## PROJECT: UNCOVERING THE WORLD'S OLDEST BUSINESSES



Staffelter Hof Winery is Germany's oldest business, established in 862 under the Carolingian dynasty. It has continued to serve customers through dramatic changes in Europe, such as the Holy Roman Empire, the Ottoman Empire, and both world wars. What characteristics enable a business to stand the test of time?

To help answer this question, BusinessFinancing.co.uk researched the oldest company still in business in almost every country and compiled the results into several CSV files. This dataset has been cleaned.

Having useful information in different files is a common problem. While it's better to keep different types of data separate for data storage, you'll want all the data in one place for analysis. You'll use joining and data manipulation to work with this data and better understand the world's oldest businesses.

## The Data

businesses and new\_businesses

Column	Description
business	Name of the business (varchar)
year_founded	Year the business was founded (int)
category_code	Code for the business category (varchar)
country code	ISO 3166-1 three-letter country code (char)

## countries

Column	Description
country_code	ISO 3166-1 three-letter country code (varchar)
country	Name of the country (varchar)
continent	Name of the continent the country exists in (varchar)

## categories

Column	Description
category_code	Code for the business category (varchar)
category	Description of the business category (varchar)

```
Projects Data DataFrame as oldest_business_continent
-- What is the oldest business on each continent?
WITH OBC AS (SELECT
   c.continent,
   c.country,
   b.business.
    ROW_NUMBER() OVER(PARTITION BY c.continent ORDER BY b.year_founded ASC ) AS rn,
    year_founded
FROM countries AS c
INNER JOIN businesses AS b
USING(country_code))
SELECT continent, country, business, year_founded
FROM OBC
WHERE rn=1;
index ··· ↑↓ continent
                                   ··· ↑↓ country
                                                        ••• ↑↓ business
                                                                                                                     ••• † year_founded
            O Africa
                                                                 Mauritius Post
                                            Mauritius
            1 Asia
                                            Japan
                                                                 Kongō Gumi
            2 Europe
                                            Austria
                                                                 St. Peter Stifts Kulinarium
            3 North America
                                            Mexico
                                                                 La Casa de Moneda de México
            4 Oceania
                                            Australia
                                                                 Australia Post
            5 South America
                                            Peru
                                                                 Casa Nacional de Moneda
Rows: 6

∠ Expand

Projects Data DataFrame as count
-- How many countries per continent lack data on the oldest businesses
-- Does including the `new_businesses` data change this?
    SELECT
        continent,
        COUNT(*) AS countries_without_businesses
    FROM countries AS c
    WHERE c.country_code NOT IN (
        SELECT country_code
        FROM businesses
        UNION
        SELECT country_code
        FROM new_businesses
    GROUP BY c.continent;
     ↑ contin... ••• ↑ countries_without_businesses
                                                            \uparrow_{\downarrow}
      0 Africa
                                                             3
                                                             7
      1 Asia
      2 South America
                                                             3
      3 Europe
                                                             2
      4 North America
                                                             5
      5 Oceania
                                                            10
Rows: 6
                                                                                                                                 Expand
```

Rows: 56

```
Projects Data DataFrame as o
-- Which business categories are best suited to last over the course of centuries?
WITH OBCC AS (
    SELECT
        co.continent AS continent,
        ca.category AS category,
        b.year_founded AS year_founded,
        ROW_NUMBER() OVER(PARTITION BY co.continent, ca.category ORDER BY b, year_founded ASC) AS rn
    FROM countries AS co
    INNER JOIN businesses AS b
    USING(country_code)
    INNER JOIN categories AS ca
    USING(category_code)
SELECT
        continent,
        category,
        year_founded
FROM OBCC
WHERE rn=1;
 ••• ↑↓ contin... ••• ↑↓
                          category
                                                           ••• 1 year... ••• 1
      0 Africa
                           Agriculture
                                                                              1947
      1 Africa
                           Aviation & Transport
                                                                              1854
      2 Africa
                           Banking & Finance
                                                                              1892
      3 Africa
                           Distillers, Vintners, & Breweries
                                                                              1933
      4 Africa
                                                                              1968
                           Energy
      5 Africa
                           Food & Beverages
                                                                              1878
      6 Africa
                           Manufacturing & Production
                                                                              1820
                           Media
      7
         Africa
                                                                              1943
      8
        Africa
                           Mining
                                                                              1962
      9
         Africa
                           Postal Service
                                                                              1772
                           Agriculture
     10
         Asia
                                                                              1930
     11
         Asia
                           Aviation & Transport
                                                                              1858
     12 Asia
                           Banking & Finance
                                                                              1830
                           Cafés, Restaurants & Bars
                                                                              1153
     13 Asia
     14
         Asia
                           Conglomerate
                                                                              1841
     15 Asia
                           Construction
                                                                               578
```

Expand