P360 Display Advertising Platform - MVP Implementation Plan

Executive Summary

Project: Pipeline360 Display Advertising Platform MVP **Timeline**: September 1, 2025 - January 19, 2026 (140 days)

Budget: \$540,000 (fixed fee with \$90K at risk)

Critical Deadline: January 9, 2026 (Production deployment) **Success Metric**: First customer dollar processed by deadline

MVP Strategy: Phased Delivery Approach

Phase Strategy Overview

We recommend a **3-tier MVP approach** to ensure business continuity and manage risk:

- 1. MVP-1 (Foundation): Core platform capabilities for business operations
- 2. MVP-2 (Enhancement): Advanced features for competitive differentiation
- 3. MVP-3 (Scale): Marketplace and optimization features

MVP-1: Foundation (Critical Path to Jan 9, 2026)

MVP-1 Objectives

- Replace Xandr functionality for business continuity
- Enable first customer dollar by January 9, 2026
- Establish core multi-tenant platform
- Implement essential integrations (TTD, Bombora, Salesforce)

MVP-1 Feature Scope

1. Core Infrastructure (Must-Have)

Tech Foundation

- Multi-tenant database architecture with org-level isolation
- Microsoft Entra ID SSO for internal users
- External user authentication (AuthO/OIDC)
- Role-based access control (Super Admin, Campaign Manager, Marketer)
- Data encryption (at rest/transit) and API security
- Basic system monitoring and health checks
- Sandbox/test mode for safe testing

2. User & Organization Management (Must-Have)

	$\overline{\checkmark}$	User	Manad	gement
--	-------------------------	------	-------	--------

- Organization creation (API + manual by Super Admin)
- User provisioning and role assignment
- TTD Advertiser API key management
- Basic audit logging for user actions
- Manual record reconciliation UI for unmapped SF records

3. Audience Management (Must-Have)

Core Audience Capabilities

- ☐ CSV upload & ingestion (max 10K records, <30s processing)
- Audience builder with AND/OR logic trees
- Audience field-mapping service for Bombora data normalization
- Audience deduplication and validation
- TTD audience export with UID2 identifiers
- ICP audience type designation
- TTD seed creation from audiences (min 10K cookies)

4. Campaign Orchestration (Must-Have)

✓ Program & Campaign Management

- ☐ Program hierarchy (Program > Campaign > Line Item)
- Campaign configuration (budget, dates, KPIs, audiences)
- Line item configuration (bids, creatives, pacing)
- TTD campaign sync API with retry logic
- Campaign metadata enrichment
- Campaign status tracking and validation

5. Data Integration (Must-Have)

Core Integrations

- Bombora daily file ingestion (20-60M records, <4hrs processing)
- Bombora taxonomy mapping engine
- TTD REDS file ingestion (hourly processing, <15min latency)
- Salesforce 3x daily sync (Accounts/Opportunities/Line Items)
- Dilling reconciliation logic with spend discrepancy identification
- TTD Advertiser API key management per organization

6. Attribution & Reporting (Must-Have)

☑ Basic Reporting

- REDS data processing engine for attribution
- Attribution engine (REDS + audience + campaign data joining)
- Aggregated reporting tables for Metabase

	 Metabase dashboard embedding via iFrames TTD Advertiser Pixel retrieval for conversion tracking
	MVP-1 Sprint Plan (19 Sprints)
Spi	rint 0-1: Foundation Setup (Weeks 1-2)
Spı	rint O Goals: Infrastructure & Development Environment
	 AWS environment setup (dev/staging/prod) CI/CD pipeline configuration Database schema design and setup Development team onboarding and access provisioning Initial security framework implementation
Spi	rint 1 Goals: Core Backend Architecture
	 Multi-tenant database implementation Authentication framework (Entra ID + external) Basic API framework and security Initial user and organization models Health check and monitoring endpoints
Spi	rints 2-3: User Management (Weeks 3-4)
Spı	rint 2 Goals: Authentication & Authorization
Sni	 Microsoft Entra ID integration External user authentication (AuthO/OIDC) Role-based access control implementation Session management and token handling Basic admin UI for user management
Spi	rint 3 Goals: Organization Management
	 Organization creation and management User-organization mapping TTD Advertiser API key management Basic audit logging framework Organization provisioning workflows
Spi	rints 4-6: Data Integration Foundation (Weeks 5-7)
Spı	rint 4 Goals: Salesforce Integration
	 Salesforce API connectivity 3x daily sync implementation Account/Opportunity/Line Item mapping Conflict resolution logic Sync monitoring and error handling

Sprint 5 Goals: Bombora Integration • S3 file ingestion pipeline • Daily processing automation (20-60M records) Schema validation and data quality checks • Taxonomy mapping engine Error handling and retry logic Sprint 6 Goals: TTD Foundation • TTD API connectivity and authentication • REDS file ingestion setup Basic TTD audience export framework API key management per organization • TTD campaign sync foundation **Sprints 7-9: Audience Management (Weeks 8-10)** Sprint 7 Goals: CSV Upload & Processing CSV upload UI and validation • Tile processing engine (max 10K records) S3 storage integration Error logging and user feedback Deduplication logic implementation Sprint 8 Goals: Audience Builder Core AND/OR logic tree UI • Bombora data integration Audience field mapping Preview and validation features Audience versioning foundation Sprint 9 Goals: TTD Audience Export • TTD-compatible JSON output • UID2 identifier integration • Batch processing and API submission Retry logic and failure handling • ICP audience type implementation **Sprints 10-12: Campaign Orchestration (Weeks 11-13)** Sprint 10 Goals: Program Hierarchy

- Program creation and management UI
- Parent-child relationship implementation
- Budget validation and constraints
- Program-level reporting container

Salesforce opportunity mapping
Sprint 11 Goals: Campaign Configuration
 Campaign creation and editing UI Budget allocation and flight dates KPI setting and audience assignment Real-time validation implementation Campaign status management
Sprint 12 Goals: Line Item Management
 Line item configuration UI Bid configuration and creative assignment Pacing controls implementation TTD constraint validation Line item status tracking
Sprints 13-15: TTD Integration (Weeks 14-16)
Sprint 13 Goals: Campaign Sync to TTD
 TTD API campaign creation P360 to TTD object translation Sync status logging and monitoring Error handling and retry logic Campaign lifecycle management
Sprint 14 Goals: REDS Data Processing
 Hourly REDS file processing Schema validation and data joining Campaign ID reconciliation Performance monitoring (<15min latency) Data quality validation
Sprint 15 Goals: TTD Advanced Features
 Seed creation from audiences Advertiser pixel retrieval Advanced campaign metadata TTD status synchronization Conversion tracking setup
Sprints 16-17: Attribution & Reporting (Weeks 17-18)
Sprint 16 Goals: Attribution Engine
 REDS + audience + campaign data joining Custom reconciliation rules Cookie-to-audience matching

 Attribution logic implementation Data aggregation for reporting
Sprint 17 Goals: Reporting Infrastructure
 Metabase setup and configuration Reporting table generation Dashboard embedding via iFrames Basic KPI calculation Report refresh automation
Sprint 18-19: Integration & Polish (Weeks 19-20)
Sprint 18 Goals: Admin Features
 Admin console implementation Manual record reconciliation UI System monitoring dashboard Audit trail UI implementation Basic user onboarding flow
Sprint 19 Goals: UAT Preparation
 End-to-end testing completion Performance optimization Security validation Documentation finalization UAT environment preparation
MVP-1 Success Criteria Checklist
Business Continuity Requirements
 Customer organization can be provisioned Audience can be uploaded and created Campaign can be launched with associated audience TTD integration operational with live campaigns Attribution data flowing from REDS service Attributed reporting tables created Salesforce billing reconciliation functional
Performance Requirements
 CSV processing: <30 seconds per file (max 10K records) Bombora ingestion: <4 hours for 20-60M records daily REDS processing: <15 minutes per hourly file Campaign actions: <5 seconds response time Salesforce sync: <15 minutes full sync

 $\bullet \quad \square$ Page loads: <2 seconds for reporting dashboards

Integration Requirements

- TTD API: Campaign creation, audience export, REDS ingestion
- Daily file processing and taxonomy mapping
- Salesforce: 3x daily sync with conflict resolution
- Authentication: Entra ID (internal) + Auth0 (external)
- Monitoring: System health checks and error alerting

MVP-2: Enhancement (February - March 2026)

MVP-2 Objectives

- Enhance user experience and operational efficiency
- Add advanced audience and campaign features
- Implement comprehensive monitoring and optimization

MVP-2 Feature Scope

1. Advanced Audience Features

- Audience expansion API for behavioral data enrichment
- Audience versioning and rollback capabilities
- Advanced deduplication with ML-based fuzzy matching
- Audience performance tracking and optimization

2. Campaign Optimization

- Auto-creation of campaigns from Salesforce triggers
- Campaign performance summary cards
- Basic optimization suggestions

3. Enhanced Integration & Monitoring

- Integration health dashboard
- Advanced data export and API access
- Enhanced audit trail with comprehensive filtering
- On-demand Salesforce sync capabilities

4. User Experience Improvements

- Enhanced user onboarding flow with tutorials
- Insight tags and annotations for campaigns
- Improved navigation and user interface
- Mobile-responsive design optimization

MVP-3: Scale (April - June 2026)

MVP-3 Objectives

- Enable marketplace functionality
- Implement advanced AI/ML features
- Add enterprise-grade capabilities

MVP-3 Feature Scope

1. Marketplace Managemer

•	Seller asset listing and management
•	☐ Buyer view of marketplace offerings
•	☐ Cross-org content syndication rules
•	$\hfill \square$ Marketplace-level reporting dashboard

2. Advanced Roles & Permissions

•	☐ Seller (external) role implementation
•	☐ Agency (external) role with multi-org access
•	Advanced permission granularity
•	Data masking and privacy controls

3. AI/ML Features

•	Optimization suggestion engine
•	☐ Predictive reach and pacing models
•	Automated record matching with ML
•	☐ Anomaly detection for campaign performance

4. Enterprise Features

•	☐ Open API for custom integrations
•	☐ Advanced data management and export
•	$\hfill \square$ Integrate sync services for campaign results
•	☐ Enhanced forecasting with market data