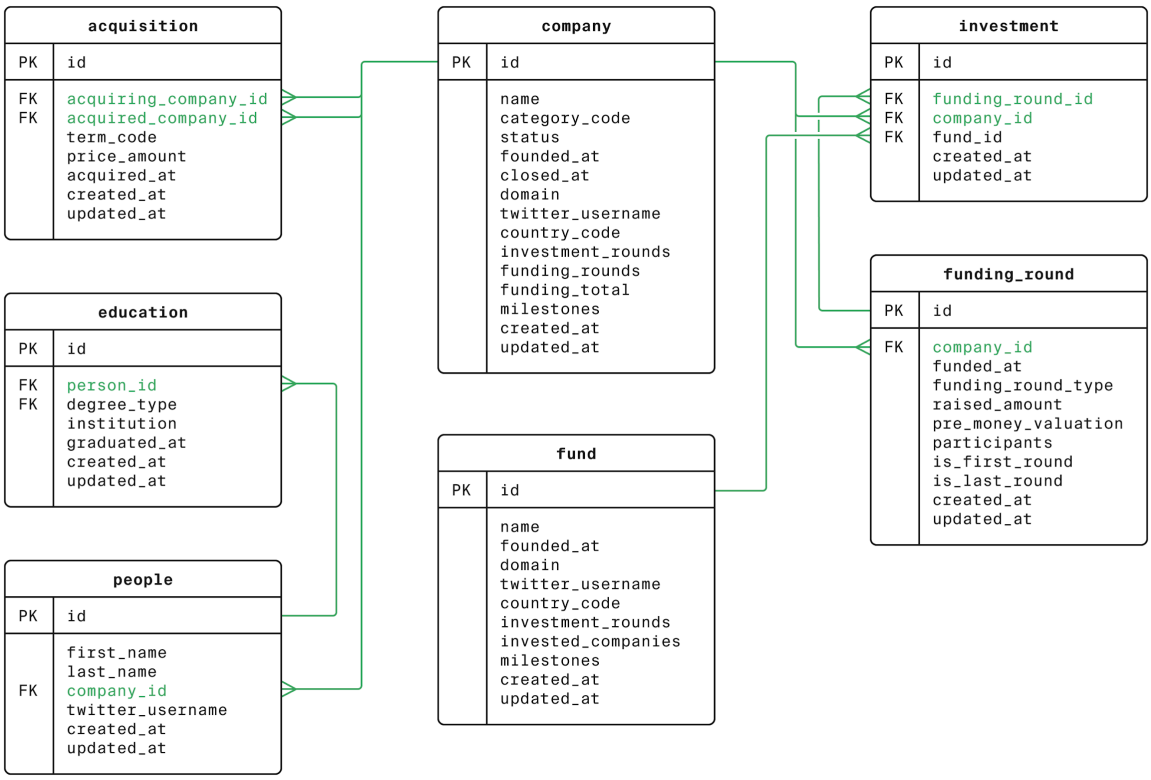
VentureInsight

ER diagram of a database that stores information about venture funds and startup investments.



Key tables:

- **company** Information about startups (funding, status, category)
- **fund** Details about venture capital funds
- **funding_round** Data on investment rounds
- **investment** Records of specific investments
- **acquisition** Information about company acquisitions
- **people** Details about founders, employees, and investors
- **education** Educational backgrounds

Startup Landscape Analysis

Before diving into specific analyses, your first task is to understand the overall startup landscape in our database. The executive team needs a snapshot of how many companies have failed (closed down) versus how many are still operating or have been acquired. This will help establish the baseline success rate in the startup ecosystem.

```
SELECT
    COUNT(DISTINCT id)
FROM
    company
WHERE
    status = 'closed';
```

Sector Analysis for US Investors

One of our major clients, a US-based VC firm, is considering investments in the media and news space. They've asked us to provide data on how much funding news-related companies from the USA have raised historically, to help them benchmark appropriate investment amounts.

```
SELECT
    funding_total
FROM
    company
WHERE
    category_code = 'news'
    AND country_code = 'USA'
ORDER BY
    funding_total DESC;
```

Analyzing Cash Acquisitions

Our quarterly report includes a section on acquisition trends. The team needs to understand the volume of cash-based acquisitions (as opposed to stock deals) that occurred during the recent post-recession period (2011-2013). This data will help identify whether companies were primarily acquired with cash or other payment methods during this economic recovery period.

```
SELECT
```

```
    SUM(price_amount) AS acqu_amount
FROM
    acquisition
WHERE
    term_code = 'cash'
    AND acquired_at BETWEEN '2011-01-01' AND '2013-12-31';
```

Identifying Industry Influencers

Our marketing team is preparing an outreach campaign to industry influencers with strong social media presence. They're particularly interested in individuals who brand themselves with "Silver" in their Twitter handles, as this group seems to have significant industry clout. We need to identify these individuals for potential partnerships.

```
SELECT
    first_name,
    last_name,
    twitter_username
FROM
    people
WHERE
    twitter_username LIKE 'Silver%';
```

Finding Finance Influencers

Following your initial influencer analysis, the marketing team has refined their focus. They're now looking specifically for finance-focused influencers (those with "money" in their Twitter handles) whose last names start with 'K'. This more targeted approach will help them connect with relevant industry voices for our upcoming FinTech investment report.

```
SELECT
    *
FROM
    people
WHERE
    twitter_username LIKE '%money%'
    AND last_name LIKE 'K%';
```

Geographic Investment Analysis

Our global investment clients need to understand funding patterns across different countries. They want to identify which countries attract the most venture capital to help them decide where to focus their international investment strategies. This geographic breakdown will be a key feature in our quarterly global trends report.

```
SELECT
    country_code,
    SUM(funding_total) AS amount_raised
FROM
    company
GROUP BY
    country_code
ORDER BY
    amount_raised DESC;
```

Funding Round Volatility Analysis

Our risk analysis team is examining volatility in funding rounds. They're specifically interested in dates where there was significant variation between the smallest and largest rounds. This indicates days when both very small and very large companies were receiving funding, which could signal unusual market activity. They also want to exclude days when some companies received no funding at all, as that skews the analysis.

```
SELECT
    MAX(raised_amount) AS highest_raised,
    MIN(raised_amount) AS lowest_raised,
    funded_at AS date
FROM
    funding_round
GROUP BY
    date
HAVING
    MIN(raised_amount)  != 0
    AND MIN(raised_amount)  != MAX(raised_amount);
```

Fund Activity Classification

For our investor clients, understanding the activity level of different venture funds helps them identify potential co-investment partners. Funds that invest

in many companies are often seen as having broader networks, while those with fewer investments might have deeper industry expertise. We need to categorize funds by their activity level to help our clients find appropriate partners.

Create a field with three categories:

- `high_activity` — for funds that invest in a hundred or more companies
- `middle_activity` — for funds that invest in between twenty (inclusive) to a hundred companies (exclusive)
- `low_activity` — for funds that invest in fewer than twenty companies

```
SELECT
    *,
   CASE
        WHEN invested_companies >= 100
            THEN 'high_activity'
        WHEN invested_companies >= 20
            THEN 'middle_activity'
        ELSE 'low_activity'
    END AS activity_level
FROM
    fund;
```

Investment Strategy by Fund Activity

Building on our fund activity classification, our research team wants to understand how a fund's investment approach changes based on its activity level. Specifically, we want to know if funds that invest in more companies tend to participate in more funding rounds per company. This will help our clients understand different fund strategies and how broadly or deeply funds typically engage with their portfolio companies.

```
SELECT
    ROUND(AVG(investment_rounds), 0) AS avg_funding,
    CASE
        WHEN invested_companies >= 100
            THEN 'high_activity'
        WHEN invested_companies >= 20
            THEN 'middle_activity'
```

```
        ELSE 'low_activity'
    END AS activity_level
FROM
    fund
GROUP BY
    activity_level
ORDER BY
    avg_funding ASC;
```

Employee Education Impact on Startup Success

A heated debate has emerged among our clients about whether the educational background of startup employees correlates with company success. Some argue that highly educated teams are more likely to succeed, while others claim education has little impact. To settle this debate with data, we need to compare the education levels of employees at successful companies versus those that closed after limited funding.

We'll start by identifying companies that closed after just one funding round, then analyze the educational backgrounds of their employees.

```
SELECT
    AVG(s.num_degrees) AS avg_empl_degrees
FROM
    (
    SELECT
        p.id,
        COUNT(e.degree_type) AS num_degrees
    FROM
        people p
            INNER JOIN education e
            ON p.id = e.person_id
    WHERE
        p.company_id IN (
            SELECT
                f.company_id
            FROM
                company c
                    INNER JOIN funding_round f
                    ON c.id = f.company_id
            WHERE
                f.is_first_round = 1
                AND f.is_last_round = 1
                AND c.status = 'closed')
    GROUP BY
        p.id) AS s;
```