By Moustafa El Jalti - May 2025

THE VALUE PLANNER

OFF-PLAN INVESTMENT ANALYSIS PLATFORM – PRODUCT REQUIREMENTS

Version: 2.0 Date: May 2025

1. EXECUTIVE SUMMARY

The Off-Plan Investment Analysis Platform ("The Value Planner") is a comprehensive SaaS tool designed specifically for Dubai real estate brokers, agencies, and clients to automate professional investment analysis reports for off-plan properties.

The platform streamlines:

- Data entry with property and client information
- Complex financial calculations including ROI, yield, payment plans and affordability analysis
- Professional PDF report generation with custom branding
- Secure document collection (EOI, KYC, passport)
- Client communication via WhatsApp/email
- Report tracking and analytics
- Team collaboration features
- Subscription billing and administration
- Compliance and audit reporting

A key differentiator is the platform's ability to allow brokers to manually adjust financial assumptions (yield percentages, average price per square foot, interest rates, loan terms, and custom costs) while maintaining automation and calculation integrity. The system clearly marks adjusted values in reports with an "Adjusted by Broker" indicator to maintain transparency.

2. USER ROLES

2.1 Broker

Description: Real estate professionals generating reports, managing leads, and collaborating with team members.

Goals:

- Generate professional investment reports quickly (under 3 minutes)
- Present customizable financial analysis with adjustable assumptions
- Maintain regulatory compliance while sharing information
- Increase client engagement and conversion rates (target: 67% improved conversion)
- Track client interactions with reports
- Securely collect required documentation
- Collaborate with team members efficiently

2.2 Admin

Description: Agency managers or administrators who oversee broker accounts, monitor usage, manage billing, and ensure compliance.

Goals:

- Control user access and permissions
- Monitor key metrics and performance indicators
- Export data for analysis and reporting
- Ensure regulatory compliance
- Manage subscription plans and billing
- Configure security settings and document retention policies

2.3 Client

Description: Property investors accessing reports, uploading required documents, and communicating securely with brokers.

Goals:

- Access comprehensive investment analyses easily
- View clear, transparent financial projections
- Securely submit required documentation
- Understand investment opportunities without information overload

3. USER STORIES (DETAILED)

Broker User Stories

US-BR-01: Property & Client Data Entry

- As a broker, I want to input client and property data into a structured form with validation
- The form should validate input formats (email, phone, numbers)
- System should automatically format currency values and percentages
- Form should include tooltips explaining fields and calculations
- Auto-save functionality should prevent data loss

US-BR-02: Payment Plan Toggle

- As a broker, I want to toggle between cash/mortgage payment options
- When toggled, relevant fields should appear/disappear appropriately
- Calculations should update automatically based on selected payment type
- The toggle should be prominently displayed near the top of the form
- Previously entered data should persist when toggling

US-BR-03: Currency Selection

- As a broker, I want to toggle between currencies (AED, USD, EUR, CNY)
- All UI values and report outputs should update instantly
- Currency conversion rates should be current (updated daily)
- Last used currency preference should be remembered per user
- Currency symbol should be visible in all monetary fields

US-BR-04: Report Preview

- As a broker, I want to preview the complete report before PDF generation
- Preview should be identical to final PDF output
- Preview should be interactive with expandable sections
- Should include page count and estimated file size
- Preview should clearly identify any overridden financial values

US-BR-05: WhatsApp Integration

- As a broker, I want to send reports via WhatsApp with a pre-filled message
- The message should include a personalized greeting, property name, and Report ID
- The secure link should have configurable expiration (default: 30 days)
- System should detect if client's number is WhatsApp-enabled
- Should offer email alternative if WhatsApp is unavailable

US-BR-06: Tracking & Analytics

- As a broker, I want to track when clients view or download reports
- Dashboard should show first view time, total views, and download count
- System should track average time spent viewing the report
- Should identify which sections were expanded/most viewed
- Data should update in real-time

US-BR-07: Automated Follow-ups

- As a broker, I want the system to resend report links if not opened
- Configurable timing for automated follow-up (default: 3 days)
- Customizable follow-up message templates
- Should log all automated communications in activity history
- Option to disable automated follow-ups per client

US-BR-08: Report Versioning

- As a broker, I want to manage multiple versions of reports per lead
- Clear version numbering (v1, v2) with creation timestamps

- Ability to compare changes between versions side-by-side
- Option to archive older versions without deletion
- All versions should maintain separate view/download analytics

US-BR-09: Calendar Integration

- As a broker, I want to set follow-up reminders synced to my calendar
- Integration with Google Calendar, Outlook, and Apple Calendar
- Follow-up events should include client context and report links
- Reminders should include quick actions (call, message, email)
- Option for recurring follow-ups with customizable frequency

US-BR-10: Access Logs

- As a broker, I want to view detailed access logs for each report
- Logs should include IP address, device type, and geolocation
- Should show exact timestamps for each view/download
- Should identify if access was from shared link or direct
- Option to export logs as CSV/Excel

US-BR-21: Yield Adjustment

- As a broker, I want to manually adjust yield percentages
- Slider interface with market average as default
- Visual indicator showing deviation from market average
- Clear marking in report for adjusted values
- Ability to reset to market default

US-BR-22: Price Override

- As a broker, I want to override average price per sqft/m²
- Input field with market data displayed as reference
- Historical price chart for context
- Clear marking in report for overridden values
- Percentage change indicator vs. market average

US-BR-23: Mortgage Customization

- As a broker, I want to adjust interest rates or loan terms
- Current rates from major UAE banks displayed as reference
- Ability to save custom mortgage scenarios
- Comparison view of different mortgage options
- Impact analysis showing effect on monthly payments

US-BR-24: Custom Cost Items

- As a broker, I want to add custom cost items to the breakdown
- Ability to add multiple line items with labels and amounts
- Option to make certain costs recurring vs. one-time
- Subtotals and grand total calculations

- Ability to create custom cost templates

Client User Stories

US-CL-01: Secure Report Access

- As a client, I want to access my investment report via secure link
- No login required, just secure unique URL
- Mobile-responsive viewing experience
- Clear property/client identification
- Option to verify identity via SMS for additional security

US-CL-02: Report Download

- As a client, I want to download the PDF report
- One-click download option
- File naming convention including property and date
- Download confirmation
- Option to send to additional email address

US-CL-03: Document Upload

- As a client, I want to securely upload required documents
- Clear instructions for each document type
- Drag-and-drop interface with progress indicator
- File type and size validation
- Confirmation receipt after successful upload

US-CL-04: Document Status

- As a client, I want to see my document submission status
- Checklist view of required vs. submitted documents
- Clear next steps for incomplete submissions
- Timestamp of last upload
- Broker contact information for questions

Admin User Stories

US-AD-01: User Management

- As an admin, I want to manage broker accounts comprehensively
- User creation with customizable permission levels
- Bulk import of users via CSV
- Activity logs per user
- Ability to temporarily suspend accounts

US-AD-02: Usage Analytics

- As an admin, I want to view detailed usage metrics

- Dashboard with key performance indicators
- Reports created/shared/viewed per broker
- Conversion rates and engagement metrics
- Trend analysis and forecasting

4. FUNCTIONAL REQUIREMENTS

Data Input & Validation

- Form for client information (name, contact, financial profile)
- Form for property details (location, size, price, payment schedule)
- Field validation with inline error messages
- Required field indicators
- Auto-formatting for currencies, percentages, and phone numbers
- Auto-completion for common Dubai locations

Dynamic Form Adaptation

- Toggle between cash and mortgage purchase scenarios
- Field visibility based on selected purchase type
- Currency selector with real-time value conversion
- Persistent data when toggling between scenarios
- Dynamic validation rules based on selected options

Customizable Financial Parameters

- Editable fields for yield percentages with market comparison
- Override capability for average price per square foot
- Adjustable interest rates and loan terms with bank rate references
- Custom cost item addition with labels and amounts
- Visual indicators for all manual overrides

Report Generation

- Preview mode with interactive sections
- Branded PDF generation with company logo
- Unique report ID for tracking and reference
- Adjustable report sections (add/remove/reorder)
- Visual indicators for broker-adjusted values

5. FINANCIAL CALCULATIONS

Basic Property Calculations

- **DLD Fee Calculation:** Price * 4%

- **Total Cost Calculation:** Purchase Price + DLD Fee + Agency Fee + Registration Fee + Custom Costs
- **Payment Milestone Calculation:** Purchase Price * Milestone Percentage

Cash Buyer Calculations

- **Accumulated Savings:** Monthly Saving Amount * Number of Months
- **Liquidity Ratio:** Total Required Investment / Available Cash
- **Affordability Indicator:**
  - Green: Liquidity Ratio < 0.7
  - Yellow: Liquidity Ratio 0.7-0.9
  - Red: Liquidity Ratio > 0.9 (potential shortfall)
- **Break-even Period:** Total Cost / Annual Rental Income

Mortgage Buyer Calculations

- **Maximum Loan Amount:** Purchase Price * LTV (max 50% for non-residents, 80% for residents)
- **Down Payment Required:** Purchase Price * (1 - LTV) + Fees

Monthly Mortgage Payment: PMT formula based on Principal, Interest Rate, and Term
$PMT = P * [r(1+r)^n]/[(1+r)^n-1]$ Where: P = principal, r = monthly interest rate, n = number of payments

-
- **Debt-to-Burden Ratio (DBR):** (Existing Monthly Debt + New Monthly Payment) / Monthly Income
  - UAE regulatory maximum: 50% of income
- **Total Interest Paid:** (Monthly Payment * Number of Months) - Loan Amount
- **Loan Affordability Rating:**
  - Green: DBR < 35%
  - Yellow: DBR 35-45%
  - Red: DBR > 45%

Yield and ROI Calculations

- **Gross Rental Yield:** (Annual Rental Income / Purchase Price) * 100%
- **Operating Expenses:** Service Charges + Maintenance + Insurance + Property Management Fee (if applicable)
- **Net Rental Yield:** ((Annual Rental Income - Operating Expenses) / Purchase Price) * 100%
- **Cash-on-Cash ROI (mortgage scenario):** (Annual Net Rental Income - Annual Mortgage Payments) / Cash Invested * 100%
- **5-Year Appreciation Projection:** Based on historical data for the specific location, developer track record, and market trends
- **Total ROI:** (Net Income + Capital Appreciation) / Total Investment * 100%

Manual Override Handling

- If broker overrides yield percentage:
  - Recalculate using manual value
  - Flag "Adjusted by Broker" in report
  - Show comparison to market average
- If broker overrides average price per sqft/m²:
  - Recalculate appreciation projections
  - Flag "Adjusted by Broker" in report
  - Show comparison to actual market data

6. REPORT STRUCTURE

1. Cover Page

- Client name
- Property name and location
- Property image (if available)
- Broker name and contact details
- Company logo
- Report ID and generation date
- Report version (if applicable)

2. Property Overview

- Property details (location, size, bedrooms, etc.)
- Developer information
- Construction status and estimated completion
- Key amenities and features
- Location advantages
- Project visuals (renders or photos)

3. Cost Breakdown

- Purchase price
- Government fees (DLD 4%)
- Registration fees
- Agency fees
- Mortgage setup fees (if applicable)
- Custom costs (broker added)
- Total investment required
- Graphical representation of cost distribution
- Notes for any broker-adjusted values

4. Payment Schedule

- Table with all payment milestones
- Due dates and amounts
- Percentage of total for each milestone

- Running balance
- Visual timeline chart showing payment flow
- Cash flow projection graph

7. Rental Yield & ROI Analysis

- Projected rental income (market-based or adjusted)
- Gross rental yield percentage
- Operating expenses breakdown
- Net rental yield percentage
- Cash-on-Cash ROI (for mortgage scenario)
- Break-even period calculation
- 5-year projection table with annual figures
- Comparison to other investment types (optional)

8. Market Benchmark

- Average price per square foot/meter for the area
- Historical price trends for the location
- Rental demand indicators
- Comparable properties analysis
- Developer track record summary
- Market risk assessment
- "Adjusted by Broker" flag if applicable

7. INTEGRATION REQUIREMENTS

Dubai Property Data API

- Integration with reliable property data source
- Pull average price per sq ft/m² by location
- Historical price trends by area
- Developer performance metrics
- Override capability with manual broker inputs
- Daily data refresh

WhatsApp Business API

- Send reports via WhatsApp with tracking
- Pre-filled message templates
- Dynamic link insertion
- Delivery confirmation
- Multi-language support
- Usage metrics and analytics

Payment Processing (Stripe)

- Subscription billing for platform access
- Multiple plan support
- Automatic renewals
- Invoice generation
- Payment method management
- Secure PCI-compliant processing

Calendar API

- OAuth integration with major calendar providers
- Google Calendar, Outlook, Apple Calendar support
- Create/update/delete events
- Reminder configuration
- Attendance tracking
- Context inclusion in calendar events

8. WORKFLOWS

Broker Workflow

1. Login to platform dashboard
2. Create new lead with client information
3. Enter property details and investment parameters
4. Adjust financial values if needed (yield, price, etc.)
5. Generate report preview and review
6. Create final PDF report
7. Send report via WhatsApp or email
8. Track client engagement with report
9. Receive notification when client uploads documents
10. Download client documents
11. Set follow-up reminders if needed
12. Close lead with appropriate status

Client Workflow

1. Receive secure link via WhatsApp or email
2. Open link to access report viewer
3. Review investment analysis
4. Download PDF report if desired
5. Access document upload section
6. Upload required documents (EOI, KYC, passport)
7. Confirm successful upload
8. Receive confirmation of document receipt
9. Broker is automatically notified

9. SECURITY & COMPLIANCE

Data Encryption

- AES-256 encryption for all data at rest
- TLS 1.3 encryption for all data in transit
- End-to-end encryption for document uploads
- Encryption key management system
- Regular encryption audit

Access Control

- Role-based access control (RBAC) system
- Principle of least privilege enforcement
- Multi-factor authentication (optional)
- Session timeout and management
- IP-based access restrictions (optional)

Data Isolation

- Complete data isolation per broker/agency
- Multi-tenant architecture with strict separation
- No cross-client data access
- Logical separation of production and test environments

Privacy & GDPR

- GDPR compliant data handling
- Explicit client consent for data collection
- Data subject access request handling
- Right to be forgotten implementation
- Privacy policy and terms of service

10. NON-FUNCTIONAL REQUIREMENTS

Performance

- 99.9% system uptime (excluding scheduled maintenance)
- Page load time < 2 seconds (95th percentile)
- Report generation < 5 seconds
- API response time < 1 second for market data
- Support for 100+ concurrent users per agency

Usability

- Mobile-responsive UI for all screens
- Consistent design language throughout
- Accessibility compliance (WCAG 2.1 AA)
- Multi-language support (English, Arabic)

- Intuitive navigation with minimal training required

Reliability

- Automated backup system (daily)
- Disaster recovery plan with < 4 hour RTO
- Graceful degradation under load
- Redundant infrastructure
- Comprehensive error handling

Configurability

- Configurable link expiry periods
- Customizable report templates
- Adjustable notification preferences
- Flexible document requirements
- White-labeling options

11. PERMISSIONS MATRIX

Feature	Broker	Admin	Client
Create lead	✅	✅	❌
Generate report	✅	❌	❌
View report	✅	✅	✅
Adjust financial parameters	✅	❌	❌
Upload docs	❌	❌	✅
Download docs	✅	✅	❌
Manage users	❌	✅	❌
Access audit logs	✅(own)	✅	❌
Manage billing	❌	✅	❌

12. TECHNICAL ARCHITECTURE

Frontend

- React Single Page Application (SPA)
- Redux state management
- Material UI component library
- Responsive design with mobile-first approach

- PWA capabilities for offline access
- Client-side form validation
- Chart.js for data visualization

Backend

- Node.js REST API
- Express framework
- JWT authentication
- Role-based middleware
- API rate limiting
- Comprehensive error handling
- Swagger API documentation

Database

- PostgreSQL relational database
- Document metadata in structured tables
- Proper indexing for performance
- Transaction support
- Data partitioning strategy
- Regular backup procedures

PDF Generation

- Puppeteer headless browser for HTML-to-PDF
- Templating system with reusable components
- Custom fonts and styling
- Optimized for print quality
- Digital signature capability

13. DEVELOPMENT ROADMAP

- Basic property and client data entry
- Financial calculations engine
- Simple PDF report generation
- Basic user management
- Fundamental security implementation

- Advanced report customization
- Financial parameter adjustment
- WhatsApp integration
- Document upload functionality

- Report tracking

- Team sharing capabilities
- Lead management system
- Follow-up reminders
- Calendar integration
- Enhanced security features

- CRM integration
- E-signature capability
- Advanced analytics dashboard
- Multi-language support
- White labeling options

14. CONCLUSION

The Off-Plan Investment Analysis Platform ("The Value Planner") represents a comprehensive solution for Dubai real estate professionals seeking to streamline investment analysis and client management. With its focus on customizable financial calculations, professional report generation, secure document handling, and team collaboration, the platform addresses the unique challenges of the Dubai property market.

The ability for brokers to adjust financial parameters while maintaining calculation integrity sets this platform apart from generic solutions, allowing for personalized client advice while ensuring transparency and accuracy. The implementation of this PRD will result in a fully featured, compliance-ready SaaS platform that significantly enhances broker productivity and client conversion rates.