

Features, Merchants & Rates

Drop — Merchant, Recipients & Rates

“ **Note (2026-02-14):** This document predates the current architecture. Drop now uses a **pass-through PSD2 model** (PISP/AISP) — Drop NEVER holds customer money. Some sections below reference wallet/balance concepts from the earlier BaaS design. The current architecture is defined in [architecture-document.md](#) and [Drop CLAUDE.md](#).

1. Recipients

Data Model

```
interface Contact {  
  id: string;  
  name: string;  
  iban: string;  
  avatar: string; // 2-char initials  
}
```

Current Implementation

Sample contacts (hardcoded in `src/app/send/page.tsx`):

Name	IBAN	Country
Sara M.	DE89370400440532013000	Germany
Amir K.	FR7630006000011234567890189	France

Name	IBAN	Country
Lejla H.	AT611904300234573201	Austria

Mock contacts (`src/lib/mockData.ts`):

Name	IBAN	Country
John Doe	DE89 3704 0044 0532 0130 00	Germany
Jane Smith	FR76 3000 6000 0112 3456 7890 189	France
Mike Wilson	GB29 NWBK 6016 1331 9268 19	UK

RecipientStep UI (`src/app/send/page.tsx`)

- Search bar (filters by name or IBAN)
- Contact list with avatar, name, truncated IBAN
- "Add new recipient" button (placeholder — not wired)
- Click to select → moves to AmountStep

Send Money Flow (6 steps)

RecipientStep → AmountStep → ConfirmStep → Processing → Success/Error

1. **Recipient** — select from contacts or search
2. **Amount** — input + quick buttons (€10, €50, €100, €200) + optional note
3. **Confirm** — review: amount, recipient, IBAN, note, fee (Free)
4. **Processing** — loading animation
5. **Success** — confirmation with amount and name
6. **Error** — message + retry

API: Send Money

POST /api/transactions

Authorization: Bearer <jwt>

Body: { toIban: string, amount: number, reference?: string }

Validations:

- Required: `toIban`, `amount`
- `amount > 0`
- Balance sufficient
- Creates `SepaCredit` transaction with direction `Debit`

- Updates account balance atomically

Future (not yet implemented)

- Add/edit/delete saved recipients
- Favorite/frequent contacts
- Import from phone contacts (mobile app)
- Recipient groups

2. Merchant Payments

Current State: Demo Only

Merchant payments exist as:

- `CardTransaction` type in schema
- `simulatePurchase()` method in `AppContext` (no-op, logs to console)
- Demo buttons on dashboard: "Netflix €9.99", "Groceries €45"

Transaction Types

Type	Direction	Use Case
<code>SepaCredit</code>	Debit	Outgoing SEPA transfer
<code>SepaDebit</code>	Credit	Incoming SEPA transfer
<code>CardTransaction</code>	Debit	Card purchase at merchant

AppContext Method

```
const simulatePurchase = async (amount: number, merchant: string) => {  
  // No-op – no API route for card purchases yet  
  console.log("[AppContext] simulatePurchase not implemented:", { amount, merchant });  
  return { id: 'demo_auth', amount, merchant };  
};
```

Stripe Issuing Mock (`src/lib/services/mock-stripe.ts`)

Card authorization logic:

- Checks card status (active)
- Checks spending limit (`spending_limit` VS `spent_this_month + amount`)
- Returns approved/declined
- Physical card ordering supported

Transaction Display (`src/components/TransactionItem.tsx`)

Shows for each transaction:

- Icon (emoji for type)
- Description (merchant name or counterparty)
- Date (formatted)
- Amount (green for incoming, gray for outgoing)

Future (post-MVP)

- Merchant directory/discovery
- Bill pay integration
- Recurring payments to merchants
- Purchase categorization (AI)
- Merchant notifications

3. Rates, Fees & Limits

Currency

MVP: EUR only (single account)

Formatting (`src/lib/mockData.ts`):

```
formatCurrency(amount, currency = "EUR")  
// Uses Intl.NumberFormat("de-DE") → "€1.234,56"
```

Fees

Transaction Type	Fee
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SEPA transfer	Free
Card top-up	Free
Card payment	Free (interchange 0.2-0.3% from merchant)

All transfers show "Free" in the UI confirmation step.

Transfer Limits (from MVP spec)

Type	Daily	Monthly
Internal P2P	€5,000	€20,000
SEPA	€2,000	€10,000

Top-up Limits

Parameter	Value
Minimum	€5
Maximum	€10,000
Preset options	€20, €50, €100, €200, €500

Card Spending

Parameter	Value
Monthly limit (default)	€5,000
Tracked via	<code>spent_this_month</code> column

Revenue Model (post-MVP)

Stream	Rate
Interchange fees	0.2-0.3% of card transactions
FX markup	0.5-2% on currency conversion
Premium subscription	€5-15/month
Interest income	On deposits
Lending	Personal loans, BNPL, overdrafts

Multi-Currency (Future)

- Additional currency accounts (GBP, USD, etc.)
 - Real-time FX rates display
 - FX conversion with 0.5-2% markup
 - Currency selection at transfer time
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4. Database Schema Reference

transactions

```
CREATE TABLE transactions (  
  id TEXT PRIMARY KEY,  
  account_id TEXT NOT NULL REFERENCES accounts(id),  
  type TEXT NOT NULL,          -- SepaCredit | SepaDebit | CardTransaction  
  amount REAL NOT NULL,  
  currency TEXT DEFAULT 'EUR',  
  direction TEXT NOT NULL,    -- Credit | Debit  
  status TEXT DEFAULT 'Pending', -- Pending | Booked | Rejected  
  counterparty TEXT,          -- Recipient IBAN or merchant name  
  reference TEXT,             -- Payment note  
  created_at TEXT DEFAULT (datetime('now'))  
);
```

accounts

```
CREATE TABLE accounts (  
  id TEXT PRIMARY KEY,  
  user_id TEXT NOT NULL REFERENCES users(id),  
  iban TEXT UNIQUE NOT NULL,  -- Format: BA393912XXXXXXX  
  bic TEXT DEFAULT 'FONLBA22',  
  currency TEXT DEFAULT 'EUR',  
  balance REAL DEFAULT 0,  
  status TEXT DEFAULT 'Opened',  
  created_at TEXT DEFAULT (datetime('now'))  
);
```

cards

```
CREATE TABLE cards (  
  id TEXT PRIMARY KEY,  
  user_id TEXT NOT NULL REFERENCES users(id),  
  type TEXT NOT NULL DEFAULT 'virtual',  
  brand TEXT DEFAULT 'Visa',  
  last4 TEXT NOT NULL,  
  exp_month INTEGER NOT NULL,  
  exp_year INTEGER NOT NULL,  
  status TEXT DEFAULT 'active',  
  spending_limit REAL DEFAULT 5000,  
  spent_this_month REAL DEFAULT 0,  
  cardholder_name TEXT,  
  created_at TEXT DEFAULT (datetime('now'))  
);
```

5. Open Tasks (Related)

Task	Priority	Description
#191	HIGH	Wire /send page to /api/transactions/remittance
#192	HIGH	Wire /scan page to /api/transactions/qr-payment
#193	HIGH	Wire /merchant page to real APIs
#198	LOW	Delete mock-data.ts and orphaned components

Revision #5

Created 2026-02-18 08:44:57 UTC by John

Updated 2026-05-25 07:26:28 UTC by John