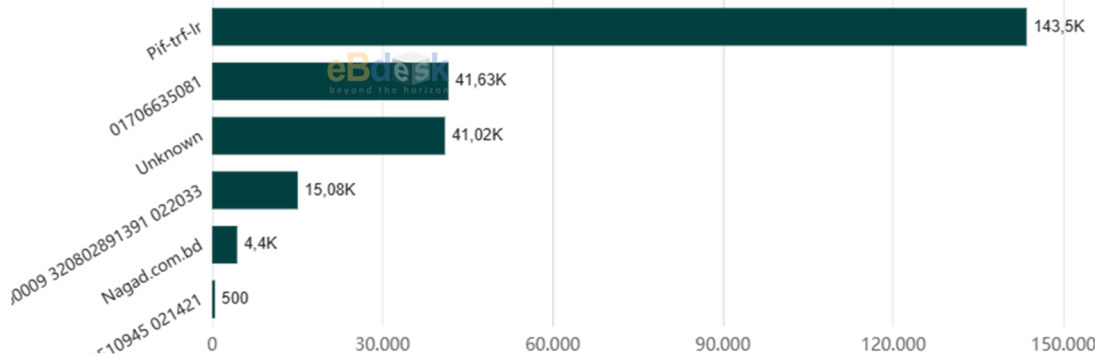
Top Sender
Identification

- Regular payment destinations
- Amount distribution
- Transaction frequency analysis

Spending
Intelligence

- Cost optimization opportunities
- Subscription and recurring payment management
- Bulk payment analysis

Cost Control

AI identifies top spending destinations by analysing transaction frequency and amounts. It reveals patterns in recurring and bulk payments, helping users manage subscriptions, reduce unnecessary costs, and make smarter financial decisions.

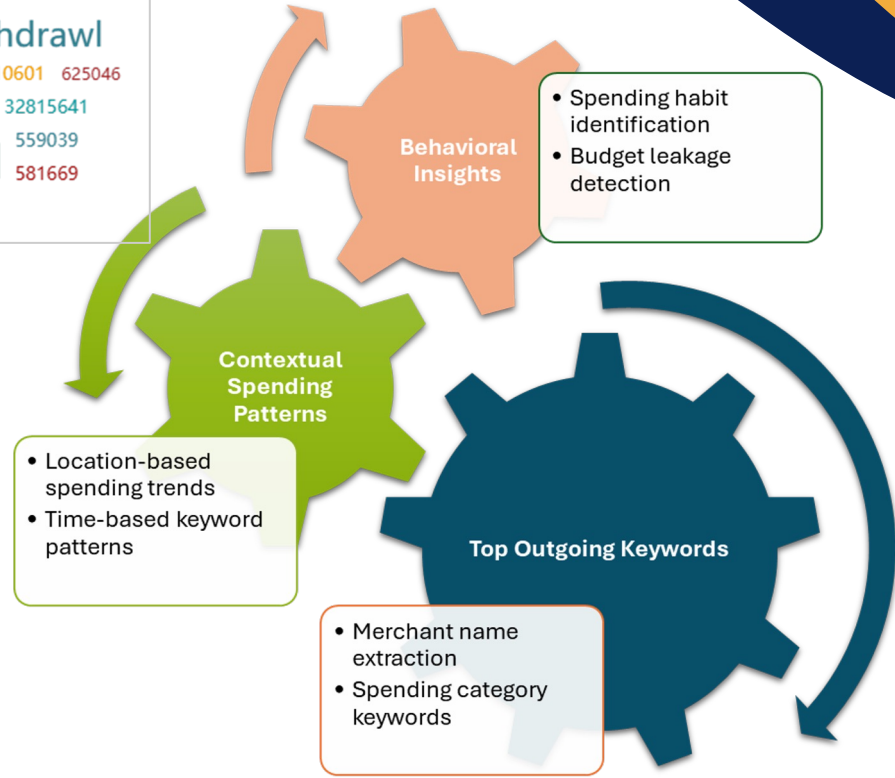Powered by eBdesk Big Data and Artificial Intelligence

Behavioural Mapping

AI analyses outgoing transactions by extracting keywords related to merchants, categories, locations, and timing. This reveals spending habits, uncovers budget leaks, and supports smarter financial control through pattern-based insights.

Top Incoming Keywords	• Payer identification • Income type classification
Income Patterns & Trends	• Regularity of payments • Source categorization
Predictive Insights	• Irregular income detection • Income stream optimization

AI analyses incoming transactions by identifying payers, classifying income types, and detecting timing patterns. These insights can **support law enforcement** in uncovering irregularities, tracing suspicious income flows, and profiling financial behaviour for investigative purposes.

Source Analysis

320802891391 021421 510945 111516 022033891391 dhaka 132143
50400009 transfer mfs money 327597
174867 rvmt com
132221 pos trfpifeftinward
518684 deposit 4008624987308 01706635081
visa profit nagad 314211174867 327402510945 314313327597

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Top Incoming Transaction

↓	Inward EFT Received, PIF-TRF-LR • From: 📅 28-02-2023	BANGLADESH TAKA 30,000 Balance: BANGLADESH TAKA 30,050.79
↓	Inward EFT Received, PIF-TRF-LR • From: PIF-TRF-LR 📅 27-04-2023	BANGLADESH TAKA 22,000 Balance: BANGLADESH TAKA 25,650.79
↓	Inward EFT Received, PIF-TRF-LR • From: PIF-TRF-LR 📅 29-05-2023	BANGLADESH TAKA 22,000 Balance: BANGLADESH TAKA 22,084.79

Top Outgoing Transaction

↑	NPSB ATM Cash Withdr, 559039 11132425 311811559039 110601, Cash Withdrawl NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD • To: AB Bank 📅 30-04-2023	BANGLADESH TAKA -20,000 Balance: BANGLADESH TAKA 5,790.79
↑	NPSB ATM Cash Withdr. 581669 32815641 327605581669 051225, Cash Withdraw NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD • To: AB Bank 📅 03-10-2023	BANGLADESH TAKA -20,000 Balance: BANGLADESH TAKA 6.96
↑	NPSB ATM Cash Withdr. 649002 11132424 321809649002 092809, Cash Withdraw NPSB, DUTCH-BANGLA BANK LTD. NARAYANGAN, JBD • To: AB Bank 📅 06-08-2023	BANGLADESH TAKA -20,000 Balance: BANGLADESH TAKA 696.96

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Transaction Investigation

Top Incoming Transactions

↓

Largest income sources

↓

Frequency vs. amount analysis

↓

Source reliability scoring

Top Outgoing Transactions

↓

Major expense identification

↓

Essential vs. discretionary spending
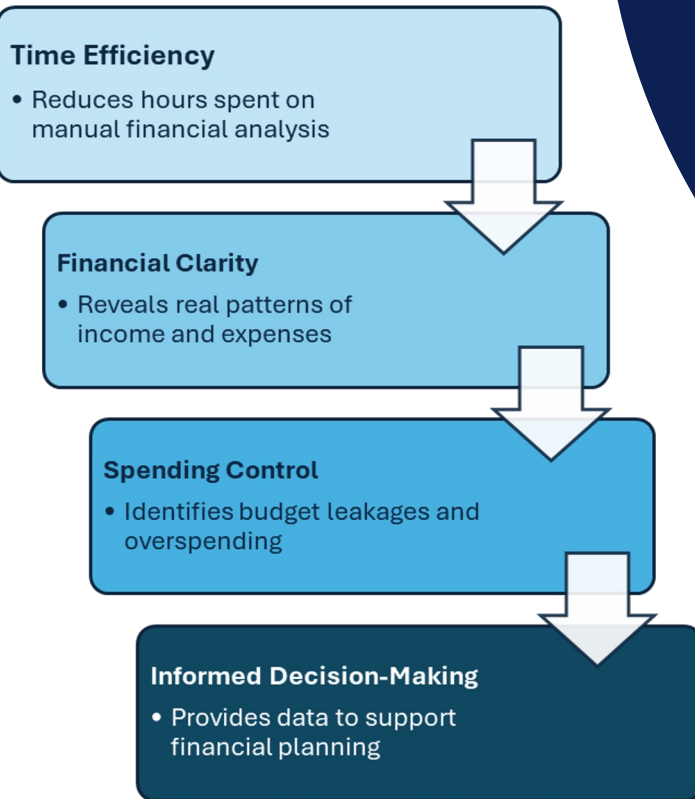
↓

Cost reduction opportunities
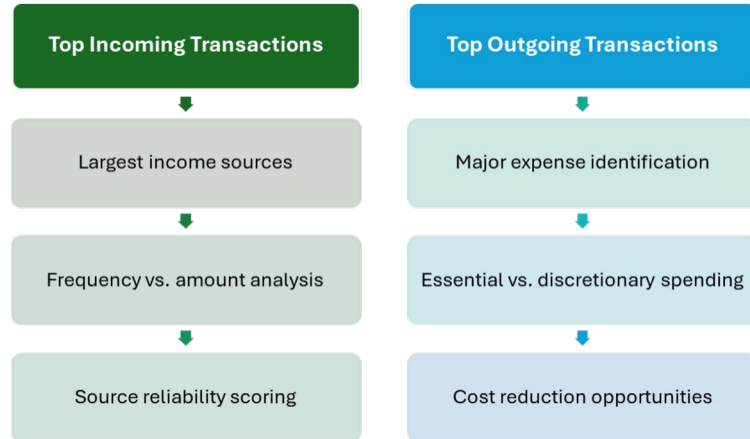
AI highlights significant income and expense transactions by analysing frequency, source reliability, and spending patterns. These insights are designed to assist **law enforcement in detecting irregularities, tracing illicit financial flows, and uncovering suspicious activities** for stronger investigative outcomes.

« »

Insight Benefit

The platform streamlines financial analysis by automating statement reviews, saving valuable time, and delivering clear visibility into income and expenses. It highlights overspending patterns and irregularities empowering **users to plan smarter** and enabling **law enforcement to detect suspicious financial activity** with greater efficiency.

Time Efficiency
- Reduces hours spent on manual financial analysis

Financial Clarity
- Reveals real patterns of income and expenses

Spending Control
- Identifies budget leakages and overspending

Informed Decision-Making
- Provides data to support financial planning

Thank You