Franchise Buyer Targeting Transition Plan

Executive Summary

This document outlines the strategic pivot of FranchiseAI from a **B2B catering lead generation platform** to a **franchise buyer prospecting platform**. The application will be repurposed to help franchise development teams identify, qualify, and engage potential franchise investors.

Current State vs. New Direction

Aspect	Current (Catering Leads)	New (Franchise Buyers)
Target	Businesses needing catering	Individuals wanting to own a franchise
Lead Type	B2B (corporate accounts)	B2C/Investor (entrepreneurs, executives)
Value Proposition	Find catering customers	Find franchise investors
Revenue Model	Franchise sells pizza	Franchise sells franchise opportunities
Primary Data Source	Google My Business, OSM	LinkedIn, Demographics
Success Metric	Catering orders	Franchise agreements signed

Part 1: AI Search Capabilities

Target Profile: Ideal Franchise Buyer

The ideal franchise buyer candidate has the following characteristics:

- **Financial Capacity**: $100K-$500K liquid capital (typical pizza franchise investment)
- **Entrepreneurial Mindset**: Desire to own and operate a business
- **Geographic Fit**: Located near available franchise territories
- **Career Stage**: Corporate professionals seeking change, military transitioning, early retirees, small business owners expanding
- **Work Ethic**: Willing to be hands-on in day-to-day operations
- **Wealth Building Goals**: Looking for equity/asset building, not just income
- **Background**: Management experience, preferably in food service, retail, or hospitality

Data Sources & API Integrations

1. LinkedIn API (PRIMARY - New Integration)

LinkedIn will be the primary data source for identifying potential franchise buyers.

Capability	Use Case
People Search	Find executives, managers, business owners by title/industry

Capability	Use Case
Career Transitions	Identify recently departed corporate employees
Education Filters	MBA holders, business degrees
Industry Experience	Food service, retail, hospitality, management backgrounds
Geographic Targeting	Filter by metro area, zip code radius
Company Size	Current/past employers as income proxy
Interests/Groups	Franchise groups, entrepreneurship communities

LinkedIn API Products Required:

Product	Purpose	Access Level
LinkedIn Marketing API	Matched Audiences, Lead Gen Forms	Partner
LinkedIn Sales Navigator API	Advanced search, lead recommendations	Enterprise
LinkedIn Talent Solutions	Professional data, career history	Partner

Key Integration Features:

- OAuth 2.0 authentication flow
- Profile search with advanced filters
- Career transition detection
- Profile enrichment and data sync
- InMail integration for outreach
- CRM synchronization

2. Demographic/Economic Data (Repurpose Existing)

Leverage existing demographic integrations with new focus areas:

Data Point	Use Case
Household Income	Target high-income zip codes ($150K+ HHI)
Population Growth	Areas with growing demand for franchises
Business Formation Rates	Entrepreneurial activity indicators
Competitor Density	Territory availability assessment
Commercial Real Estate	Available restaurant spaces
Employment Statistics	Corporate layoff areas, job market shifts

3. Google My Business (Repurpose)

Shift focus from catering targets to franchise ecosystem:

Use Case	Description
Existing Small Business Owners	Potential multi-unit operators
Franchise Consultants	Partnership and referral opportunities
Business Brokers	Lead generation sources
Competitor Locations	Territory mapping and gap analysis
Commercial Realtors	Site selection partners

4. New Data Source Integrations

Source	Data Provided	Priority
SBA Loan Data	Franchise financing activity by geographic area	Medium
Franchise Broker Networks	Active franchise seekers with verified interest	High
BizBuySell API	Business opportunity seekers actively looking	High
BusinessBroker.net	Qualified buyer inquiries	High
Franchise Expo Databases	High-intent prospects who attended expos	High
Chamber of Commerce	Local business leaders and networkers	Medium
SCORE/SBDC Programs	Entrepreneurship program participants	Medium
VetFran Program	Military veterans interested in franchising	Medium
FranNet/FranChoice	Franchise consultant referral networks	High

5. Social & Content Signal Tracking

Signal	Platform	Intent Indicator
Franchise content engagement	LinkedIn, YouTube	Active research phase
Business opportunity group membership	Facebook, LinkedIn	Interest signals
Entrepreneurship newsletter subscriptions	Various	Passive interest
Franchise review site activity	FranchiseGrade, FDD Exchange	Due diligence stage
Franchise webinar attendance	Zoom, GoToWebinar	High intent
Discovery day RSVPs	Internal tracking	Very high intent

AI Analysis Capabilities

The AI engine will be retrained/reprompted for franchise buyer analysis:

Analysis Type	Purpose	Output
Investor Profile Scoring	Overall fit assessment	0-100 score
Financial Readiness Assessment	Investment capacity estimation	Tier classification
Entrepreneurial Fit Analysis	Personality/background alignment	Fit report
Territory Match	Geographic fit with available territories	Territory recommendations
Timing Signal Detection	Career transitions, life events	Urgency rating
Outreach Recommendations	Personalized approach strategy	Talking points
Objection Prediction	Likely concerns based on profile	Objection handling guide

Part 2: Application Repurposing Plan

Phase 1: Core Model Transformation (Foundation)

Data Model Changes

Replace `BusinessInfo` with `CandidateProfile`:

```
CandidateProfile
├── Personal Information
│   ├── name
│   ├── email
│   ├── phone
│   ├── location (city, state, zip)
│   └── linkedInUrl
│
├── Professional Background
│   ├── currentTitle
│   ├── currentEmployer
│   ├── yearsExperience
│   ├── industryBackground[]
│   ├── managementExperience (boolean)
│   ├── businessOwnershipHistory[]
│   └── education[]
│
├── Financial Indicators
│   ├── estimatedNetWorthTier (enum)
│   ├── investmentCapacityRange
│   ├── financingPreference (cash/SBA/partner)
│   ├── creditIndicators
│   └── liquiditySignals
│
├── Franchise Fit Signals
│   ├── entrepreneurialScore
```

```
│   ├── foodServiceExperience (boolean)
│   ├── retailExperience (boolean)
│   ├── multiUnitPotential (boolean)
│   ├── handsOnWillingness
│   └── familyInvolvement
│
├── Engagement Tracking
│   ├── source (LinkedIn/Referral/Expo/Organic)
│   ├── contentEngagement[]
│   ├── websiteVisits[]
│   ├── emailOpens[]
│   └── callHistory[]
│
├── Pipeline Status
│   ├── stage (Lead/Qualified/Applied/Approved/Funded)
│   ├── assignedTo
│   ├── nextAction
│   ├── nextActionDate
│   └── notes[]
│
└── AI Analysis
    ├── investorScore (0-100)
    ├── fitAssessment
    ├── financialReadiness
    ├── recommendedApproach
    ├── timingIndicators
    ├── predictedObjections[]
    └── analysisDate
```

Scoring Rules Transformation

Current Rule (Catering)	New Rule (Investor)	Points
Has conference room	Has management experience	+15
High employee count	10+ years professional experience	+10
Good Google rating	Complete LinkedIn profile	+8
BBB accreditation	Previous business ownership	+20
Has event space	Food/retail industry background	+12
Regular meetings	Recent career transition	+15
Verified business	Verified contact information	+10
Missing address	Missing LinkedIn profile	-15
No phone number	No direct contact method	-10
Closed business	Currently unemployed (risk)	-5

New Scoring Categories:

Category	Weight	Factors
Financial Readiness	30%	Net worth tier, liquidity signals, financing history
Professional Fit	25%	Industry experience, management level, business ownership
Entrepreneurial Indicators	20%	Career moves, risk tolerance, self-starter signals
Geographic Fit	15%	Territory availability, relocation willingness
Timing Signals	10%	Career transition, life stage, urgency indicators

Database Schema Updates

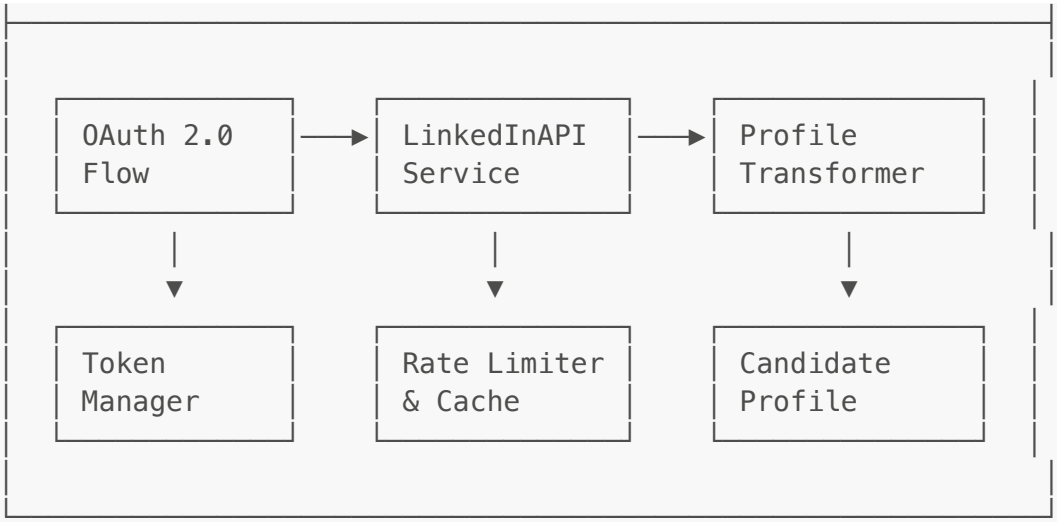
```
-- New table: candidate_profiles
CREATE TABLE candidate_profiles (
    id UUID PRIMARY KEY,
    store_location_id UUID REFERENCES store_locations(id),

    -- Personal Info
    first_name VARCHAR(100),
    last_name VARCHAR(100),
    email VARCHAR(255),
    phone VARCHAR(20),
    linkedin_url VARCHAR(500),
    city VARCHAR(100),
    state VARCHAR(50),
    zip_code VARCHAR(20),

    -- Professional Background
    current_title VARCHAR(200),
    current_employer VARCHAR(200),
    years_experience INTEGER,
    industry_background JSONB,
    has_management_experience BOOLEAN,
    has_business_ownership BOOLEAN,
    education JSONB,

    -- Financial Indicators
    net_worth_tier VARCHAR(50),
    investment_capacity_min INTEGER,
    investment_capacity_max INTEGER,
    financing_preference VARCHAR(50),

    -- Franchise Fit
    entrepreneurial_score INTEGER,
    has_food_service_exp BOOLEAN,
    has_retail_exp BOOLEAN,
    multi_unit_potential BOOLEAN,

    -- Pipeline
    pipeline_stage VARCHAR(50),
    assigned_to VARCHAR(100),
```

```
    next_action TEXT,
    next_action_date DATE,

    -- AI Analysis
    investor_score INTEGER,
    fit_assessment TEXT,
    recommended_approach TEXT,
    timing_indicators JSONB,
    predicted_objections JSONB,

    -- Metadata
    source VARCHAR(100),
    created_at TIMESTAMP DEFAULT NOW(),
    updated_at TIMESTAMP DEFAULT NOW(),
    is_active BOOLEAN DEFAULT TRUE
);

-- New table: candidate_interactions
CREATE TABLE candidate_interactions (
    id UUID PRIMARY KEY,
    candidate_id UUID REFERENCES candidate_profiles(id),
    interaction_type VARCHAR(50),
    interaction_date TIMESTAMP,
    notes TEXT,
    outcome VARCHAR(100),
    created_by VARCHAR(100),
    created_at TIMESTAMP DEFAULT NOW()
);

-- New table: franchise_territories
CREATE TABLE franchise_territories (
    id UUID PRIMARY KEY,
    territory_name VARCHAR(200),
    territory_code VARCHAR(50),
    city VARCHAR(100),
    state VARCHAR(50),
    zip_codes JSONB,
    status VARCHAR(50),
    population INTEGER,
    household_income_median INTEGER,
    competitor_count INTEGER,
    market_potential_score INTEGER,
    created_at TIMESTAMP DEFAULT NOW()
);
```

Phase 2: LinkedIn Integration (Critical Path)

Implementation Architecture

```
┌─────────────────────────────────────────────────────────┐
│                   LinkedIn Integration                  │
```



LinkedInAPI Service Class

```
// src/services/LinkedInAPI.h
class LinkedInAPI {
public:
    // Authentication
    std::string getAuthorizationUrl();
    bool exchangeCodeForToken(const std::string& code);
    bool refreshAccessToken();

    // Profile Search
    SearchResults searchProfiles(const ProfileSearchCriteria& criteria);
    CandidateProfile getProfileById(const std::string& linkedInId);
    std::vector<CandidateProfile> getSimilarProfiles(const std::string&
profileId);

    // Career Transition Detection
    std::vector<CandidateProfile> findRecentCareerTransitions(
        const std::string& location,
        int radiusMiles,
        int daysBack = 90
    );

    // Saved Searches
    std::string createSavedSearch(const ProfileSearchCriteria& criteria);
    std::vector<CandidateProfile> executeSavedSearch(const std::string&
searchId);

    // Enrichment
    CandidateProfile enrichProfile(const CandidateProfile& basic);

    // Messaging
    bool sendInMail(const std::string& profileId, const std::string&
message);

private:
```

```
    std::string accessToken_;
    std::string refreshToken_;
    TokenManager tokenManager_;
    RateLimiter rateLimiter_;
    ResponseCache cache_;
};
```

Profile Search Criteria

```
struct ProfileSearchCriteria {
    // Location
    std::string city;
    std::string state;
    std::string zipCode;
    int radiusMiles;

    // Professional
    std::vector<std::string> titles;
    std::vector<std::string> industries;
    int minYearsExperience;
    int maxYearsExperience;
    std::vector<std::string> companies;
    std::vector<std::string> schools;

    // Filters
    bool hasManagementExperience;
    bool isBusinessOwner;
    bool recentCareerChange;
    int careerChangeDaysBack;

    // LinkedIn Specific
    std::vector<std::string> groups;
    std::vector<std::string> skills;
    std::string connectionDegree; // 1st, 2nd, 3rd

    // Pagination
    int offset;
    int limit;
};
```

Phase 3: AI Engine Updates

New AI Prompts

Investor Analysis Prompt:

```
You are a franchise development analyst. Analyze this candidate profile
and assess their potential as a franchise investor.
```

```
CANDIDATE PROFILE:
{profile_json}

FRANCHISE REQUIREMENTS:
- Initial investment: $150,000 - $400,000
- Liquid capital required: $100,000 minimum
- Net worth required: $300,000 minimum
- Time commitment: Full-time owner-operator preferred

Provide analysis in the following JSON format:
{
    "investorScore": 0-100,
    "financialReadiness": "High/Medium/Low",
    "entrepreneurialFit": "Excellent/Good/Fair/Poor",
    "keyStrengths": ["strength1", "strength2"],
    "potentialConcerns": ["concern1", "concern2"],
    "predictedObjections": ["objection1", "objection2"],
    "recommendedApproach": "Personalized outreach strategy...",
    "timingAssessment": "Ready now/3-6 months/6-12 months/Long-term
nurture",
    "talkingPoints": ["point1", "point2", "point3"]
}
```

Territory Match Prompt:

```
Analyze the match between this candidate and available franchise
territories.

CANDIDATE LOCATION: {candidate_location}
RELOCATION WILLINGNESS: {relocation_preference}

AVAILABLE TERRITORIES:
{territories_json}

Provide territory recommendations with reasoning.
```

AI Analysis Output Structure

```
struct InvestorAnalysis {
    int investorScore;                    // 0-100
    std::string financialReadiness;       // High/Medium/Low
    std::string entrepreneurialFit;       // Excellent/Good/Fair/Poor
    std::vector<std::string> keyStrengths;
    std::vector<std::string> potentialConcerns;
    std::vector<std::string> predictedObjections;
    std::string recommendedApproach;
    std::string timingAssessment;
    std::vector<std::string> talkingPoints;
```

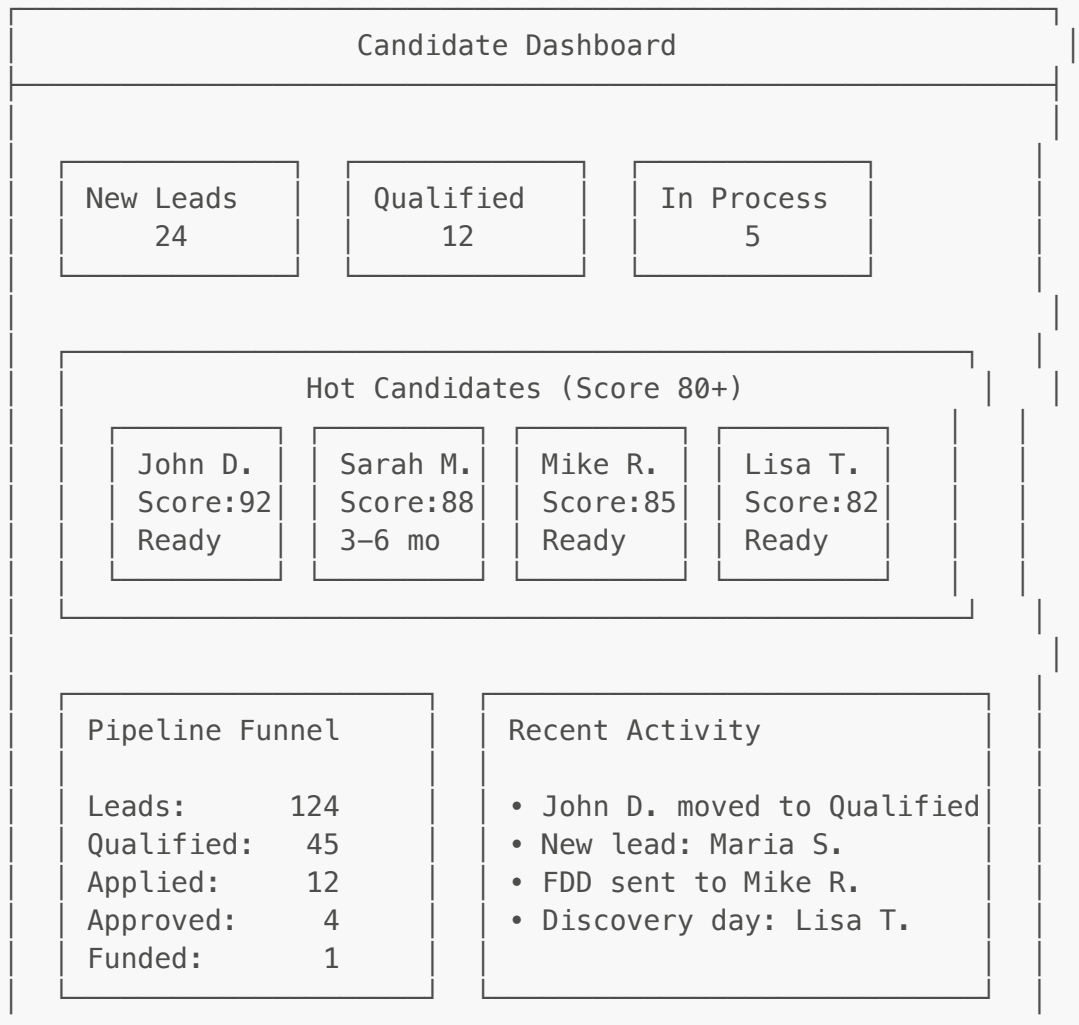
```
    std::vector<TerritoryMatch> territoryMatches;
    double confidenceScore;
    std::string analysisTimestamp;
};
```

Phase 4: UI Transformation

Page Mapping

Current Page	New Page	Key Changes
Dashboard	**Candidate Dashboard**	Pipeline overview, hot candidates, conversion metrics
AI Search	**Candidate Search**	LinkedIn filters, investor criteria, territory targeting
My Prospects	**Candidate Pipeline**	Pipeline stages, candidate cards, AI insights
Demographics	**Territory Analysis**	Available territories, market opportunity maps
Settings	**Settings**	LinkedIn credentials, outreach templates, scoring rules
Reports	**Pipeline Reports**	Funnel metrics, conversion rates, source attribution

New Dashboard Widgets



```
┌─────────────────────────────────────────────────────────┐
│                                                         │
└─────────────────────────────────────────────────────────┘
```

Candidate Search Page

```
┌─────────────────────────────────────────────────────────┐
│                   Candidate Search                      │
├─────────────────────────────────────────────────────────┤
│                                                         │
│  Location: [Pittsburgh, PA    ] Radius: [25 miles ▼]    │
│                                                         │
│  ┌─────────────────────────────────────────────┐        │
│  │ Professional Criteria                       │        │
│  │                                             │        │
│  │ Titles: [Executive, Director, VP, Owner  ]  │        │
│  │ Industries: [□ Food Service □ Retail □ Hospitality] │
│  │ Experience: [10+ years ▼]                   │        │
│  │ □ Has Management Experience                 │        │
│  │ □ Previous Business Owner                   │        │
│  │ □ Recent Career Transition (90 days)        │        │
│  └─────────────────────────────────────────────┘        │
│                                                         │
│  ┌─────────────────────────────────────────────┐        │
│  │ Investment Criteria                         │        │
│  │                                             │        │
│  │ Estimated Net Worth: [$500K+ ▼]             │        │
│  │ Investment Timeline: [Ready within 6 months ▼]      │
│  └─────────────────────────────────────────────┘        │
│                                                         │
│  [🔍 Search Candidates]                                 │
│                                                         │
└─────────────────────────────────────────────────────────┘
```

Candidate Card Design

```
┌─────────────────────────────────────────────────────────┐
│ [Photo] John Davidson                    Score: [92]    │
│         VP of Operations, Retired                       │
│         Pittsburgh, PA                                  │
├─────────────────────────────────────────────────────────┤
│ 💼 25 years experience | 🏢 Former: Marriott Hotels     │
│ 🎓 MBA, Penn State | 💰 Est. Net Worth: $750K+          │
├─────────────────────────────────────────────────────────┤
│ AI Insights:                                            │
│ "Strong candidate with extensive hospitality management │
│  experience. Recent retirement suggests ready to invest │
│  time and capital. Food service background is excellent fit.
│  Recommend discovery day invitation."                   │
```

```
┌─────────────────────────────────────────────────────────┐
│ Key Strengths:                                          │
│ • 15+ years food service management                     │
│ • Multi-unit operations experience                      │
│ • Strong financial position                             │
├─────────────────────────────────────────────────────────┤
│ Recommended Approach:                                   │
│ • Lead with ROI and wealth-building potential           │
│ • Emphasize semi-absentee ownership options             │
│ • Connect with existing franchisee in hospitality       │
├─────────────────────────────────────────────────────────┤
│ [📧 Send InMail] [📞 Log Call] [➕ Add to Pipeline]      │
└─────────────────────────────────────────────────────────┘
```

Phase 5: New Feature Additions

Territory Management

```
┌──────────────────────────────────────────────────────────┐
│                    Territory Manager                     │
├──────────────────────────────────────────────────────────┤
│                                                          │
│  ┌────────────────────────────────────────────────┐      │
│  │                                                │      │
│  │                  [Interactive Map]             │      │
│  │                                                │      │
│  │     🟢 Available    🟡 Reserved    🔴 Sold     │      │
│  │                                                │      │
│  │            [Map with territory overlays]       │      │
│  │                                                │      │
│  └────────────────────────────────────────────────┘      │
│                                                          │
│  Available Territories:                                  │
│  ┌────────────────────────────────────────────────┐      │
│  │ North Hills, PA    | Pop: 125K | HHI: $85K | Score: 87 │      │
│  │ South Side, PA     | Pop: 98K  | HHI: $72K | Score: 79 │      │
│  │ Monroeville, PA    | Pop: 145K | HHI: $91K | Score: 92 │      │
│  └────────────────────────────────────────────────┘      │
│                                                          │
└──────────────────────────────────────────────────────────┘
```

Pipeline Workflow

```
Lead ──► Qualified ──► Applied ──► Approved ──► Funded
  │          │           │           │           │
  ▼          ▼           ▼           ▼           ▼
Initial    Discovery   FDD Sent    Background  Franchise
Contact    Day Invite  & Review    Check Pass  Agreement
```

Investment Calculator

Provide prospects with ROI projections:

- Initial investment breakdown
- Projected revenue scenarios
- Break-even analysis
- 5-year wealth building projection

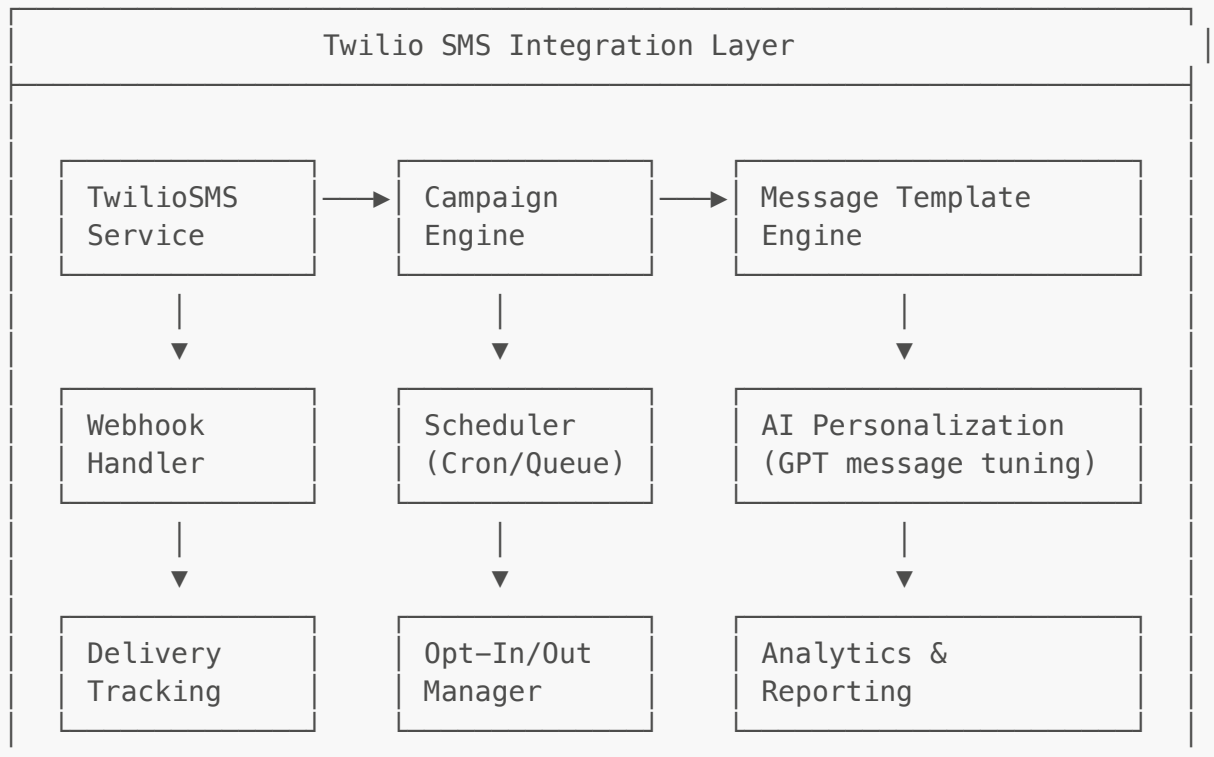
CRM Integration

CRM	Integration Type	Data Sync
Salesforce	Native API	Bi-directional
HubSpot	Native API	Bi-directional
Zoho CRM	REST API	Bi-directional
FranConnect	Partner API	Bi-directional

Twilio SMS Outbound Communication

Integrate Twilio Programmable Messaging APIs to enable direct SMS-based outreach to franchise buyer candidates. SMS provides a high-open-rate, immediate-delivery channel for pipeline hooks, marketing campaigns, and long-term grooming sequences.

Twilio Integration Architecture



```
└──────────────────────────────────────────────────────────────┘
```

Twilio API Products Required

Product	Purpose	Pricing Model
Programmable Messaging	Send/receive SMS and MMS	Per-message ($0.0079/SMS outbound)
Messaging Services	Sender pools, opt-out handling, rate limiting	Included with Messaging
Twilio Phone Numbers	Dedicated sending numbers (local, toll-free, short code)	$1-$1,000/month depending on type
Twilio Verify	Phone number validation before sending	Per-verification ($0.05)
Twilio Lookup	Carrier/line-type detection (mobile vs. landline)	Per-lookup ($0.01)

TwilioSMSService Class

```
// src/services/TwilioSMSService.h
class TwilioSMSService {
public:
    // Configuration
    void configure(const std::string& accountSid,
                   const std::string& authToken,
                   const std::string& messagingServiceSid);

    // Single Message
    SendResult sendSMS(const std::string& toNumber,
                       const std::string& messageBody);
    SendResult sendTemplateSMS(const std::string& toNumber,
                               const std::string& templateId,
                               const TemplateContext& context);
    SendResult sendMMS(const std::string& toNumber,
                       const std::string& messageBody,
                       const std::string& mediaUrl);

    // Bulk / Campaign
    CampaignResult launchCampaign(const Campaign& campaign);
    void pauseCampaign(const std::string& campaignId);
    void resumeCampaign(const std::string& campaignId);
    CampaignStats getCampaignStats(const std::string& campaignId);

    // Pipeline Hooks
    void registerHook(PipelineStage stage, const MessageTemplate& tmpl);
    void triggerHook(PipelineStage stage, const CandidateProfile&
candidate);
```

```
    // Grooming Sequences
    std::string enrollInSequence(const std::string& candidateId,
                                 const std::string& sequenceId);
    void advanceSequenceStep(const std::string& enrollmentId);
    void pauseSequence(const std::string& enrollmentId);
    void removeFromSequence(const std::string& enrollmentId);

    // Compliance
    bool verifyOptIn(const std::string& phoneNumber);
    void processOptOut(const std::string& phoneNumber);
    bool isNumberMobile(const std::string& phoneNumber);
    ConsentStatus getConsentStatus(const std::string& candidateId);

    // Webhooks (inbound from Twilio)
    void handleDeliveryCallback(const DeliveryEvent& event);
    void handleInboundSMS(const InboundMessage& message);
    void handleOptOutCallback(const OptOutEvent& event);

    // Analytics
    MessagingStats getStats(const DateRange& range);
    std::vector<MessageLog> getMessageHistory(const std::string&
candidateId);

private:
    std::string accountSid_;
    std::string authToken_;
    std::string messagingServiceSid_;
    RateLimiter rateLimiter_;
    DeliveryTracker deliveryTracker_;
    ConsentManager consentManager_;
};
```

SMS Communication Types

1. Pipeline Hook Messages (Event-Driven)

Automated SMS messages triggered by candidate pipeline stage changes and system events.

Hook Trigger	Message Purpose	Timing
New Lead Added	Welcome / introduction	Immediate
Qualified Stage	Discovery day invitation	Immediate
FDD Sent	Confirmation + next steps	Immediate
Application Received	Acknowledgment + timeline	Within 1 hour
Approval Granted	Congratulations + onboarding info	Immediate
Stale Lead (7 days)	Re-engagement nudge	Automated
Discovery Day Reminder	Event reminder	24 hours before

Hook Trigger	Message Purpose	Timing
Document Deadline	Reminder to complete paperwork	48 hours before
Birthday/Anniversary	Personal touch	Day-of

Hook Registration Model:

```
struct PipelineHook {
    std::string hookId;
    PipelineStage triggerStage;      // Lead, Qualified, Applied, etc.
    HookEvent triggerEvent;          // STAGE_ENTER, STAGE_EXIT, STALE,
REMINDER
    std::string messageTemplateId;
    int delayMinutes;                // 0 = immediate
    bool requiresOptIn;              // true (always)
    bool isActive;
    std::string createdBy;
};
```

2. Marketing Campaign Messages (Bulk Outreach)

Targeted SMS campaigns to engage potential franchise buyers at scale.

Campaign Type	Target Audience	Content Focus
Territory Launch	Candidates in new territory area	"New franchise opportunity in [City]"
Franchise Expo Follow-Up	Expo attendees	"Great meeting you at [Expo] - next steps"
Webinar Invitation	Qualified leads, warm prospects	"Join our franchise info session"
Success Story	All pipeline candidates	"Meet [Name], our newest franchise owner"
Limited Availability	High-score candidates in target territory	"Only [N] territories remaining in [Area]"
Seasonal Promotion	All opted-in candidates	Reduced franchise fee, financing offers
Referral Request	Funded franchisees	"Know someone who'd be a great owner?"

Campaign Configuration:

```
struct Campaign {
    std::string campaignId;
    std::string name;
    CampaignType type;               // MARKETING, ANNOUNCEMENT, REFERRAL
```

```
    std::string messageTemplateId;

    // Targeting
    CandidateFilter targetFilter;    // Pipeline stage, score range,
territory, etc.
    std::vector<std::string> excludeCandidateIds;

    // Scheduling
    ScheduleType schedule;           // IMMEDIATE, SCHEDULED, RECURRING
    std::string scheduledTime;       // ISO 8601
    std::string recurringCron;       // e.g. "0 10 * * MON" (Monday 10 AM)
    std::string timezone;

    // Throttling
    int maxMessagesPerHour;          // Rate limiting
    int maxMessagesPerDay;
    bool respectQuietHours;          // No messages 9PM-9AM local time

    // Tracking
    CampaignStatus status;           // DRAFT, SCHEDULED, ACTIVE, PAUSED,
COMPLETED
    int totalRecipients;
    int messagesSent;
    int messagesDelivered;
    int messagesFailed;
    int optOuts;
    int responses;
};
```

3. Grooming Campaign Messages (Nurture Sequences)

Multi-touch SMS sequences designed to build trust, educate, and move candidates through the franchise buying journey over time.

Sequence	Target Stage	Duration	Touches	Goal
Awareness Drip	New Leads	30 days	6 messages	Educate on franchise ownership benefits
Qualification Nurture	Qualified	21 days	5 messages	Build urgency, share success stories
FDD Follow-Up	Applied (FDD Sent)	14 days	4 messages	Answer concerns, encourage review
Re-Engagement	Stale Leads (30+ days)	45 days	4 messages	Rekindle interest
Post-Discovery Day	Post-Event	10 days	3 messages	Close the deal, address objections
Long-Term Nurture	Not Ready (6-12 mo)	6 months	12 messages	Stay top-of-mind

Grooming Sequence Model:

```
struct GroomingSequence {
    std::string sequenceId;
    std::string name;
    std::string description;
    PipelineStage targetStage;
    int totalSteps;
    bool autoEnroll;                // Auto-enroll when candidate enters
target stage
    bool exitOnStageChange;         // Remove from sequence if pipeline
stage advances

    std::vector<SequenceStep> steps;
};

struct SequenceStep {
    int stepNumber;
    int delayDays;                  // Days after previous step (or
enrollment)
    std::string messageTemplateId;
    std::string sendTime;           // Preferred time of day "10:00"
    bool skipWeekends;
    std::string exitCondition;      // e.g. "candidate.stage != 'Lead'"

    // A/B Testing
    bool abTestEnabled;
    std::string variantATemplateId;
    std::string variantBTemplateId;
    int variantASplitPercent;       // e.g. 50
};

struct SequenceEnrollment {
    std::string enrollmentId;
    std::string candidateId;
    std::string sequenceId;
    int currentStep;
    EnrollmentStatus status;        // ACTIVE, PAUSED, COMPLETED, EXITED
    std::string enrolledAt;
    std::string nextMessageAt;
    std::string completedAt;
    std::string exitReason;         // "completed", "opt_out",
"stage_changed", "manual"
};
```

Example: Awareness Drip Sequence (30 Days)

Day	Message Theme	Example Content

Day	Message Theme	Example Content
1	Welcome	"Hi [Name], thanks for your interest in [Franchise]. We help entrepreneurs build wealth through franchise ownership. Reply STOP to opt out."
5	Social Proof	"[Name], did you know our average franchise owner reaches profitability within 18 months? Here's how: [link]"
10	Education	"Thinking about franchise ownership? Here are the top 5 questions every investor asks: [link]"
17	Success Story	"Meet [Owner Name] - went from corporate VP to franchise owner in [City]. Read their story: [link]"
24	Territory Alert	"[Name], we have [N] territories available near [City]. Interested in learning more? Reply YES."
30	Call to Action	"[Name], ready to take the next step? Schedule a discovery call with our franchise team: [link]"

AI-Powered Message Personalization

Leverage the existing AI engine (OpenAI/Gemini) to personalize SMS content based on candidate profiles.

```
AI Personalization Prompt:

You are a franchise development copywriter. Personalize this SMS template
for the candidate based on their profile.

TEMPLATE: "{template_text}"
CANDIDATE PROFILE: {profile_json}
MESSAGE TYPE: {hook|marketing|grooming}
TONE: Professional, warm, entrepreneurial
CHARACTER LIMIT: 160 (SMS segment)

Rules:
- Keep under 160 characters for single SMS segment when possible
- Reference candidate's industry or background naturally
- Match urgency level to pipeline stage
- Never include financial guarantees or earnings claims
- Always include opt-out language on first message

Return personalized message text only.
```

Personalization Factor	Example Adaptation
Industry Background	"Your hospitality experience is exactly what makes great franchise owners..."

Personalization Factor	Example Adaptation
Career Stage	"Many executives like you have found franchise ownership the perfect next chapter..."
Location	"The [City] market is growing fast - perfect timing for a new franchise..."
Financial Tier	Adjust investment language: "accessible investment" vs. "portfolio diversification"
Engagement Level	First touch = softer; 5th touch = more direct call-to-action

SMS Compliance & Regulations

TCPA (Telephone Consumer Protection Act) Requirements:

Requirement	Implementation
Prior Express Written Consent	Digital opt-in form with clear disclosure before any SMS
Opt-Out Handling	Honor STOP/UNSUBSCRIBE/CANCEL/QUIT/END keywords immediately
Quiet Hours	No messages before 8 AM or after 9 PM in recipient's local timezone
Message Frequency Disclosure	"Msg frequency varies. Msg & data rates may apply." on opt-in
Business Identification	Every message must identify the sender business name
Record Retention	Store consent records, opt-out timestamps, message logs for 5 years

10DLC Registration (Required for A2P SMS):

Step	Description	Status
1	Register brand with The Campaign Registry (TCR)	Required
2	Create campaign use case (Franchise Lead Nurturing)	Required
3	Obtain 10DLC phone numbers	Required
4	Submit campaign for carrier approval	Required
5	Maintain throughput within approved tier	Ongoing

Consent Management Database:

```
-- New table: sms_consent
CREATE TABLE sms_consent (
    id UUID PRIMARY KEY,
    candidate_id UUID REFERENCES candidate_profiles(id),
```

```
    phone_number VARCHAR(20) NOT NULL,
    consent_status VARCHAR(20) NOT NULL,        -- OPTED_IN, OPTED_OUT,
PENDING
    consent_source VARCHAR(100),                -- web_form,
discovery_day, expo, manual
    consent_timestamp TIMESTAMP NOT NULL,
    opt_out_timestamp TIMESTAMP,
    opt_out_keyword VARCHAR(20),                -- STOP, UNSUBSCRIBE, etc.
    ip_address VARCHAR(45),                     -- For web form consent
    consent_text TEXT,                          -- Exact disclosure shown
    created_at TIMESTAMP DEFAULT NOW()
);

-- New table: sms_messages
CREATE TABLE sms_messages (
    id UUID PRIMARY KEY,
    candidate_id UUID REFERENCES candidate_profiles(id),
    campaign_id UUID,
    sequence_enrollment_id UUID,
    hook_id UUID,
    message_type VARCHAR(20) NOT NULL,          -- HOOK, MARKETING,
GROOMING
    twilio_message_sid VARCHAR(50),
    from_number VARCHAR(20),
    to_number VARCHAR(20),
    message_body TEXT NOT NULL,
    media_url VARCHAR(500),
    direction VARCHAR(10) NOT NULL,             -- OUTBOUND, INBOUND
    status VARCHAR(20),                         -- QUEUED, SENT,
DELIVERED, FAILED, UNDELIVERED
    error_code VARCHAR(10),
    error_message TEXT,
    sent_at TIMESTAMP,
    delivered_at TIMESTAMP,
    created_at TIMESTAMP DEFAULT NOW()
);

-- New table: sms_campaigns
CREATE TABLE sms_campaigns (
    id UUID PRIMARY KEY,
    name VARCHAR(200) NOT NULL,
    campaign_type VARCHAR(50),
    message_template_id UUID,
    target_filter JSONB,
    schedule_type VARCHAR(20),
    scheduled_time TIMESTAMP,
    recurring_cron VARCHAR(50),
    timezone VARCHAR(50),
    max_messages_per_hour INTEGER DEFAULT 60,
    respect_quiet_hours BOOLEAN DEFAULT TRUE,
    status VARCHAR(20) DEFAULT 'DRAFT',
    total_recipients INTEGER DEFAULT 0,
    messages_sent INTEGER DEFAULT 0,
    messages_delivered INTEGER DEFAULT 0,
```

```
    messages_failed INTEGER DEFAULT 0,
    opt_outs INTEGER DEFAULT 0,
    responses INTEGER DEFAULT 0,
    created_by VARCHAR(100),
    created_at TIMESTAMP DEFAULT NOW(),
    updated_at TIMESTAMP DEFAULT NOW()
);

-- New table: grooming_sequences
CREATE TABLE grooming_sequences (
    id UUID PRIMARY KEY,
    name VARCHAR(200) NOT NULL,
    description TEXT,
    target_stage VARCHAR(50),
    total_steps INTEGER,
    auto_enroll BOOLEAN DEFAULT FALSE,
    exit_on_stage_change BOOLEAN DEFAULT TRUE,
    is_active BOOLEAN DEFAULT TRUE,
    steps JSONB NOT NULL,
    created_at TIMESTAMP DEFAULT NOW()
);

-- New table: sequence_enrollments
CREATE TABLE sequence_enrollments (
    id UUID PRIMARY KEY,
    candidate_id UUID REFERENCES candidate_profiles(id),
    sequence_id UUID REFERENCES grooming_sequences(id),
    current_step INTEGER DEFAULT 0,
    status VARCHAR(20) DEFAULT 'ACTIVE',
    enrolled_at TIMESTAMP DEFAULT NOW(),
    next_message_at TIMESTAMP,
    completed_at TIMESTAMP,
    exit_reason VARCHAR(100)
);
```

SMS Settings UI

```
┌─────────────────────────────────────────────────────────────┐
│                  Settings > SMS Configuration               │
├─────────────────────────────────────────────────────────────┤
│                                                             │
│  Twilio Credentials                                         │
│  ┌─────────────────────────────────────────────────────┐    │
│  │ Account SID:          [AC_____________________________]  │    │
│  │ Auth Token:           [•••••••••••••••••••••••••••••]  │    │
│  │ Messaging Service ID: [MG_____________________________]  │    │
│  │ Status: ✅ Connected                  [Test Connection]│    │
│  └─────────────────────────────────────────────────────┘    │
│                                                             │
│  Sending Preferences                                        │
│  ┌─────────────────────────────────────────────────────┐    │
```

```
┌──────────────────────────────────────────────────────────────────────────┐
│ Default Sender Number: [(412) 555-0100          ▼]                       │
│ Quiet Hours:           [9:00 PM] to [8:00 AM]                            │
│ Max Messages/Day:      [200        ]                                     │
│ Timezone:              [America/New_York       ▼]                        │
│ ☐ Respect weekends (no marketing on Sat/Sun)                             │
│ ☑ Require opt-in before first message                                    │
└──────────────────────────────────────────────────────────────────────────┘

Pipeline Hooks
┌──────────────────────────────────────────────────────────────────────────┐
│ ☑ New Lead Welcome          Template: [Welcome v2       ▼]               │
│ ☑ Qualified Notification    Template: [Discovery Invite ▼]               │
│ ☑ FDD Sent Confirmation     Template: [FDD Confirm      ▼]               │
│ ☑ Application Received      Template: [App Received     ▼]               │
│ ☑ Approval Granted          Template: [Congrats         ▼]               │
│ ☑ Stale Lead (7 days)       Template: [Re-Engage        ▼]               │
│ ☐ Discovery Day Reminder    Template: [DD Reminder      ▼]               │
│                                                                          │
│ [+ Add Custom Hook]                                                      │
└──────────────────────────────────────────────────────────────────────────┘

Grooming Sequences
┌──────────────────────────────────────────────────────────────────────────┐
│ Name                  | Target    | Steps | Enrolled | Status |          │
│ Awareness Drip        | Lead      | 6     | 48       | Active |          │
│ Qualification Nurture | Qualified | 5     | 22       | Active |          │
│ FDD Follow-Up         | Applied   | 4     | 8        | Active |          │
│ Re-Engagement         | Stale     | 4     | 15       | Active |          │
│ Long-Term Nurture     | Not Ready | 12    | 34       | Active |          │
│                                                                          │
│ [+ Create New Sequence]  [Edit]  [Pause All]                             │
└──────────────────────────────────────────────────────────────────────────┘

Message Templates
┌──────────────────────────────────────────────────────────────────────────┐
│ [+ New Template]                                                         │
│                                                                          │
│ Template Name     | Type      | Characters | AI Personal. |            │
│ Welcome v2        | Hook      | 142        | ☑            |            │
│ Discovery Invite  | Hook      | 156        | ☑            |            │
│ Territory Alert   | Marketing | 148        | ☑            |            │
│ Success Story #1  | Grooming  | 155        | ☐            |            │
│ ROI Teaser        | Marketing | 138        | ☑            |            │
└──────────────────────────────────────────────────────────────────────────┘

[Save Settings]
```

SMS Analytics & Reporting

Metric	Description	Target

Metric	Description	Target
Delivery Rate	Messages delivered / messages sent	> 95%
Opt-Out Rate	Opt-outs / total recipients per campaign	< 3%
Response Rate	Inbound replies / messages delivered	> 10%
Click-Through Rate	Link clicks / messages delivered	> 5%
Conversion Rate	Stage advances attributed to SMS / messages sent	> 2%
Cost per Conversion	Total SMS spend / conversions	< $15
Sequence Completion Rate	Enrollments completed / enrollments started	> 60%

```
SMS Dashboard:
├── Messages Sent (MTD): 1,247
├── Delivery Rate: 97.2%
├── Response Rate: 12.4%
├── Opt-Out Rate: 1.8%
├── Active Campaigns: 3
├── Active Sequence Enrollments: 127
├── Cost (MTD): $9.85
├── Pipeline Advances Attributed to SMS: 18
└── Top Performing Template: "Discovery Invite" (22% response rate)
```

Twilio Cost Estimation

Component	Unit Cost	Monthly Estimate (200 candidates)
Outbound SMS	$0.0079/message	~$12 (avg 8 msgs/candidate)
Inbound SMS	$0.0075/message	~$3 (est. 20% reply rate)
Phone Number	$1.00/month (local)	$1-$5
Lookup (carrier)	$0.01/lookup	$2
Verify (opt-in)	$0.05/verification	$10
Messaging Service	Included	$0
Estimated Monthly Total		**$28-$32**

Implementation Roadmap

Timeline Overview

```
Month 1–2          Month 3–4          Month 5–6          Month 7–8
Month 9–10
──────────────     ──────────────     ──────────────     ──────────────
```

```
_____________
Phase 1:          Phase 2:          Phase 3:          Phase 4–5:
Phase 6:
Foundation        LinkedIn          AI Engine         UI & Advanced
Twilio SMS
                  Integration       Updates           Features
Outreach
```

Phase 1: Foundation (Weeks 1-8)

Week	Tasks	Deliverables
1-2	Data model design	CandidateProfile schema, ER diagrams
3-4	Database migration	New tables, migration scripts
5-6	Scoring engine update	New scoring rules, configuration UI
7-8	Search criteria refactor	New search filters, API updates

Phase 2: LinkedIn Integration (Weeks 9-16)

Week	Tasks	Deliverables
9-10	LinkedIn API setup	OAuth flow, token management
11-12	Profile search implementation	Search API, result parsing
13-14	Career transition detection	Algorithm, alerting
15-16	Profile enrichment	Data mapping, caching

Phase 3: AI Engine Updates (Weeks 17-24)

Week	Tasks	Deliverables
17-18	Prompt engineering	New analysis prompts
19-20	Investor scoring AI	Scoring integration
21-22	Outreach recommendations	Personalization engine
23-24	Territory matching	Match algorithm

Phase 4: UI Transformation (Weeks 25-32)

Week	Tasks	Deliverables
25-26	Dashboard redesign	New widgets, metrics
27-28	Search page rebuild	New filters, results display
29-30	Pipeline management	Stage workflow, candidate cards

Week	Tasks	Deliverables
31-32	Territory analysis	Map updates, territory view

Phase 5: Advanced Features (Weeks 33-40)

Week	Tasks	Deliverables
33-34	Territory manager	Full territory CRUD
35-36	Investment calculator	ROI projections
37-38	CRM integration	Salesforce/HubSpot sync
39-40	Reporting & polish	Pipeline reports, bug fixes

Phase 6: Twilio SMS Outreach (Weeks 41-48)

Week	Tasks	Deliverables
41-42	Twilio account setup, 10DLC registration, TwilioSMSService class	API integration, send/receive SMS, delivery tracking
43-44	Pipeline hooks implementation	Automated SMS triggers on stage changes, webhook handlers
45-46	Marketing campaigns & grooming sequences	Campaign engine, sequence scheduler, enrollment management
47-48	AI message personalization, analytics, SMS settings UI	GPT-powered templates, SMS dashboard, compliance tools

Technical Decisions

LinkedIn API Strategy

Recommended Approach: Sales Navigator API

Option	Pros	Cons	Recommendation
Marketing API	Lead Gen Forms, Matched Audiences	Requires ad spend, limited profile data	Supplement
Sales Navigator API	Deep profile search, CRM sync, InMail	Expensive ($100+/user/month)	**Primary**
Recruiter Lite API	Profile access, InMail	Designed for recruiting, ToS concerns	Avoid

Implementation Notes:

- Apply for LinkedIn Partner Program
- Budget $1,200+/year per user for Sales Navigator

- Implement robust rate limiting (100 requests/day typical)
- Cache aggressively to minimize API calls

Data Privacy & Compliance

Requirement	Implementation
GDPR Compliance	Consent tracking, data deletion, export
CCPA Compliance	Opt-out mechanism, disclosure
LinkedIn ToS	No scraping, respect rate limits, proper attribution
Data Retention	2-year retention, automated purge
Consent Management	Explicit opt-in for outreach

Infrastructure Considerations

Component	Current	Recommended
Database	PostgreSQL	PostgreSQL (no change)
Caching	In-memory	Redis for distributed caching
Queue	None	RabbitMQ for async processing
Search	SQL queries	Elasticsearch for profile search

Success Metrics

Key Performance Indicators (KPIs)

Metric	Target	Measurement
Candidate Discovery Rate	50+ qualified/month	New qualified leads
AI Accuracy	80%+	Scored 80+ that convert
Pipeline Velocity	45 days avg	Lead to Application time
Conversion Rate	5%	Lead to Funded
Cost per Lead	<$50	Total cost / qualified leads
User Adoption	80%	Active users / total users

Reporting Dashboard

```
Monthly Metrics:
├── Candidates Discovered: XXX
├── Candidates Qualified: XX
├── Applications Received: X
├── Approvals: X
```

```
├── Franchises Funded: X
├── Pipeline Value: $X.XM
├── Average Score of Converts: XX
└── Top Performing Territories: [List]
```

Risk Assessment

Risk	Probability	Impact	Mitigation
LinkedIn API access denied	Medium	High	Alternative data sources, broker partnerships
High API costs	Medium	Medium	Aggressive caching, tiered usage
Low AI accuracy	Low	High	Continuous prompt tuning, feedback loops
User adoption resistance	Medium	Medium	Training, gradual rollout
Data privacy issues	Low	High	Legal review, compliance framework
Integration complexity	Medium	Medium	Phased approach, MVP first
TCPA SMS compliance violation	Low	Critical	Legal review, strict opt-in enforcement, automated opt-out
SMS opt-out rate too high	Medium	Medium	A/B test messaging, respect frequency limits, personalize content
10DLC registration delays	Medium	Low	Begin registration early in Phase 5, use toll-free as interim
Carrier filtering/blocking	Low	Medium	Follow 10DLC best practices, monitor delivery rates, rotate numbers

---

Appendix

A. LinkedIn API Resources

- LinkedIn Marketing API Documentation
- Sales Navigator API
- LinkedIn Partner Program

B. Franchise Industry Data Sources

- International Franchise Association (IFA)
- Franchise Times Top 400
- Entrepreneur Franchise 500
- FRANdata

C. Twilio API Resources

- Twilio Programmable Messaging
- Twilio Messaging Services
- Twilio 10DLC Registration
- Twilio Webhooks
- TCPA Compliance Guide
- Twilio Lookup API
- Twilio Verify API

D. Competitor Analysis

Competitor	Focus	Differentiator
FranConnect	Franchise CRM	Full franchise management
ClientTether	Lead follow-up	Automated nurturing
Scorpion	Digital marketing	Lead generation
FranchiseAI	AI-powered prospecting	Intelligent candidate discovery

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Document History

Version	Date	Author	Changes
1.0	2026-02-03	Claude AI	Initial draft
1.1	2026-02-04	Claude AI	Added Twilio SMS outbound communication section (hooks, marketing campaigns, grooming sequences)

This document outlines the strategic transition plan for FranchiseAI. Implementation details may be adjusted based on technical discoveries and business requirements during development.