Pipeline360 // Display RFP & Scopes

Executive Summary

Pipeline-360 is seeking a qualified development partner to build a comprehensive Display advertising platform that integrates with The TradeDesk, Internal Vendors and can be adjusted based upon customer data & preferences. This product serves 3 primary purposes in it's completed state: 1) The ability for a customer to generate Advertising campaigns via a hierarchal & programmatic campaign structure 2) the ability to generate audiences based upon their targeting parameters and 3) the ability to reconcile the performance of these campaigns into our primary business context of Branded Demand. This platform represents a critical business initiative with a firm deadline of December 19th 2025 for the first customer dollar to be processed.

The successful vendor will work collaboratively with P360's product and engineering teams while maintaining development responsibility for the front end and back end code of the proposed solution. A strong vendor will be able to justify proposed language solutions (ex, React / Node) and a proposed path for hosting and storage (ex: AWS / Azure). This project requires expertise in high-volume data processing, real-time integrations, and a bonus to experience with programmatic advertising workflows.

Why This Matters:

This platform directly generates customer revenue and must be production-ready by December 19th 2025 to meet committed customer deliverables and revenue targets. The core of this product will contain several re-usable components (Programs / Audience Builder) that we envision growing usage of in the long run of our product lifecycle.

High Level Core Requirements
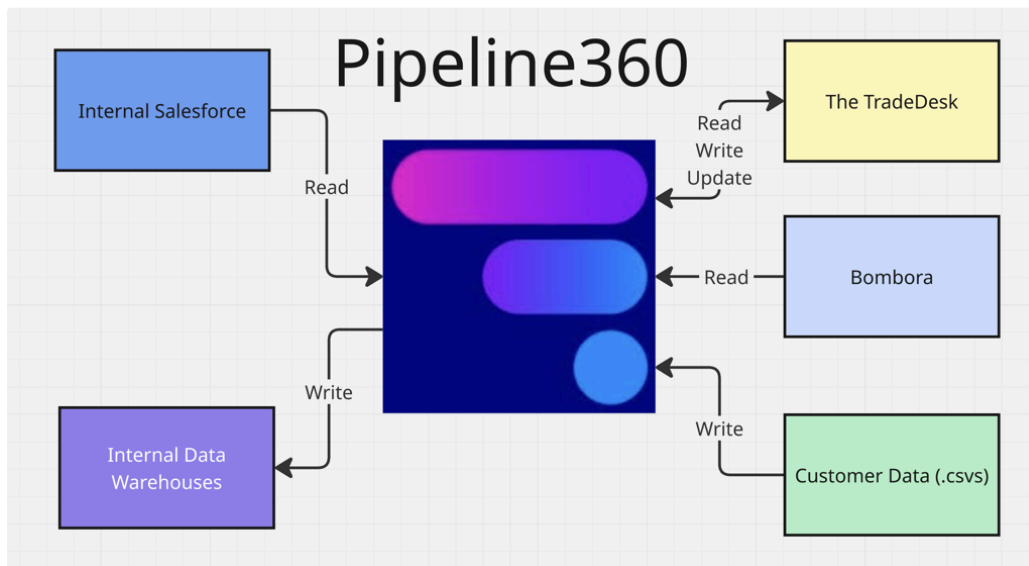
User Management System

- Multi-tenant user authentication and authorization
- Role-based permission system with organizational hierarchy.
- Future SSO capability (OAuth/SAML ready architecture for future products)

Admin + Login Pages (UI / UX)

- Ability for a user with proper roles to create organizations, add users, link organizations to known seats in other entities.

Program & Campaign Management (UI / UX Involved)

- A Hierarchal Program creation flow, which houses parent rules for Display Campaigns and Line Items via API's and an interface.
- Display Line Item tactical configuration
- Budget allocation and flight date management
- Audience targeting parameter configuration
- Campaign status tracking and table views.

Audience Building and Management (UI / UX Involved)

- Ability for a user to upload a .csv and store data in the product. This will be a series of domains in a .csv.
- Ability for a user to compose audiences based off of .csv' and/or data provided in the product by vendor (Bombora) using and/or logic trees using the sourced parameters of their .csv's or the underlying Bombora data.
- Ability for a created audience to be translated into an array posted into TTD

Data Processing Infrastructure

- First Party Database for customer data normalization
- High-volume file processing (2K+ CSV uploads annually)
- Real-time data ingestion from vendor partners (20-60M records daily)
- Data quality validation and error handling
- Attribution logic processing and reconciliation

Integration Layer

- The TradeDesk campaign creation and reporting APIs: 🔗 Partner Portal
- The TradeDesk REDS Service will deliver files to us via a S3 file processing: 🔗 Partner Portal
- Bombora data ingestion from AWS S3 buckets for file processing
- READ Connection to Internal Salesforce via an API connected to our seat
- Future Integrate platform connectivity (architecture preparation)

Reporting & Analytics (UX / UI / iFrame)

- Metabase dashboard embedding via iframe → ⊞ Metabase Open Source Editions
- Results & statistics queried from TTD API's
- Attribution reporting connects customer data to campaign outcomes by joining log files from Bombora, Audiences, and TTD.
- Data hygiene cycles created for products requiring attribution

Activity Service

- Comprehensive user audit logging – features write to service for history logs.
- System monitoring and health checks – written on a feature-by-feature basis.
- Consumable via UI and CSV export
- Integration with monitoring and alerting systems

Integration Object Mapping

Pipeline360 Entity	TTD API Entity/Concept	TTD API Endpoints	Key Responsibilities
Customer	Advertiser	`POST /v3/advertiser`	Representative of
Program	Logical Container (P360 DB)	N/A (Internal)	Cross-campaign budget management, high-level audience definition, multi-channel coordination.
Campaign	`Campaign`	`POST /v3/campaign`	Overall budget, flight dates, primary channel, high-level KPIs (goals). Container for Ad Groups.
Line Item	`Ad Group`	`POST /v3/adgroup`	Granular targeting, bid strategy (`MaxBidCPM`), creative assignment, pacing, specific budget allocation.

Audience Segment	`Audience` & `Data Group`	`POST /v3/datagroup`, `POST /v3/audience`	Definition of targetable user sets using first-party and third-party data elements.

Pipeline360 can provide a proposed entity and object mapping in a separate format should it need to be needed further. Our internal Datawarehouse's & Bombora are not tied to specific objects, moreover they are data sources that span multiple data sources.

Technical Architecture Requirements

Technology Stack (A sample proposal may)

- **Frontend:** React (latest stable version)
- **Backend:** .NET (latest LTS version) or equivalent
- **Database:** PostgreSQL or SQL Server on AWS RDS or equivalent
- **Hosting:** AWS (EC2, S3, RDS, Lambda as appropriate) or equivalent
- **Data Processing:** AWS Glue, SQS, SNS for data pipeline management or equivalent

Performance & Scalability Requirements

Component	Volume	Frequency	Performance Requirement
Users	12 admin users (initial) → 200+ reporting users.	Peak usage	< 2 second page loads
Vendor Data Ingestion	20-60M records	Daily batch	Process within 4 hours
Customer File Uploads	2K files/year (850 average file)	On-demand	< 30 seconds processing
Salesforce Sync	Accounts, Opportunities, Line Items	3x daily + on-demand	< 15 minutes full sync
Campaign Actions	Real-time updates	User-initiated	< 5 seconds response

Integration Architecture & Data Flows

System	Direction	Data Type	Frequency	Format	Notes
The TradeDesk API	Bidirectional	Campaign creation, reporting	Real-time campaigns, daily reporting	REST API	Campaign management + performance data
The TradeDesk REDS	Inbound	Attribution log files	Hourly	S3 file drop	Requires custom attribution logic

Bombora	Inbound	Intent data & Cookie Sharing	Daily	S3 file drop	Customer audience enhancement
Salesforce	Bidirectional	Account/Opportunity reconciliation	3x daily + on-demand	REST API	Billing and customer management
Integrate	Bidirectional	Customer platform data	Future implementation	API/File	Architecture preparation only

Security & Compliance Requirements

- **GDPR Compliance:** Full data protection and right to erasure capabilities
- **CCPA Compliance:** California consumer privacy requirements
- **SOC 2 Preparation:** Architecture must support future SOC 2 certification (2026)
- **Data Encryption:** At rest and in transit
- **Access Controls:** Role-based permissions with audit trails
- **API Security:** OAuth 2.0, rate limiting, input validation

User Roles & Permissions

[P360 will provide detailed user role matrix in conjunction with designs and entity mapping]. We should assume for sake of argument

Integration Requirements Detail

The TradeDesk Integration

- **Campaign Creation:** Full campaign setup including audiences, budgets, targeting
- **Reporting API:** Daily performance data retrieval and reconciliation
- **REDS Service:** Hourly S3 file processing with custom attribution logic
- **Error Handling:** Robust retry logic and failure notification systems

Salesforce Integration

- **Objects:** Accounts, Opportunities, Opportunity Line Items
- **Sync Frequency:** 3x daily automated + real-time on-demand
- **Data Mapping:** Bidirectional field mapping with conflict resolution
- **Audit Trail:** All sync activities logged with success/failure tracking

Bombora Integration

- **Data Type:** Intent data for audience enhancement
- **Delivery Method:** S3 bucket file drops (P360-provisioned)
- **Processing:** Real-time ingestion with data validation
- **Integration Logic:** Match data to customer audiences

Project Roles & Responsibilities

P360 Responsibilities

- **Product Management:** Requirements definition, user story creation, acceptance criteria
- **Design:** Complete UI/UX design system, wireframes, prototypes, and design specifications via provided figma's and demo's.
- **Infrastructure:** AWS account provisioning and initial setup
- **Integration Support:** API credentials with vendors, vendor relationship management
- **Testing Support:** User acceptance testing, business logic validation. Final feature sign off.
- **Documentation Review:** Technical documentation review and approval

Development Partner Responsibilities

- **Technical Architecture:** System design, database schema, API architecture
- **Full Stack Development:** Frontend React application and .NET backend services
- **Database Design:** Schema design, optimization, migration strategies
- **Integration Development:** All third-party API integrations and data processing
- **Testing:** Unit testing, integration testing, performance testing
- **DevOps:** CI/CD pipeline setup, deployment automation, monitoring setup
- **Documentation:** Technical documentation, API documentation, deployment guides
- **Code Quality:** Code reviews, security scanning, performance optimization
- **Project Management:** Sprint planning, daily standups, progress reporting with P360

Shared Responsibilities

- **Code Reviews:** Joint review process with P360 technical team oversight
- **Deployment:** Collaborative deployment with P360 infrastructure team
- **Monitoring:** Joint system monitoring and incident response
- **Knowledge Transfer:** Ongoing knowledge sharing throughout development process

Timeline & Critical Success Milestones

Non-Negotiable Deadline: First customer dollar transacted: December 19th 2025

First Customer Dollar Traffic Requirements:

1. Customer organization provisioned in product
2. Audience uploaded and created in product
3. Campaign launched with associated audience and sent to TTD
4. TradeDesk integration operational with live campaigns built TTD
5. Attribution data flowing from REDS service into Product
6. Attributed Reporting Tables created in Product
7. Salesforce billing reconciliation functional

Data Processing Requirements

Customer File Processing

- **Volume:** 2,000 CSV files annually. .csv utf-8 acceptable minimum functionality

- **Size Range:** Average 850 records per file (maximum 10,000)

- **Processing Time:** < 30 seconds per file to upload

- **Validation:** Data quality checks, format validation, duplicate detection

- **Error Handling:** Detailed error reporting and resolution workflows

Vendor Data Ingestion

- **Daily Volume:** 20-60 million records

- **Processing Window:** 4-hour maximum processing time

- **Data Sources:** The TradeDesk REDS (hourly), Bombora (daily)

- **Quality Assurance:** Data validation, reconciliation, and error reporting

- **Attribution Logic:** Custom business rules connecting campaign data to internal vendor data and customer inputs.

Technical Deliverables

Code & Architecture

- **Repository Access:** Full Git repository with branching strategy

- **Code Documentation:** Inline comments, README files, architecture documentation

- **API Documentation:** Complete OpenAPI/Swagger specifications

- **Database Documentation:** ERD, schema documentation, migration scripts

Testing & Quality Assurance

- **Unit Testing:** Minimum 80% code coverage target

- **Integration Testing:** All API endpoints and data flows tested

- **Performance Testing:** Load testing for specified capacity requirements

- **Security Testing:** Vulnerability scanning and penetration testing

- **AWS Best Practices:** Following AWS Well-Architected Framework principles

Deployment & Operations

- **CI/CD Pipeline:** Automated build, test, and deployment processes

- **Infrastructure as Code:** Terraform or CloudFormation templates

- **Monitoring Setup:** CloudWatch, application performance monitoring

- **Backup Strategy:** Automated backup and recovery procedures

- **Scaling Documentation:** Auto-scaling configuration and manual scaling procedures

Submission Requirements

Technical Proposal

- Detailed system architecture diagram

- Technology stack justification and implementation approach

- Integration strategy for each third-party system

- Database design and data modeling approach

- Security and compliance implementation plan

- Testing strategy and quality assurance methodology

Project Management

- Detailed project timeline with dependencies
- Resource allocation and team member profiles
- Risk assessment and mitigation strategies
- Communication plan and collaboration tools
- Change management and scope control processes

Company Qualifications

- Company overview and relevant experience
- Team member resumes and role assignments
- Client references (minimum 2) for similar projects
- Certifications and partnerships (AWS, Microsoft, etc.)
- Financial stability and project capacity confirmation

Appendix: Bombora Data Structure:

```
{
"hem":"abc-123-456",
"domain":"capitalone.com",
"company_name":"capitalone",
"industry":["Finance"],
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"FinanceProfessional"],
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"decision_maker":["FinanceDecisionMaker"],
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"topic_id":["1500923"],
"interest_group":["Trading&Investing"],
"in
```