Business Requirements Document: The Antigravity Operational Logic

1. System Philosophy and Core Directives

The Antigravity system is engineered on a "history-first" strategic foundation, predicated on the reality that real estate is a game of decades, not days. In high-value markets, data is often treated as a disposable snapshot; Antigravity rejects this by treating people as permanent institutional assets and their market intents as transient events. By shifting the focus from static data points to longitudinal relationship tracking, we ensure the system preserves the intellectual capital of every interaction.

The "People Evolve" Mandate

The foundational axiom of this architecture is that **contacts are permanent, while roles are temporary.** Traditional CRMs fail by locking individuals into rigid labels like "Buyer" or "Seller." Antigravity implements time-bound role fluidity, acknowledging that an individual's relationship with the business changes. For example, a contact—let's call him Holger—might enter the system as a "Buyer" in 2022, transition to "Client" status upon a successful purchase, become a "Seller" in 2023, and act as a "Referral Partner" in 2024. By tracking roles with effective_from and effective_to timestamps, the system maintains a perfect narrative of the contact's evolution.

The "Won-Only" Deal Rule

To protect the integrity of performance analytics and maintain absolute business truth, Antigravity enforces a binary distinction: **If it didn't close, it wasn't a Deal.** Any negotiation, inquiry, or transaction attempt remains classified as a "Lead" (for buyers) or "Inventory listing" (for sellers). A transaction is only promoted to the "Deal" module upon reaching a **WON** outcome. This prevents the systemic inflation of success metrics, ensuring that the Deal module reflects only confirmed revenue and actual business performance.

The Hierarchy of Truth

The system's logic is anchored by two permanent constants and three transient modules:
- **Network (Who):** The permanent master registry of human entities.
- **Areas (Where):** The permanent geographic reality of the physical market.
- **Leads (Demand):** Transient buyer intent linked to the Network.
- **Inventory (Supply):** Transient seller intent and asset availability.
- **Deals (Success):** The historical record of successful collisions between demand and supply.While the Network module provides the stable identity of our participants, it must be supported by a rigorous identity resolution logic to prevent the fragmentation of these relationships.

2. The Network Module: Unified Contact Management

The Network module acts as the system's central nervous system, providing a single source of truth for all human interactions. By centralizing clients, agents, and external partners into one

unified registry, we eliminate data silos and ensure that every touchpoint enriches a single, persistent record.

Universal Contact Definition and person_uid

A "Contact" is any individual or legal entity within the system. Roles such as Mortgage Advisors, Developer Agents, External Brokers, and Collaborators are not separate entities but roles held by Contacts. To ensure structural integrity, every contact is assigned a person_uid, **deterministically generated** via a SHA1 hash of their most stable identifier (e.g., sha1(email|phone|item_id)). This ensures that identity is hard-coded into the system's logic rather than being a fluctuating database ID.

Identity Resolution Logic

To maintain the "one person, one record" mandate across disparate Monday boards and internal modules, the system utilizes a strict deterministic matching hierarchy:

1. **Internal ID / person_uid:** The absolute match.
2. **Monday Key:** For direct synchronization with operational boards.
3. **Email:** Normalized (trim + lowercase) exact match.
4. **Phone:** Digits-only normalized match.
5. **Name:** Used only as a last resort; name matches must return a "low confidence" flag and prompt for manual duplicate verification rather than auto-merging.

The "Client" Distinction

Within the Antigravity logic, "Client" is not a self-assigned tag; it is an earned status. **Participation as a principal (Buyer or Seller) in a WON deal is the sole mechanism for cementation into the "Client" role.** This ensures that our client registry is a verified list of those who have transacted, while those with unfulfilled intent remain classified as Leads or Inventory contacts.The permanence of the Contact record provides the necessary anchor for tracking the volatile lifecycle of buyer intent, which is managed within the Leads module.

3. The Lead Lifecycle: Managing Buyer Intent

The Leads module is designed to capture and qualify market demand without polluting the system's success metrics. It isolates "Buyer Intent" as a temporary state that is distinct from the permanent Contact record.

Lead Definition and Scope

A Lead is a specific instance of buyer intent. It is temporary by nature. A single Contact in the Network may have multiple Leads over their lifetime—each representing a unique inquiry or negotiation. By separating the Lead from the Contact, we can track the success rate of different inquiries without losing the historical context of the person behind them.

Operational "Active Buyer" Logic

The system dynamically computes an "Active" state to prioritize current demand. A Contact is flagged as an **Active Buyer** if they have an open Buyer Lead role meeting specific signals:

- **Active Engagement:** Recent activity logs or timeline updates.
- **Open Requirements:** Active pipeline stages in Monday boards.
- **90-Day Window:** Meaningful interaction within the last 90 days.Conversely, a buyer is deactivated and removed from active dashboards if the Lead is marked **LOST** or **CANCELLED**, if the intent is **explicitly withdrawn**, if the lead is **disqualified**, or if 90 days of total inactivity pass.

Lead Outcomes and Transition Rules

All buyer intent must eventually resolve into a definitive state, dictating the next steps for both the Lead and the Contact:| Lead Outcome | Systemic Effect | Impact on Network Role || ------ | ------ | ------ || **WON** | **Converts to a Deal.** | Earns permanent "Client" status; updates LTV. || **LOST** | Lead archived as historical attempt. | Remains a Contact; Intent deactivated. || **CANCELLED** | Lead archived with reason. | Remains a Contact; Intent deactivated. || **INACTIVE** | Moved to dormant status. | Removed from "Active" operational views. |
While Leads capture the volatility of buyer demand, the Inventory module anchors the system in the physical supply of the market.

4. The Inventory Module: Sellers and Physical Assets

The Inventory module manages the supply side of the business by balancing the physical reality of assets with the temporary intent of sellers.

The Asset vs. The Relationship

Antigravity enforces a strict architectural separation between the **"Unit"** and the **"Seller Lead."** Units are **neutral market facts** —stable records of physical property that exist independently of our CRM or current listings. The Seller Lead represents the transient relationship and intent to sell that property. This allows the system to maintain price history and ownership proxies for a Unit over decades, even if multiple listing attempts by different sellers are lost or withdrawn.

Active Seller Logic and Sourcing

An **Active Seller** is defined exclusively by the presence of an active inventory listing. The system tracks physical assets through four primary states:
- **Active:** Live listing available for matching.
- **Withdrawn:** Market intent removed by seller.
- **Sold:** Linked to a WON Deal; updates Unit history.
- **Expired:** Listing contract duration exceeded.Inventory can be sourced from various Network Contacts who are not necessarily the owners, such as **Developer Agents** or **External Brokers**. These participants are tracked for attribution and commission logic, even though they do not earn "Client" status through these listings.When an Active Lead and Active Inventory collide and successfully close, the system formalizes this success in the Deal module.

5. The Deal Module: Formalizing Success

The Deal module is the definitive record of business achievement. It serves as the primary filter for all financial reporting and relationship-cementing logic.

Deal Eligibility and Immutable Facts

In adherence to the core directive— **if it didn't close, it wasn't a deal** —the Deal module only accepts records with a "WON" status. All unsuccessful attempts remain in the Lead or Inventory modules. Once a Deal is formalized, it captures a set of immutable facts that cannot be altered:
- **Closing Date & Transaction Value:** The basis for all revenue reporting.
- **Unit ID:** The link to the "Atomic Truth" in the Areas hierarchy.
- **Participants & Commission Share:** A comprehensive list of every Network Contact involved (Buyer, Seller, Referrer, External Broker) and their respective share of the value.

Post-Deal System Effects

A WON deal is the most powerful event in the system, triggering a cascade of updates:
1. **Client Cementing:** Principals (Buyer/Seller) are permanently updated to "Client" status in the Network.
2. **LTV Increment:** The transaction value is added to the Contact's Lifetime Value.
3. **Asset Archiving:** The associated Buyer Lead and Seller Inventory are archived as "Sold," and the Unit's internal history is updated.While Deals track the success of our operations, they must be geographically grounded within the Areas hierarchy to provide market context.

6. The Areas Hierarchy: Geographic and Physical Reality

The Areas hierarchy is the system's "Map of Reality." It provides the spatial structure required for matching buyers, analyzing inventory, and benchmarking against market trends.

The Five-Level Hierarchy

The hierarchy is structured to align with official market data while serving internal business needs:
1. **Zone:** The **only business-defined layer** . Zones are created for agent accountability and management focus.
2. **Area:** DLD-recognized geographic boundaries.
3. **Master Project:** Optional development umbrella (e.g., Dubai Hills).
4. **Project:** Specific phases or buildings where units reside.
5. **Unit:** The **Atomic Truth** . The individual physical asset.

Operational Logic and Taxonomy

Zones aggregate data from multiple Areas to allow management to track agent performance and market share by business territory. Within this structure, a strict **Property Type Taxonomy** is enforced. Every unit must be classified as a **Villa, Townhouse, Apartment, or Plot** . All

system analytics—from demand density to pricing graphs—must be filterable by these types to ensure precise market intelligence.

Unit-Level Rich Data

Each Unit record functions as a "Market Fact" dashboard, containing:
- **Longitudinal History:** Every internal deal and listing attempt.
- **DLD Validation:** Synced transaction history and owner history proxies.
- **Physical Specs:** BUA, plot size, and beds.This internal unit data achieves its full strategic value when anchored against the external truth of the Dubai Land Department.

7. DLD Integration and Market Intelligence

DLD integration provides the external "Historical Truth" that validates internal performance and provides the context for pricing trends.

Market Truth Validation and Mapping

DLD transactions serve as the proxy for the total market. The system enforces a mandatory mapping rule: **Every DLD transaction must resolve to a specific Unit ID.** If a transaction cannot be resolved due to data gaps, it is moved to an exceptions table for manual resolution. This ensures that the system's "Map of Reality" is never compromised by orphan data.

Time-Series Analytics

By merging internal Deal data with external DLD records, the system generates "Over Years Growth" dashboards. These allow the business to compare internal success against broader market movements, tracking absorption rates and price-per-square-foot trends across the entire hierarchy—from individual Projects to Management Zones.This comprehensive view of the lifecycle, from market movement to closed deals, is completed by tracing everything back to its marketing origin.

8. Marketing: Source Attribution and ROI

Marketing within Antigravity is focused on relationship provenance, answering the critical question: "Where did this relationship begin?"

The Attribution Logic

The system maintains a non-destructive, append-only record of a Contact's journey. While a Lead is temporary, the **Network never loses source history.** We utilize First-Touch (origin), Last-Touch (conversion trigger), and Multi-Touch models to understand the full path to a transaction. Sources are categorized into a strict taxonomy:
- **Digital Ads:** (Meta, Google).
- **Portals:** (Bayut, Dubizzle).
- **Referrals:** (Partners, Mortgage Advisors).
- **Sourcing:** (Direct agent outreach).

Measuring True ROI

In this architected environment, Marketing ROI is calculated **exclusively against WON Deals.** Measuring success by Lead volume is considered a failure of logic. By filtering performance through the "Won-Only" rule, the system ensures that marketing spend is optimized for revenue-generating relationships, closing the loop on the unified business flow from the first touch to the final closure.