**CRM Application Using Palantir Foundry**

**1. Introduction**

This project involves the design and implementation of a CRM (Customer Relationship Management) application using **Palantir Foundry** as part of a work sample test for Axis Data. The goal was to demonstrate the ability to translate a real-world business need into a functional data-driven application using Foundry’s suite of tools.

The CRM solution is designed to help users, such as sales or operations teams, manage and analyze interactions with **people** (contacts) and **companies** (clients or leads). It involved end-to-end tasks including data cleaning, object modeling, relationship linking, and the creation of a dynamic and interactive dashboard.

The system uses two primary datasets: one for individual people and one for companies. These datasets were cleaned, normalized, and modeled into Foundry’s Ontology framework using Object Types and Link Types to establish relationships between individuals and the organizations they are associated with. The final application includes a visual interface that supports data exploration, filtering, segmentation, and relationship navigation—mirroring the capabilities of modern CRMs like Salesforce or HubSpot.

This project showcases not only the technical implementation of Foundry’s data infrastructure but also highlights critical data modeling and UI design decisions that enable scalable, real-time CRM insights.

The goal of this CRM application is to help sales or operations teams manage customer interactions by organizing and exploring information about **people** and the **companies** they’re associated with.

**2. Data Cleaning**

I started by cleaning both datasets:

* Normalized fields like emails, phone numbers, and company names
* Removed duplicates using distinct and trim operations
* Standardized casing and formatting

Then I separated the datasets into **People** and **Company** objects and used email and company name as primary keys.

I have performed an ETL operation on the given datasets.

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**3. Data Modeling with Object Types**

I created two object types:

* **Person**: with fields like name, email, phone number, job title, and company
* **Company**: with company name, address, revenue, industry, and website

I then created a **Link Type** between Person and Company using company as a foreign key. This allowed me to build a normalized object model where each person links to the company they work at, and each company shows its employees.

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**4. Interactive CRM View (Ontology View)**

Now I’ll walk you through the visual dashboard I built using Foundry’s Ontology Views.

* 🔸 **Top section**: A pie chart segmenting people by [🟰 current field like name/title]. This can easily be switched to group by company, title, or industry for more insight.
* 🔸 **Center section**: A detailed object table with name, email, title, company, and phone number.
* 🔸 **Right side**: Filter panel — allows filtering people by name, company, title, etc. Great for lead targeting or internal lookups.
* 🔸 **Click interaction**: Clicking a person brings up a profile card with full details and a direct relationship to their company.

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**5. Expandable Opportunities**

This model can be extended easily to:

* Include opportunities, deals, or contact stages
* Add dashboards for high-value clients or industries
* Automate data refreshes and alerts via pipelines

**Conclusion:**

This CRM application project successfully demonstrates the end-to-end use of Palantir Foundry for real-world data modeling, transformation, and interactive analytics. Through careful data cleaning, normalization, and object modeling, the solution effectively connects people to the companies they are associated with, allowing for meaningful insights into customer relationships.

By leveraging Object Types, Link Types, and Ontology Views, the application provides a structured and scalable foundation for sales and operational teams to explore contact and company data. The interactive dashboard supports dynamic filtering, relationship navigation, and intuitive data exploration, closely aligning with the functionality expected in enterprise-grade CRM systems.

Overall, the project highlights both the flexibility of Palantir Foundry and the ability to turn raw datasets into a polished, actionable, and extensible application. It sets the stage for future enhancements such as opportunity tracking, sales pipeline integration, and lead prioritization.