BrochureTracker Pipeline Enhancement Specification

Complete Merchant Services Sales Lifecycle Management System

Instructions for Implementation

IMPORTANT: Before building anything new, thoroughly audit what already exists in the BrochureTracker codebase related to:

- Merchants, leads, prospects, or any deal/opportunity tracking
- Pipeline stages or status fields
- Deal values, probabilities, or forecasting
- Activity logging on merchants/deals
- Any existing kanban, funnel, or pipeline views
- Referral engine and referral tracking
- E-Sign integration with SignNow
- Statement Analyzer functionality
- Proposal Generator functionality
- Prospect Finder functionality
- Meeting Recording functionality
- Brochure drop tracking
- Offline/IndexedDB patterns
- Existing RBAC (Master Admin, RM, Agent roles)

After your audit, report what currently exists and identify gaps before implementing. Optimize and enhance existing functionality where possible rather than rebuilding from scratch.

Project Overview

Purpose

Transform BrochureTracker into a complete merchant services sales lifecycle management system. This enhancement enables field sales agents to manage their entire book of business from their mobile phone—from first identifying a prospect through closing the sale, equipment installation, and ongoing relationship management with upsell opportunities.

Target Users

1. **Agents (Field Sales Reps)** - Primary users, mobile phone as primary device (iPhone/Android)
2. **Managers (Relationship Managers)** - Team oversight, iPad or laptop
3. **Admins (Master Admins)** - System configuration, desktop/laptop

Key Differentiators from Generic CRM

- Built specifically for merchant services sales workflow
- Follow-up attempt tracking (systematic 5-touch system)
- Statement analysis and proposal generation integrated into pipeline
- E-Sign integration for paperless closing
- Post-sale relationship management with quarterly merchant touches
- Referral tracking throughout the entire lifecycle
- Mobile-first with offline capability for field work
- Video brochure drop tracking integrated with deals

Sales Lifecycle Stages

The pipeline consists of **14 distinct stages** organized into **4 phases**. This reflects the actual merchant services sales process.

Phase 1: Prospecting

Stage	Description	Typical Duration	Stage

			Color
1. Prospect	Identified potential merchant, no contact made yet	Varies	Gray
2. Cold Call / Drop-In	Initial contact made (quick meeting, video brochure drop, intro conversation)	1-3 days	Blue
3. Appointment Set	Formal meeting scheduled with decision maker	Until appointment date	Light Blue

Phase 2: Active Selling

Stage	Description	Typical Duration	Stage Color
4. Presentation Made	Full sales presentation delivered to merchant	1-7 days	Purple
5. Proposal Sent	Formal proposal delivered (video proposal, written proposal, or online demo)	3-7 days	Indigo
6. Statement Analysis	Analyzing their current processing statement for savings calculation	1-5 days	Cyan
7. Negotiating	Active back-and-forth, addressing objections, refining offer	1-14 days	Orange
8. Follow-Up (1-5)	Systematic follow-up attempts after proposal (tracked individually, up to 5 attempts)	Varies	Yellow

Phase 3: Closing

Stage	Description	Typical Duration	Stage Color
9. Documents Sent	E-Sign application or paper application sent to merchant	1-3 days	Amber
10. Documents Signed	Application completed by merchant, pending underwriting/approval	1-5 days	Lime

11. Sold / Won	Account approved and boarded with processor	Terminal	Green
12. Dead / Lost	Deal lost (requires loss reason for tracking)	Terminal	Red

Phase 4: Post-Sale Lifecycle

Stage	Description	Typical Duration	Stage Color
13. Installation Scheduled	Equipment delivery and setup scheduled	Until install date	Teal
14. Active Merchant	Live and processing, ongoing relationship management	Indefinite	Green (variant)

Detailed Requirements by User Persona

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1. AGENT (Field Sales Rep - Mobile Phone Primary)

The agent experience must prioritize **SPEED**. Agents are in parking lots between appointments with 30 seconds to update a deal. Every interaction must be optimized for one-handed thumb operation.

1.1 Pipeline Home View

Layout Options:

- **Default: Horizontal Stage Scroll** - Stages as horizontal columns, swipe left/right between stages (like Trello but optimized for mobile thumb reach)
- **Alternative: Priority List View** - Single list sorted by “needs attention” score

Quick Filter Tabs (horizontally scrollable):

- My Pipeline (all active deals)
- Hot Deals (high temperature)
- Stale Deals (no activity in X days)
- Follow-ups Due Today

- Appointments Today
- Active Merchants (for check-ins)

Always Visible:

- Total pipeline value (sum of estimated monthly volume or commission)
- Deal count by stage (badge numbers)
- Search icon (searches business name, contact name, notes)
- Add Deal button (floating action button, bottom right)

Pull-to-refresh for manual sync

1.2 Deal Cards (Mobile Optimized)

Each deal card must be **scannable in under 2 seconds**. Display:

Primary Information (largest, always visible):

- Business name
- Deal value (estimated monthly volume formatted as currency)

Secondary Information (smaller but visible):

- Contact name
- Current stage (color-coded chip/badge)
- Days in current stage (warning color if exceeds stale threshold)
- Last activity (e.g., "Called 2 days ago")
- Next action due date (if scheduled)

Tertiary Indicators (icons/badges):

- Follow-up attempt counter (e.g., "F/U 2/5" for follow-up 2 of 5)
- Source indicator icon (Referral 🤝, Prospect Finder 🔍, Cold Call 📞, Walk-in 🚶)
- Temperature indicator (🔥 Hot, 🌡️ Warm, ❄️ Cold)
- Has attachments indicator (📎)
- Has appointment scheduled (📅)
- Referral source badge (if from referral)

Card Size: Compact enough to see 4-5 cards on screen without scrolling

1.3 Moving Deals Between Stages

Gesture-Based Stage Changes:

- **Swipe right** on deal card → Advance to next logical stage
- **Swipe left** on deal card → Open action menu (Move back, Mark Dead, More options)
- **Long press** on deal card → Open stage picker to jump to any stage
- **Tap** on deal card → Open deal detail bottom sheet

Stage Change Contextual Prompts: When moving to certain stages, prompt for required/recommended information:

Moving To	Prompt
Appointment Set	"When is the appointment?" (date/time picker)
Presentation Made	"How did it go?" (quick outcome picker)
Proposal Sent	"Attach proposal?" (link to Proposal Generator or file picker)
Statement Analysis	"Attach statement?" (link to Statement Analyzer or file picker)
Documents Sent	"Link E-Sign document?" (link to E-Sign or note paper app sent)
Documents Signed	Auto-triggered when E-Sign status syncs
Dead / Lost	**Required:** Select loss reason from list
Installation Scheduled	"When is installation?" (date/time picker)
Active Merchant	Auto-schedule first quarterly check-in

All stage changes automatically logged as activities with timestamp and agent.

1.4 Quick Actions from Deal Card

Without opening the full deal record, one-tap actions available via action buttons or swipe-reveal:

Action	Icon	Behavior
Call	📞	Initiates phone call to primary contact

Text	💬	Opens SMS to primary contact
Email	✉️	Opens AI Email Drafter with deal context pre-filled
Directions	🗺️	Opens Maps app with business address
Quick Note	📝	Opens note input (voice or text)
Schedule	📅	Opens follow-up/appointment scheduler
Attach	📎	Opens file/photo picker
Share	👥	Share deal with manager for help

1.5 Deal Detail View

Implementation: Bottom sheet that slides up from bottom of screen. User can swipe down to dismiss. This avoids full page navigation which is slower.

Bottom Sheet Sections:

Header (always visible when sheet is open):

- Business name (large)
- Stage chip (tappable to change)
- Temperature indicator (tappable to change)
- Edit button

Scrollable Content:

Section: Business Information

- Business name (tap to edit inline)
- Address (tap for directions)
- Phone (tap to call)
- Email (tap to email)
- Website (tap to open)
- MCC code / Business type

Section: Contact Information

- Contact name

- Title
- Direct phone
- Direct email
- Preferred contact method
- “Add another contact” option

Section: Deal Information

- Estimated monthly volume
- Estimated commission
- Source (Referral, Prospect Finder, Cold Call, etc.)
- If Referral: Link to referral source with referrer name
- Assigned agent
- Created date
- Days in pipeline

Section: Follow-Up Tracker

- Visual progress: ○ ○ ● ○ ○ (attempt 3 of 5)
- Last follow-up: date, method, outcome
- Next follow-up: scheduled date or “Schedule now” button
- “Log Follow-Up” button

Section: Activity Timeline

- Scrollable list of all activities, newest first
- Each entry: Date, Type icon, Description, Agent name
- “Add Activity” button at top

Section: Attachments

- Linked proposals (tap to view, link to Proposal Generator)
- Linked statements (tap to view analysis, link to Statement Analyzer)
- Linked E-Sign documents (tap to view status)

- Linked meeting recordings (tap to view summary)
- Linked brochure drops (tap to view)
- Photos (storefront, equipment, business card)
- Signed application document (placeholder: “Available after E-Sign integration complete”)
- “Add Attachment” button

Section: Related Actions Quick link buttons to integrated features:

- Generate Proposal → Opens Proposal Generator with deal data pre-filled
- Analyze Statement → Opens Statement Analyzer
- Send E-Sign Document → Opens E-Sign flow
- Schedule Meeting → Opens calendar/scheduler
- Record Meeting → Opens Meeting Recording
- View Signed Application → Placeholder until E-Sign enhancement complete

Section: Notes

- Free-form notes field
- Voice-to-text input option
- Manager notes (visible only if user is RM/Admin)

Section: For Active Merchants Only

- Last quarterly check-in date
- Next quarterly check-in due
- “Complete Check-In” button
- Upsell opportunities checklist:
  - Payroll services
  - Digital marketing
  - POS system upgrade
  - Merchant cash advance
  - Additional locations

- Processing volume notes

1.6 Creating New Deals

Speed Target: Under 10 seconds to create a deal

Required Fields (only 2):

1. Business name (text input with voice option)
2. Source (single tap selection):
    - Prospect Finder
    - Referral (if selected, prompt to link referral)
    - Cold Call
    - Walk-in / Drop-in
    - Other

Smart Defaults Applied Automatically:

- Stage: "Prospect"
- Location: Auto-captured via GPS
- Created date: Now
- Assigned agent: Current user
- Temperature: Warm

Optional Fields (can add later):

- Everything else

Progressive Data Capture: System prompts for additional info at logical moments:

- After first call logged: "Add contact name?"
- After appointment set: "Add contact email for reminder?"
- After presentation: "Estimate monthly volume?"

Never block the agent from saving a deal.

1.7 Integration with Existing BrochureTracker Features

Prospect Finder Integration:

- “Convert to Deal” button on prospect cards
- Pre-fills: Business name, address, phone, website, MCC code
- Source auto-set to “Prospect Finder”
- Links to original prospect record

Business Card Scanner Integration:

- Scanning a card offers “Create Deal” option
- Pre-fills: Business name, contact name, phone, email
- Source can be set during creation

Referral Engine Integration:

- Deals created from referrals must link to referral source
- Referral source visible on deal card and detail
- When deal reaches “Sold”, referral status updates automatically
- Referral credit tracked for reporting
- Agent can see “Deals from my referrals” view

Statement Analyzer Integration:

- From deal detail: “Analyze Statement” opens Statement Analyzer
- Analysis results link back to deal automatically
- Savings calculations populate deal notes
- Analysis attachment visible in deal attachments

Proposal Generator Integration:

- From deal detail: “Generate Proposal” opens Proposal Generator
- Deal data (business name, contact, volume) pre-fills proposal
- Generated proposal links back to deal
- Proposal attachment visible in deal attachments

E-Sign Integration:

- From deal detail: “Send E-Sign Document” opens E-Sign flow

- Document links to deal
- Document status syncs automatically:
  - Sent → Deal can move to "Documents Sent"
  - Viewed → Notification to agent (engagement signal)
  - Signed → Deal auto-advances to "Documents Signed" (or prompts agent)
- Signed document viewable from deal detail (read-only)
- **Placeholder Note:** "View Signed Application" feature placeholder until E-Sign section fully built out

Meeting Recording Integration:

- "Record Meeting" from deal opens Meeting Recording
- Recording auto-links to deal
- AI summary attached to deal notes
- Recording accessible from deal attachments

Brochure Tracking Integration:

- Brochure drops can link to deals
- "Link to Deal" option when logging a drop
- Drop history visible in deal activity timeline

1.8 Follow-Up Management System

Core Philosophy: Systematic follow-up wins deals. The system must make follow-up foolproof.

Follow-Up Attempt Tracking:

- Each deal tracks: current attempt number, max attempts (default 5)
- Visual indicator: "Follow-up 2 of 5" or ●●○○○
- Configurable max attempts per organization (Admin setting)

Logging a Follow-Up: One-tap "Log Follow-Up" button opens quick form:

1. **Method** (single tap):
   - 📞 Phone call

- ✉️ Email
- 💬 Text message
- 🚶 In-person visit

2. **Outcome** (single tap):
    - No answer / Left voicemail
    - Spoke - Interested, scheduling callback
    - Spoke - Needs more time, follow up later
    - Spoke - Has objection (prompt to log objection)
    - Spoke - Ready to move forward! (prompt to advance stage)
    - Not interested (prompt to move to Dead)
3. **Next follow-up** (optional):
    - Schedule next attempt date
    - Or use suggested cadence
4. **Notes** (optional):
    - Voice or text

Suggested Follow-Up Cadence: Default timing (Admin can customize):

- Attempt 1: Immediate / Day 1
- Attempt 2: Day 3
- Attempt 3: Day 7
- Attempt 4: Day 14
- Attempt 5: Day 21

After attempt 5 with no progress: Prompt to mark Dead or extend follow-up cycle.

Follow-Up Notifications:

- Morning digest: “You have 5 follow-ups due today”
- Individual reminders at scheduled times
- Overdue alerts: “Follow-up with Mario’s Pizza is 2 days overdue”

1.9 "Today" View - Agent's Daily Action Center

Purpose: Single screen showing everything the agent needs to act on today.

Sections:

🔥 **Hot Actions (Top Priority)**

- Follow-ups overdue
- Appointments in next 2 hours
- Deals with engagement signals (E-Sign viewed, email opened)

📅 **Today's Schedule**

- Appointments chronologically
- Each shows: Time, Business name, Contact name, Address (tap for directions)
- "Prep" button opens deal detail

📞 **Follow-Ups Due Today**

- List of deals needing follow-up today
- Sorted by priority (hot deals first)
- One-tap to call or log follow-up

⚠️ **Stale Deals**

- Deals with no activity in X days (configurable, default 7)
- Shows days since last activity
- "Take Action" button

🏪 **Quarterly Check-Ins Due**

- Active merchants due for quarterly touch
- Shows last check-in date
- "Complete Check-In" button

✅ **Installations Today**

- Scheduled installations
- Address and time

- “Mark Complete” button

1.10 Active Merchant Relationship Management

For deals that reach “Active Merchant” stage, ongoing relationship management:

Automatic Quarterly Check-In System:

- System auto-schedules check-ins every 90 days (configurable)
- Reminder notification when due
- Check-in options:
  - 📞 Phone call
  - ✉️ Email
  - 🚶 In-person visit
  - ⏭️ Skip this quarter (requires reason)
- Check-in completion logs activity and reschedules next

Upsell Opportunity Tracking: Checklist of additional products/services:

- Payroll services - “Offered” / “Interested” / “Sold” / “Not interested”
- Digital marketing - same status options
- POS system upgrade - same status options
- Merchant cash advance - same status options
- Additional locations - same status options

Agent can track which products discussed and status.

Anniversary Reminders:

- 1-year processing anniversary
- 2-year anniversary
- Opportunity for thank you call and upsell conversation

Processing Notes:

- Field for agent to note processing volume changes
- “Volume up significantly” could trigger upsell prompt

Referral Prompt:

- Periodic reminder: “Ask [Merchant] for referrals?”
- Link to referral engine to log new referrals from this merchant

1.11 Offline Functionality

Full offline capability is critical for field agents.

Available Offline:

- View entire pipeline
- View all deal details
- Create new deals
- Edit existing deals
- Log activities
- Change stages
- Add notes
- Schedule follow-ups

Sync Behavior:

- Visual indicator showing “Offline” status
- Badge showing number of pending changes
- Auto-sync when connectivity restored
- Manual “Sync Now” option
- Conflict resolution: Last write wins with notification if conflict detected

Technical Implementation:

- Leverage existing IndexedDB patterns in BrochureTracker
- Queue all changes with timestamps
- Sync queue processes in background when online
- Critical: Offline-created deals must sync before agent can see them in reports

1.12 Push Notifications

Notification Types:

Notification	Trigger	Priority
Follow-up due	Scheduled follow-up time reached	High
Follow-up overdue	Follow-up not completed by end of day	Medium
Appointment reminder	1 day before, 1 hour before	High
Deal going stale	No activity in X days	Medium
E-Sign viewed	Prospect opened E-Sign document	High
E-Sign signed	Prospect signed document	High (celebration!)
Quarterly check-in due	Check-in date reached	Medium
Manager commented	Manager added note to your deal	Medium
Referral converted	Your referral became a deal	Low
Weekly digest	Monday morning summary	Low

Notification Settings:

- Agent can toggle notification types
- Quiet hours setting
- Digest vs. real-time preference

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2. MANAGER / RELATIONSHIP MANAGER (Tablet or Desktop)

Managers need visibility into team performance without micromanaging. Focus on coaching opportunities and pipeline health.

2.1 Team Pipeline Board

Layout: Kanban board with stages as columns, deal cards in each column.

Controls:

- Filter by agent (multi-select)
- Filter by date range

- Filter by deal value range
- Filter by source
- Filter by temperature
- Search across all deals

Deal Cards: Same information as agent view, plus:

- Agent name/avatar on each card
- Color coding by agent for visual grouping

Drag and Drop:

- Drag deal card to different stage (logs activity)
- Drag deal card to different agent (reassignment)
- All changes create audit trail

2.2 Pipeline Analytics Dashboard

Pipeline Value Summary:

- Total pipeline value (sum of all active deals)
- Value by stage (horizontal bar chart)
- Value by agent (comparison bar chart)
- Value trend over time (line chart)

Conversion Funnel: Visual funnel showing conversion rates between stages:

```
Prospect (100)
    ↓ 60%
Cold Call (60)
    ↓ 50%
Appointment Set (30)
    ↓ 70%
Presentation Made (21)
    ↓ 60%
Proposal Sent (13)
    ↓ 50%
Negotiating (6)
    ↓ 50%
Sold (3)
```

- Click any stage transition to see deals that dropped off

Win/Loss Analysis:

- Win rate: Sold / (Sold + Dead) by time period
- Win rate by agent
- Win rate by source
- Loss reasons breakdown (pie chart)
- Average deal value won vs. lost

Velocity Metrics:

- Average days from Prospect to Sold
- Average days in each stage
- Velocity by agent
- Deals stuck longer than average (drill-down list)

Activity Metrics by Agent:

Agent	Calls	Emails	Meetings	Proposals	Deals Created	Deals Won
(table with data)						

2.3 Team Activity Feed

Real-time timeline of team activity:

```
[10:45 AM] Sarah moved "Joe's Diner" to Proposal Sent
[10:32 AM] Mike logged call with "City Hardware" - Interested, callback scheduled
[10:15 AM] Sarah created new deal: "Sunrise Cafe" (Referral from Tony's Pizza)
[9:58 AM] Mike closed deal: "Downtown Flowers" - $15,000/mo volume 🎉
[9:30 AM] John lost deal: "Quick Stop" - Reason: Staying with current processor
```

Filters:

- By agent
- By activity type

- By date range

2.4 Stale Deal Management

Stale Deal List:

- All deals with no activity in X days (threshold from Admin settings)
- Grouped by agent
- Sorted by days stale (most stale first)

For Each Stale Deal:

- Business name, stage, deal value
- Days since last activity
- Last activity type and date
- Assigned agent

Manager Actions:

- Send nudge to agent (in-app notification)
- Add manager note
- Reassign deal
- Mark for review

2.5 Forecasting

Weighted Pipeline:

- Each stage has probability % (set by Admin)
- Weighted value = Deal value × Stage probability
- Total weighted pipeline = Sum of all weighted values

Expected Closes:

- This week: Deals in Negotiating or later stages
- This month: Based on average velocity
- Weighted by probability

Quota Tracking (if quotas configured by Admin):

- Agent quota vs. actual
- Team quota vs. actual
- Projected attainment based on pipeline

2.6 Rep Coaching Tools

Manager-Only Notes:

- Add notes to any deal (not visible to agent)
- Use for coaching observations
- “I would have asked about their current contract terms”

Flag for Review:

- Mark deal for discussion in 1:1
- Flagged deals list for manager

Deal Review Request:

- Request agent explain their strategy on a deal
- Agent receives notification

Win/Loss Reviews:

- After deal closes (won or lost), prompt for debrief
- What worked? What would you do differently?
- Captured for training purposes

2.7 Referral Tracking (Manager View)

- All deals that originated from referrals
- Referral conversion rate (referrals → closed deals)
- Top referral sources (which merchants/agents generate most referrals)
- Referral → Revenue attribution

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3. ADMIN / MASTER ADMIN (Desktop Primary)

Admins configure the system and see organization-wide metrics.

3.1 Pipeline Stage Configuration

Manage Stages:

- Add new stage
- Remove stage (must reassign existing deals first)
- Rename stage
- Reorder stages (drag and drop)
- Set stage color
- Set stage icon

Stage Properties:

Property	Description
Name	Display name
Color	Hex color for visual identification
Probability %	For weighted forecasting (e.g., Prospect = 10%, Proposal Sent = 50%)
Stale Threshold	Days before deal in this stage is considered stale
Is Terminal	Stage where deals end (Sold, Dead)
Is Closing	Stage counts toward close metrics
Requires Reason	Require note/reason when entering (useful for Dead)

3.2 Required Fields by Stage

Configure what data must be present to move a deal to each stage:

Stage	Required Fields
Appointment Set	Appointment date/time
Proposal Sent	Proposal attachment or link
Statement Analysis	Statement attachment
Documents Sent	E-Sign document linked OR “Paper app sent” checked

Dead / Lost	Loss reason selected
Installation Scheduled	Installation date

When agent tries to move deal without required field, prompt to add it.

3.3 Loss Reason Management

Default Loss Reasons:

- Price / Fees too high
- Staying with current processor
- Went with competitor (with text field for which competitor)
- Bad timing / Not ready
- Business closing
- Could not reach / Ghosted
- Not a good fit for our services
- Contract with current provider
- Other (free text)

Admin Can:

- Add custom loss reasons
- Remove/disable loss reasons
- Reorder loss reasons
- Mark reasons as “requires follow-up” (e.g., “Bad timing” might warrant future contact)

3.4 Automation Rules

Configurable Automations:

Trigger	Action
Deal enters [Stage]	Create follow-up task for [X] days later
Deal enters [Stage]	Send notification to manager
Deal value exceeds [$X]	Notify manager

Deal stale for [X] days	Send reminder notification to agent
Follow-up attempt [X] reached with no progress	Auto-move to Dead
E-Sign document signed	Move deal to “Documents Signed” stage
Deal reaches “Sold”	Schedule installation follow-up task
Deal reaches “Active Merchant”	Schedule first quarterly check-in
Quarterly check-in overdue [X] days	Notify agent

3.5 Upsell Product Configuration

Define Available Upsell Products:

- Product name
- Description
- Estimated value/commission
- Qualification notes

Default Products:

- Payroll services
- Digital marketing
- POS system (full replacement)
- POS system (upgrade)
- Merchant cash advance
- Additional location
- Gift card program
- Loyalty program

3.6 Notification Settings (Org-Wide Defaults)

- Default notification preferences by role
- Quiet hours (org-wide or by timezone)
- Digest timing (what time to send morning digest)

- Which notifications are enabled/disabled by default

3.7 Org-Wide Dashboard

Key Metrics:

- Total pipeline value
- Pipeline value by team/manager
- Total deals won this period (count and value)
- Total deals lost this period
- Organization win rate
- Average deal velocity
- Average deal value
- Deals by source (pie chart)
- Month-over-month trends

Manager Comparison:

- Pipeline value by manager's team
- Win rate by manager's team
- Activity levels by team

3.8 Data Management

Import:

- Bulk import deals from CSV
- Field mapping interface
- Duplicate detection
- Import preview and validation

Export:

- Export all deals with filters
- Export activity logs
- Export for specific date range

- Formats: CSV, Excel

Bulk Operations:

- Bulk stage change
- Bulk reassignment
- Bulk delete (soft delete)
- Bulk archive (old Dead deals)

Merge Duplicates:

- Identify potential duplicate deals
- Merge interface preserving activity history

3.9 Audit Trail

Complete History:

- Every change to every deal logged
- Who made change
- When change was made
- What changed (old value → new value)

Audit Log Viewer:

- Filter by user
- Filter by deal
- Filter by change type
- Filter by date range
- Export audit log

Data Model Specification

Deal / Opportunity Entity

```
interface Deal {
  // Identifiers
```

```
id: string;                          // UUID
organization_id: string;             // FK to organization (multi-tenancy)

// Core Business Information
business_name: string;               // Required
business_address?: string;
business_city?: string;
business_state?: string;
business_zip?: string;
business_phone?: string;
business_email?: string;
website?: string;
mcc_code?: string;                   // Merchant Category Code
business_type?: string;              // Human-readable business type

// Primary Contact
contact_name?: string;
contact_title?: string;
contact_phone?: string;
contact_email?: string;
contact_preferred_method?: 'phone' | 'email' | 'text';

// Additional Contacts (JSON array)
additional_contacts?: {
  name: string;
  title?: string;
  phone?: string;
  email?: string;
  is_decision_maker?: boolean;
}[];

// Pipeline Status
current_stage: PipelineStage;        // Enum of stages
stage_entered_at: DateTime;          // When entered current stage
previous_stage?: PipelineStage;      // For tracking movement
days_in_stage: number;               // Computed field

// Deal Value
estimated_monthly_volume?: number;   // Monthly processing volume
estimated_commission?: number;       // Projected commission
deal_probability?: number;           // 0-100, from stage or manual override
weighted_value?: number;             // Computed: volume × probability

// Follow-Up Tracking
follow_up_attempt_count: number;     // Current attempt number (0-5)
max_follow_up_attempts: number;      // Default 5, configurable
last_follow_up_at?: DateTime;
```

```
last_follow_up_method?: 'phone' | 'email' | 'text' | 'visit';
last_follow_up_outcome?: string;
next_follow_up_at?: DateTime;
next_follow_up_method?: string;

// Source & Attribution
source_type: 'prospect_finder' | 'referral' | 'cold_call' | 'walk_in' | 'brochu
source_details?: string;             // Additional source context
referral_id?: string;                // FK to referral record if source is refe
prospect_finder_id?: string;         // FK to prospect if from Prospect Finder

// Assignment
assigned_agent_id: string;           // FK to user
assigned_at: DateTime;
previous_agent_id?: string;          // For reassignment tracking

// Lifecycle Dates
created_at: DateTime;
created_by: string;                  // FK to user
updated_at: DateTime;
updated_by: string;

last_activity_at?: DateTime;
last_activity_type?: string;

closed_at?: DateTime;                // When moved to terminal stage
closed_reason?: string;              // Loss reason if Dead
won_at?: DateTime;                   // When moved to Sold

// Post-Sale (for Active Merchants)
installation_scheduled_at?: DateTime;
installation_completed_at?: DateTime;
go_live_at?: DateTime;               // When started processing

last_quarterly_checkin_at?: DateTime;
next_quarterly_checkin_at?: DateTime;
quarterly_checkin_frequency_days: number;  // Default 90

// Upsell Tracking (JSON)
upsell_opportunities?: {
  product: string;
  status: 'not_discussed' | 'offered' | 'interested' | 'sold' | 'not_interested
  notes?: string;
  updated_at?: DateTime;
}[];

// Location (for mapping/routing)
```

```
  latitude?: number;
  longitude?: number;

  // Linked Records (FKs)
  merchant_id?: string;                // FK to Merchant if converted
  linked_proposal_ids?: string[];      // FKs to proposals
  linked_statement_ids?: string[];     // FKs to statement analyses
  linked_esign_document_ids?: string[];// FKs to E-Sign documents
  linked_meeting_ids?: string[];       // FKs to meeting recordings
  linked_brochure_drop_ids?: string[]; // FKs to brochure drops

  // E-Sign Status
  esign_status?: 'not_sent' | 'sent' | 'viewed' | 'signed';
  esign_sent_at?: DateTime;
  esign_viewed_at?: DateTime;
  esign_signed_at?: DateTime;
  signed_application_url?: string;     // URL to signed doc (placeholder)

  // Notes & Manager Tools
  notes?: string;                      // Agent notes
  manager_notes?: string;              // Visible only to RM/Admin
  flagged_for_review: boolean;
  flagged_at?: DateTime;
  flagged_by?: string;

  // Computed / Display
  temperature: 'hot' | 'warm' | 'cold';// Computed or manual
  tags?: string[];                     // For organization

  // Soft Delete
  archived: boolean;
  archived_at?: DateTime;
}

// Pipeline stages enum
type PipelineStage =
  | 'prospect'
  | 'cold_call'
  | 'appointment_set'
  | 'presentation_made'
  | 'proposal_sent'
  | 'statement_analysis'
  | 'negotiating'
  | 'follow_up'
  | 'documents_sent'
  | 'documents_signed'
  | 'sold'
```

```
  | 'dead'
  | 'installation_scheduled'
  | 'active_merchant';
```

Activity Log Entity

```
interface DealActivity {
  id: string;
  deal_id: string;                     // FK to Deal
  organization_id: string;             // FK for multi-tenancy

  // Activity Details
  activity_type: ActivityType;
  activity_subtype?: string;           // More specific categorization

  // Timing
  activity_at: DateTime;               // When activity occurred
  created_at: DateTime;                // When logged (may differ if logging late

  // Who
  agent_id: string;                    // FK to user who performed/logged

  // Details
  description?: string;                // Human-readable description
  notes?: string;                      // Additional notes

  // For Follow-Up Activities
  follow_up_attempt_number?: number;   // Which attempt this was (1-5)
  follow_up_method?: 'phone' | 'email' | 'text' | 'visit';
  follow_up_outcome?: FollowUpOutcome;

  // For Stage Change Activities
  from_stage?: PipelineStage;
  to_stage?: PipelineStage;
  stage_change_reason?: string;

  // For Communication Activities
  communication_direction?: 'outbound' | 'inbound';
  communication_duration_seconds?: number;  // For calls

  // Attachments
  voice_note_url?: string;
  attachment_urls?: string[];

  // Linking
  linked_proposal_id?: string;
```

```
  linked_statement_id?: string;
  linked_esign_id?: string;
  linked_meeting_id?: string;

  // System Generated
  is_system_generated: boolean;        // True for auto-logged activities
}

type ActivityType =
  | 'call'
  | 'email'
  | 'text'
  | 'visit'
  | 'meeting'
  | 'presentation'
  | 'proposal_sent'
  | 'statement_analyzed'
  | 'esign_sent'
  | 'esign_viewed'
  | 'esign_signed'
  | 'follow_up'
  | 'stage_change'
  | 'note'
  | 'voicemail'
  | 'appointment_scheduled'
  | 'appointment_completed'
  | 'installation_scheduled'
  | 'installation_completed'
  | 'quarterly_checkin'
  | 'referral_requested'
  | 'deal_created'
  | 'deal_reassigned'
  | 'manager_note'
  | 'other';

type FollowUpOutcome =
  | 'no_answer'
  | 'left_voicemail'
  | 'spoke_interested'
  | 'spoke_needs_time'
  | 'spoke_objection'
  | 'spoke_ready'
  | 'not_interested'
  | 'callback_scheduled'
  | 'meeting_scheduled';
```

Pipeline Configuration Entity

```
interface PipelineStageConfig {
  id: string;
  organization_id: string;

  stage_key: string;                    // Machine name (e.g., 'proposal_sent')
  stage_name: string;                   // Display name (e.g., 'Proposal Sent')
  stage_order: number;                  // Sort order

  color: string;                        // Hex color
  icon?: string;                        // Icon identifier

  probability_percent: number;          // 0-100 for forecasting
  stale_threshold_days: number;         // Days before considered stale

  is_terminal: boolean;                 // Deals don't progress from here
  is_closing_stage: boolean;            // Counts toward close metrics
  is_active: boolean;                   // Stage is enabled

  required_fields?: string[];           // Fields required to enter stage
  required_attachments?: string[];      // Attachment types required

  automation_rules?: {
    trigger: 'enter' | 'exit' | 'stale';
    action: 'create_task' | 'notify' | 'move_stage';
    config: Record<string, any>;
  }[];

  created_at: DateTime;
  updated_at: DateTime;
}
```

Loss Reason Entity

```
interface LossReason {
  id: string;
  organization_id: string;

  reason_text: string;
  is_active: boolean;
  sort_order: number;

  requires_competitor_name: boolean;    // If went to competitor
  requires_follow_up: boolean;          // Should re-contact in future
```

```
  follow_up_days?: number;             // Days until follow-up

  created_at: DateTime;
  updated_at: DateTime;
}
```

API Endpoints Specification

Deal Management

```
# Core CRUD
GET    /api/deals                        # List deals with filters, pagination
POST   /api/deals                        # Create new deal
GET    /api/deals/:id                    # Get single deal with full details
PATCH  /api/deals/:id                    # Update deal
DELETE /api/deals/:id                    # Soft delete deal

# Stage Management
POST   /api/deals/:id/stage              # Change stage with validation
GET    /api/deals/:id/stage-history      # Get stage change history

# Activity Management
GET    /api/deals/:id/activities         # Get activity timeline
POST   /api/deals/:id/activities         # Log new activity

# Follow-Up Management
POST   /api/deals/:id/follow-up          # Log follow-up attempt
GET    /api/deals/:id/follow-ups         # Get follow-up history

# Attachments
POST   /api/deals/:id/attachments        # Add attachment
DELETE /api/deals/:id/attachments/:aid # Remove attachment

# Linking
POST   /api/deals/:id/link-proposal      # Link proposal to deal
POST   /api/deals/:id/link-statement     # Link statement analysis
POST   /api/deals/:id/link-esign         # Link E-Sign document
POST   /api/deals/:id/link-meeting       # Link meeting recording
POST   /api/deals/:id/link-brochure      # Link brochure drop
```

Agent Views

```
# Today View
GET    /api/deals/today                # Today's action items for current agent

# Pipeline Views
GET    /api/deals/pipeline             # Pipeline view with stage grouping
GET    /api/deals/stale                # Stale deals for current agent
GET    /api/deals/follow-ups-due       # Follow-ups due today/overdue
GET    /api/deals/appointments         # Upcoming appointments
GET    /api/deals/active-merchants     # Active merchant list with check-in statu
GET    /api/deals/quarterly-checkins   # Due quarterly check-ins

# Quick Actions
POST   /api/deals/:id/quick-note       # Add quick note (voice or text)
POST   /api/deals/:id/quick-call       # Log quick call outcome
POST   /api/deals/:id/schedule-followup # Schedule follow-up
```

Manager Views

```
# Team Pipeline
GET    /api/manager/pipeline           # All deals for manager's team
GET    /api/manager/deals              # Filtered deal list
GET    /api/manager/activity-feed      # Team activity feed

# Analytics
GET    /api/manager/analytics/summary  # Pipeline summary metrics
GET    /api/manager/analytics/funnel   # Conversion funnel data
GET    /api/manager/analytics/velocity # Deal velocity metrics
GET    /api/manager/analytics/by-agent # Metrics broken down by agent
GET    /api/manager/analytics/win-loss # Win/loss analysis

# Management Actions
POST   /api/manager/deals/:id/reassign # Reassign deal to different agent
POST   /api/manager/deals/:id/manager-note # Add manager-only note
POST   /api/manager/deals/:id/flag     # Flag deal for review
GET    /api/manager/stale-deals        # Stale deals across team
GET    /api/manager/flagged-deals      # Deals flagged for review
```

Admin Configuration

```
# Pipeline Configuration
GET    /api/admin/pipeline-config      # Get all stage configurations
PUT    /api/admin/pipeline-config      # Update stage configurations
POST   /api/admin/pipeline-config/stages # Add new stage
DELETE /api/admin/pipeline-config/stages/:id # Remove stage
```

```
# Loss Reasons
GET    /api/admin/loss-reasons         # Get loss reasons
PUT    /api/admin/loss-reasons         # Update loss reasons

# Automation Rules
GET    /api/admin/automations          # Get automation rules
PUT    /api/admin/automations          # Update automation rules

# Upsell Products
GET    /api/admin/upsell-products      # Get upsell product list
PUT    /api/admin/upsell-products      # Update upsell products

# Organization Dashboard
GET    /api/admin/analytics/org        # Org-wide analytics
GET    /api/admin/analytics/by-team    # Analytics by team

# Data Management
POST   /api/admin/deals/import         # Bulk import deals
GET    /api/admin/deals/export         # Export deals
POST   /api/admin/deals/bulk-update    # Bulk update deals
GET    /api/admin/audit-log            # Audit trail
```

Offline Sync

```
# Sync Endpoints
POST   /api/sync/deals                 # Sync offline deal changes
GET    /api/sync/deals/since/:timestamp # Get deals changed since timestamp
POST   /api/sync/activities            # Sync offline activities
GET    /api/sync/config                # Get latest configuration for offline cac
```

UI Component Specifications

Mobile Components

DealCard (Compact)

- Height: ~80px
- Touch target: Full card tappable
- Swipe: Left/right gesture detection
- Must render efficiently for lists of 100+ deals

PipelineBoard (Horizontal Scroll)

- Stages as horizontal columns
- Snap scrolling between stages
- Stage headers sticky at top
- Pull-to-refresh

DealDetailSheet (Bottom Sheet)

- Slides up from bottom
- Three snap points: Peek (30%), Half (50%), Full (90%)
- Swipe down to dismiss
- Sections collapsible

TodayView

- Sectioned list
- Collapsible sections
- Pull-to-refresh
- Floating “Add Deal” button

QuickActionBar

- Horizontal scrollable action buttons
- 48px minimum touch targets
- Haptic feedback on tap

StageChip

- Color-coded badge
- Tappable to change stage
- Shows stage name abbreviated if needed

Desktop/Tablet Components

PipelineKanban

- Full kanban board with drag-drop

- Column headers with counts and values
- Filter bar above
- Responsive: Fewer columns on tablet

AnalyticsDashboard

- Card-based layout
- Charts: Bar, Line, Funnel, Pie
- Date range selector
- Export buttons

ActivityFeed

- Infinite scroll timeline
- Real-time updates (WebSocket if available)
- Filters in sidebar

DealTable

- Sortable columns
- Inline editing for quick fields
- Row selection for bulk actions
- Expandable rows for detail preview

Technical Implementation Notes

Leverage Existing BrochureTracker Patterns

1. **Offline/IndexedDB**: Extend existing offline storage patterns
2. **RBAC**: Use existing role system (Master Admin, RM, Agent)
3. **Multi-tenancy**: Respect organization_id on all queries
4. **Component Library**: Use existing shadcn/ui components
5. **API Patterns**: Follow existing /api/* REST conventions
6. **Database**: Use Drizzle ORM with proper migrations

7. **State Management**: Use TanStack React Query

Mobile Performance Requirements

- Pipeline view loads in < 2 seconds on 3G
- Deal cards lazy load details
- Smooth 60fps scrolling
- Touch targets minimum 48px
- Gestures feel native (no lag)
- Offline mode fully functional

Integration Points

Feature	Integration
Prospect Finder	"Convert to Deal" creates deal with data
Business Card Scanner	"Create Deal" option
Referral Engine	Link referrals, update status on close
Statement Analyzer	Link analysis, pull savings data
Proposal Generator	Link proposals, pre-fill data
E-Sign (SignNow)	Link documents, sync status
Meeting Recording	Link recordings, attach summaries
Brochure Tracking	Link drops to deals

E-Sign Signed Application Placeholder

The "View Signed Application" feature in the deal detail view should be implemented as a placeholder until the E-Sign section is fully built out. The placeholder should:

- Display text: "Signed application will be available here once E-Sign integration is complete"
- Show the signed_application_url if available
- Be ready to display the document when the feature is implemented

Implementation Phases

Phase 1: Core Pipeline (Week 1-2)

Goal: Basic deal tracking working on mobile

- Deal data model and database migrations
- Core API endpoints (CRUD, stage change, activities)
- Mobile pipeline view with stage grouping
- Deal card component
- Deal creation flow (quick, minimal fields)
- Deal detail bottom sheet
- Stage advancement with swipe gesture
- Basic activity logging
- Basic filters and search

Phase 2: Follow-Up System (Week 2-3)

Goal: Systematic follow-up tracking

- Follow-up attempt tracking
- Follow-up logging UI
- Follow-up due notifications
- Today view with action items
- Stale deal identification
- Suggested follow-up cadence

Phase 3: Feature Integrations (Week 3-4)

Goal: Connect to existing BrochureTracker features

- Referral engine linking
- Prospect Finder “Convert to Deal”
- Statement Analyzer linking

- Proposal Generator linking
- E-Sign document linking and status sync
- Meeting Recording linking
- Brochure drop linking

Phase 4: Manager Tools (Week 4-5)

Goal: Team visibility and coaching

- Team pipeline view
- Pipeline analytics dashboard
- Team activity feed
- Manager notes
- Deal reassignment
- Stale deal management

Phase 5: Post-Sale & Admin (Week 5-6)

Goal: Complete lifecycle and configuration

- Active Merchant management
- Quarterly check-in system
- Upsell opportunity tracking
- Admin pipeline configuration
- Loss reason management
- Automation rules
- Signed application document view placeholder
- Org-wide dashboard

Phase 6: Offline & Polish (Week 6-7)

Goal: Production-ready

- Full offline support
- Sync conflict resolution

- Push notifications
- Performance optimization
- Edge case handling
- Testing and QA

Success Metrics

Agent Adoption

- % of agents using pipeline daily
- Average deals per agent
- Average activities logged per deal

Process Adherence

- Follow-up completion rate
- Average follow-up attempts before close
- Stage progression velocity

Business Impact

- Deal conversion rate improvement
- Average days to close reduction
- Quarterly check-in completion rate
- Upsell revenue from active merchants

Appendix: Default Stage Configuration

Stage	Probability	Stale Days	Color	Required Fields
Prospect	10%	14	Gray	None
Cold Call / Drop-In	15%	7	Blue	None

Appointment Set	25%	Until appt	Light Blue	Appointment date
Presentation Made	35%	7	Purple	None
Proposal Sent	50%	5	Indigo	Proposal attachment
Statement Analysis	55%	5	Cyan	Statement attachment
Negotiating	65%	7	Orange	None
Follow-Up	40%	Per cadence	Yellow	None
Documents Sent	80%	3	Amber	E-Sign linked
Documents Signed	95%	5	Lime	None
Sold / Won	100%	-	Green	None
Dead / Lost	0%	-	Red	Loss reason
Installation Scheduled	100%	Until install	Teal	Install date
Active Merchant	100%	90 (checkin)	Green	None

Appendix: Default Loss Reasons

1. Price / Fees too high
2. Staying with current processor
3. Went with competitor: [text field]
4. Bad timing / Not ready now
5. Business closing or closed
6. Could not reach / Ghosted
7. Not a good fit for our services
8. Under contract with current provider
9. Decision maker unavailable

10. Other: [text field]

End of Specification Document