

# What and Where are the World's Oldest Businesses

April 27, 2024

## 0.1 1. The oldest business in the world

Image: St. Peter Stiftskeller, founded 803. Credit: Pakeha.

An important part of business is planning for the future and ensuring that the company survives changing market conditions. Some businesses do this really well and last for hundreds of years.

BusinessFinancing.co.uk researched the oldest company that is still in business in (almost) every country and compiled the results into a dataset. In this project, you'll explore that dataset to see what they found.

The database contains three tables.

categories

column

type

meaning

category\_\_code

varchar

Code for the category of the business.

category

varchar

Description of the business category.

countries

column

type

meaning

country\_\_code

varchar

ISO 3166-1 3-letter country code.

country

varchar

Name of the country.

continent

varchar

Name of the continent that the country exists in.

businesses

column

type

meaning

business

varchar

Name of the business.

year\_\_founded

int

Year the business was founded.

category\_\_code

varchar

Code for the category of the business.

country\_\_code

char

ISO 3166-1 3-letter country code.

Let's begin by looking at the range of the founding years throughout the world.

```
[70]: %%sql
      postgresql:///oldestbusinesses

      -- Select the oldest and newest founding years from the businesses table
      SELECT MIN(year_founded), MAX(year_founded) FROM businesses
```

1 rows affected.

```
[70]: [(578, 1999)]
```

## 0.2 2. How many businesses were founded before 1000?

Wow! That's a lot of variation between countries. In one country, the oldest business was only founded in 1999. By contrast, the oldest business in the world was founded back in 578. That's pretty incredible that a business has survived for more than a millennium.

I wonder how many other businesses there are like that.

```
[72]: %>%sql

-- Get the count of rows in businesses where the founding year was before 1000
SELECT COUNT(*)
FROM businesses
WHERE year_founded < 1000;

* postgresql:///oldestbusinesses
1 rows affected.
```

```
[72]: [(6,)]
```

### 0.3 3. Which businesses were founded before 1000?

Having a count is all very well, but I'd like more detail. Which businesses have been around for more than a millennium?

```
[74]: %>%sql

-- Select all columns from businesses where the founding year was before 1000
-- Arrange the results from oldest to newest
SELECT * FROM businesses
WHERE year_founded < 1000
ORDER BY year_founded ASC;

* postgresql:///oldestbusinesses
6 rows affected.
```

```
[74]: [('Kongō Gumi', 578, 'CAT6', 'JPN'),
      ('St. Peter Stifts Kulinarium', 803, 'CAT4', 'AUT'),
      ('Staffelter\xa0Hof Winery', 862, 'CAT9', 'DEU'),
      ('Monnaie de Paris\xa0', 864, 'CAT12', 'FRA'),
      ('The Royal Mint', 886, 'CAT12', 'GBR'),
      ("Sean's Bar", 900, 'CAT4', 'IRL')]
```

### 0.4 4. Exploring the categories

Now we know that the oldest, continuously operating company in the world is called Kongō Gumi. But what does that company do? The category codes in the businesses table aren't very helpful: the descriptions of the categories are stored in the categories table.

This is a common problem: for data storage, it's better to keep different types of data in different tables, but for analysis, you want all the data in one place. To solve this, you'll have to join the two tables together.

```
[76]: %>%sql
```

```
-- Select business name, founding year, and country code from businesses; and
category from categories
-- where the founding year was before 1000, arranged from oldest to newest
SELECT business, year_founded, country_code, category
FROM businesses
INNER JOIN categories
ON businesses.category_code = categories.category_code
WHERE businesses.year_founded < 1000
ORDER BY businesses.year_founded ASC;
```

```
* postgresql:///oldestbusinesses
6 rows affected.
```

```
[76]: [('Kongō Gumi', 578, 'JPN', 'Construction'),
      ('St. Peter Stifts Kulinarium', 803, 'AUT', 'Cafés, Restaurants & Bars'),
      ('Staffelter\xa0Hof Winery', 862, 'DEU', 'Distillers, Vintners, & Breweries'),
      ('Monnaie de Paris\xa0', 864, 'FRA', 'Manufacturing & Production'),
      ('The Royal Mint', 886, 'GBR', 'Manufacturing & Production'),
      ("Sean's Bar", 900, 'IRL', 'Cafés, Restaurants & Bars')]
```

## 0.5 5. Counting the categories

With that extra detail about the oldest businesses, we can see that Kongō Gumi is a construction company. In that list of six businesses, we also see a café, a winery, and a bar. The two companies recorded as “Manufacturing and Production” are both mints. That is, they produce currency.

I’m curious as to what other industries constitute the oldest companies around the world, and which industries are most common.

```
[78]: %sql

-- Select the category and count of category (as "n")
-- arranged by descending count, limited to 10 most common categories
SELECT categories.category, COUNT(categories.category) AS n
FROM categories
INNER JOIN businesses
ON categories.category_code = businesses.category_code
GROUP BY categories.category
ORDER BY n DESC
LIMIT 10
```

```
* postgresql:///oldestbusinesses
10 rows affected.
```

```
[78]: [('Banking & Finance', 37),
      ('Distillers, Vintners, & Breweries', 22),
      ('Aviation & Transport', 19),
      ('Postal Service', 16),
      ('Manufacturing & Production', 15),
```

```
('Media', 7),
('Agriculture', 6),
('Cafés, Restaurants & Bars', 6),
('Food & Beverages', 6),
('Tourism & Hotels', 4)]
```

## 0.6 6. Oldest business by continent

It looks like “Banking & Finance” is the most popular category. Maybe that’s where you should aim if you want to start a thousand-year business.

One thing we haven’t looked at yet is where in the world these really old businesses are. To answer these questions, we’ll need to join the businesses table to the countries table. Let’s start by asking how old the oldest business is on each continent.

```
[80]: %%sql

-- Select the oldest founding year (as "oldest") from businesses,
-- and continent from countries
-- for each continent, ordered from oldest to newest
SELECT MIN(businesses.year_founded) AS oldest, countries.continent
FROM businesses
INNER JOIN countries
ON businesses.country_code = countries.country_code
GROUP BY countries.continent
ORDER BY oldest ASC;

* postgresql:///oldestbusinesses
6 rows affected.
```

```
[80]: [(578, 'Asia'),
(803, 'Europe'),
(1534, 'North America'),
(1565, 'South America'),
(1772, 'Africa'),
(1809, 'Oceania')]
```

## 0.7 7. Joining everything for further analysis

Interesting. There’s a jump in time from the older businesses in Asia and Europe to the 16th Century oldest businesses in North and South America, then to the 18th and 19th Century oldest businesses in Africa and Oceania.

As mentioned earlier, when analyzing data it’s often really helpful to have all the tables you want access to joined together into a single set of results that can be analyzed further. Here, that means we need to join all three tables.

```
[82]: %%sql
```

```
-- Select the business, founding year, category, country, and continent
SELECT businesses.business,
       businesses.year_founded,
       categories.category,
       countries.country,
       countries.continent
FROM businesses
INNER JOIN categories
ON businesses.category_code = categories.category_code
INNER JOIN countries
ON businesses.country_code = countries.country_code;
```

```
* postgresql:///oldestbusinesses
163 rows affected.
```

```
[82]: [('Spinzar Cotton Company', 1930, 'Agriculture', 'Afghanistan', 'Asia'),
       ('ALBtelecom', 1912, 'Telecommunications', 'Albania', 'Europe'),
       ('Andbank', 1930, 'Banking & Finance', 'Andorra', 'Europe'),
       ('Liwa Chemicals', 1939, 'Manufacturing & Production', 'United Arab Emirates',
       'Asia'),
       ('Bank of the Province of Buenos Aires', 1822, 'Banking & Finance',
       'Argentina', 'South America'),
       ('Yerevan Ararat Brandy-Wine-Vodka Factory', 1877, 'Distillers, Vintners, &
       Breweries', 'Armenia', 'Asia'),
       ('Australia Post', 1809, 'Postal Service', 'Australia', 'Oceania'),
       ('St. Peter Stifts Kulinarium', 803, 'Cafés, Restaurants & Bars', 'Austria',
       'Europe'),
       ('Azerbaijan Caspian Shipping Company', 1858, 'Aviation & Transport',
       'Azerbaijan', 'Asia'),
       ('Brarudi', 1955, 'Distillers, Vintners, & Breweries', 'Burundi', 'Africa'),
       ('Affligem Brewery', 1074, 'Distillers, Vintners, & Breweries', 'Belgium',
       'Europe'),
       ('Communauté Électrique du Bénin', 1968, 'Energy', 'Benin', 'Africa'),
       ('Air Burkina', 1967, 'Aviation & Transport', 'Burkina Faso', 'Africa'),
       ('M. M. Ispahani Limited', 1820, 'Food & Beverages', 'Bangladesh', 'Asia'),
       ('Arsenal AD', 1878, 'Defense', 'Bulgaria', 'Europe'),
       ('BMMI', 1883, 'Retail', 'Bahrain', 'Asia'),
       ('Sarajevska Pivara', 1864, 'Distillers, Vintners, & Breweries', 'Bosnia and
       Herzegovina', 'Europe'),
       ('Olivaria Brewery', 1864, 'Distillers, Vintners, & Breweries', 'Belarus',
       'Europe'),
       ('Belize Bank', 1902, 'Banking & Finance', 'Belize', 'North America'),
       ('Banco Nacional de Bolivia', 1871, 'Banking & Finance', 'Bolivia,
       Plurinational State of', 'South America'),
       ('Casa da Moeda do Brasil', 1694, 'Manufacturing & Production', 'Brazil',
       'South America'),
       ('Mount Gay Rum', 1703, 'Distillers, Vintners, & Breweries', 'Barbados', 'North
```

America'),  
 ('Hua Ho Department Store', 1947, 'Retail', 'Brunei Darussalam', 'Asia'),  
 ('Tashi Group', 1959, 'Aviation & Transport', 'Bhutan', 'Asia'),  
 ('Botswana Meat Commission', 1965, 'Agriculture', 'Botswana', 'Africa'),  
 ('Banque Internationale pour la Centrafrique', 1946, 'Banking & Finance',  
 'Central African Republic', 'Africa'),  
 ('Hudson's Bay Company', 1670, 'Retail', 'Canada', 'North America'),  
 ('Gasthof Sternen', 1230, 'Tourism & Hotels', 'Switzerland', 'Europe'),  
 ('Famae', 1811, 'Defense', 'Chile', 'South America'),  
 ('Ma Yu Ching's Bucket Chicken House', 1153, 'Cafés, Restaurants & Bars',  
 'China', 'Asia'),  
 ('La Poste', 1945, 'Postal Service', 'Côte d'Ivoire', 'Africa'),  
 ('Cameroon Development Corporation', 1947, 'Agriculture', 'Cameroon',  
 'Africa'),  
 ('Société nationale des Chemins de fer du Congo', 1889, 'Aviation & Transport',  
 'Congo, The Democratic Republic of the', 'Africa'),  
 ('Development Bank of the Central African States', 1975, 'Banking & Finance',  
 'Congo', 'Africa'),  
 ('Casa de Moneda de Colombia', 1621, 'Manufacturing & Production', 'Colombia',  
 'South America'),  
 ('Central Bank of the Comoros', 1981, 'Banking & Finance', 'Comoros',  
 'Africa'),  
 ('Correios de Cabo Verde', 1849, 'Postal Service', 'Cabo Verde', 'Africa'),  
 ('Florida Ice and Farm Company', 1908, 'Distillers, Vintners, & Breweries',  
 'Costa Rica', 'North America'),  
 ('Cubana de Aviación', 1929, 'Aviation & Transport', 'Cuba', 'North America'),  
 ('Bank of Cyprus', 1899, 'Banking & Finance', 'Cyprus', 'Europe'),  
 ('Pivovar Broumov', 1348, 'Distillers, Vintners, & Breweries', 'Czechia',  
 'Europe'),  
 ('Staffelter Hof Winery', 862, 'Distillers, Vintners, & Breweries',  
 'Germany', 'Europe'),  
 ('Ethio-Djibouti Railways', 1901, 'Aviation & Transport', 'Djibouti',  
 'Africa'),  
 ('The Chronicle (Dominica)', 1909, 'Media', 'Dominica', 'North America'),  
 ('Munke Mølle', 1135, 'Manufacturing & Production', 'Denmark', 'Europe'),  
 ('Hamoud Boualem', 1878, 'Food & Beverages', 'Algeria', 'Africa'),  
 ('Egyptian National Railways', 1854, 'Aviation & Transport', 'Egypt',  
 'Africa'),  
 ('Asmara Brewery', 1939, 'Distillers, Vintners, & Breweries', 'Eritrea',  
 'Africa'),  
 ('Casa de Ganaderos', 1218, 'Agriculture', 'Spain', 'Europe'),  
 ('Raeapteek', 1422, 'Medical', 'Estonia', 'Europe'),  
 ('National Bank of Ethiopia', 1906, 'Banking & Finance', 'Ethiopia', 'Africa'),  
 ('Fiskars', 1649, 'Consumer Goods', 'Finland', 'Europe'),  
 ('Monnaie de Paris', 864, 'Manufacturing & Production', 'France',  
 'Europe'),  
 ('BGFIBank Group', 1971, 'Banking & Finance', 'Gabon', 'Africa'),

('The Royal Mint', 886, 'Manufacturing & Production', 'United Kingdom',  
 'Europe'),  
 ('Bank of Georgia', 1903, 'Banking & Finance', 'Georgia', 'Asia'),  
 ('Halco Mining', 1962, 'Mining', 'Guinea', 'Africa'),  
 ('Correios da Guiné-Bissau', 1973, 'Postal Service', 'Guinea-Bissau',  
 'Africa'),  
 ('Guinea Ecuatorial Airlines', 1996, 'Aviation & Transport', 'Equatorial  
 Guinea', 'Africa'),  
 ('Piraeus Bank', 1606, 'Banking & Finance', 'Greece', 'Europe'),  
 ('Corporación Multi Inversiones', 1920, 'Food & Beverages', 'Guatemala', 'North  
 America'),  
 ('Banks DIH', 1840, 'Food & Beverages', 'Guyana', 'South America'),  
 ('National Railroad of Honduras', 1870, 'Aviation & Transport', 'Honduras',  
 'North America'),  
 ('Kraljevica Shipyard', 1729, 'Manufacturing & Production', 'Croatia',  
 'Europe'),  
 ('Rhum Barbancourt', 1862, 'Distillers, Vintners, & Breweries', 'Haiti', 'North  
 America'),  
 ('Zwack', 1790, 'Distillers, Vintners, & Breweries', 'Hungary', 'Europe'),  
 ('Pindad', 1808, 'Defense', 'Indonesia', 'Asia'),  
 ('Wadia Group', 1736, 'Manufacturing & Production', 'India', 'Asia'),  
 ('Sean's Bar', 900, 'Cafés, Restaurants & Bars', 'Ireland', 'Europe'),  
 ('North Oil Company', 1928, 'Energy', 'Iraq', 'Asia'),  
 ('Íslandspóstur', 1776, 'Postal Service', 'Iceland', 'Europe'),  
 ('Café Abu Salem', 1914, 'Cafés, Restaurants & Bars', 'Israel', 'Asia'),  
 ('Marinelli Bell Foundry', 1040, 'Manufacturing & Production', 'Italy',  
 'Europe'),  
 ('Rose Hall', 1770, 'Tourism & Hotels', 'Jamaica', 'North America'),  
 ('Arab Bank', 1930, 'Banking & Finance', 'Jordan', 'Asia'),  
 ('Kongō Gumi', 578, 'Construction', 'Japan', 'Asia'),  
 ('Bogatyr Access Komir', 1913, 'Mining', 'Kazakhstan', 'Asia'),  
 ('KCB Group Limited', 1896, 'Banking & Finance', 'Kenya', 'Africa'),  
 ('National Bank of Cambodia', 1954, 'Banking & Finance', 'Cambodia', 'Asia'),  
 ('KT Corporation', 1885, 'Telecommunications', 'Korea, Republic of', 'Asia'),  
 ('M.H. Alshaya Co.', 1890, 'Retail', 'Kuwait', 'Asia'),  
 ('Electricite du Laos', 1959, 'Energy', 'Lao People's Democratic Republic',  
 'Asia'),  
 ('Bank Audi', 1830, 'Banking & Finance', 'Lebanon', 'Asia'),  
 ('National Port Authority', 1921, 'Aviation & Transport', 'Liberia', 'Africa'),  
 ('Umma Bank', 1907, 'Banking & Finance', 'Libya', 'Africa'),  
 ('1st National Bank of St Lucia', 1938, 'Banking & Finance', 'Saint Lucia',  
 'North America'),  
 ('National Bank of Liechtenstein', 1861, 'Banking & Finance', 'Liechtenstein',  
 'Europe'),  
 ('George Steuart Group', 1835, 'Food & Beverages', 'Sri Lanka', 'Asia'),  
 ('Central Bank of Lesotho', 1978, 'Banking & Finance', 'Lesotho', 'Africa'),  
 ('Gubernija', 1665, 'Distillers, Vintners, & Breweries', 'Lithuania',



'Europe'),  
 ('Mousel', 1511, 'Distillers, Vintners, & Breweries', 'Luxembourg', 'Europe'),  
 ('Cēsu Alus', 1590, 'Distillers, Vintners, & Breweries', 'Latvia', 'Europe'),  
 ('Attijariwafa Bank', 1904, 'Banking & Finance', 'Morocco', 'Africa'),  
 ('Air Madagascar', 1962, 'Aviation & Transport', 'Madagascar', 'Africa'),  
 ('La Casa de Moneda de México', 1534, 'Manufacturing & Production', 'Mexico',  
 'North America'),  
 ('Tutunski kombinat Prilep', 1873, 'Consumer Goods', 'North Macedonia',  
 'Europe'),  
 ('Office de Radiodiffusion-Télévision du Mali', 1957, 'Media', 'Mali',  
 'Africa'),  
 ('HSBC Bank Malta', 1882, 'Banking & Finance', 'Malta', 'Europe'),  
 ('Myanmar National Airlines', 1948, 'Aviation & Transport', 'Myanmar', 'Asia'),  
 ('Pošta Crne Gore', 1841, 'Postal Service', 'Montenegro', 'Europe'),  
 ('Mongolian National Broadcaster', 1931, 'Media', 'Mongolia', 'Asia'),  
 ('Beira Railroad Corporation', 1892, 'Aviation & Transport', 'Mozambique',  
 'Africa'),  
 ('Central Bank of Mauritania', 1973, 'Banking & Finance', 'Mauritania',  
 'Africa'),  
 ('Mauritius Post', 1772, 'Postal Service', 'Mauritius', 'Africa'),  
 ('Malawi Broadcasting Corporation', 1964, 'Media', 'Malawi', 'Africa'),  
 ('Pos Malaysia', 1800, 'Postal Service', 'Malaysia', 'Asia'),  
 ('NamPost', 1814, 'Postal Service', 'Namibia', 'Africa'),  
 ('Office of Radio and Television of Niger', 1960, 'Media', 'Niger', 'Africa'),  
 ('First Bank of Nigeria', 1894, 'Banking & Finance', 'Nigeria', 'Africa'),  
 ('Flor de Caña', 1890, 'Distillers, Vintners, & Breweries', 'Nicaragua', 'North  
 America'),  
 ('The Brand Brewery', 1340, 'Distillers, Vintners, & Breweries', 'Netherlands',  
 'Europe'),  
 ('Posten Norge', 1647, 'Postal Service', 'Norway', 'Europe'),  
 ('Nepal Bank Limited', 1937, 'Banking & Finance', 'Nepal', 'Asia'),  
 ('Bank of New Zealand', 1861, 'Banking & Finance', 'New Zealand', 'Oceania'),  
 ('Petroleum Development Oman', 1937, 'Energy', 'Oman', 'Asia'),  
 ('House of Habib', 1841, 'Conglomerate', 'Pakistan', 'Asia'),  
 ('National Bank of Panama', 1904, 'Banking & Finance', 'Panama', 'North  
 America'),  
 ('Casa Nacional de Moneda', 1565, 'Banking & Finance', 'Peru', 'South  
 America'),  
 ('Destileria Limtuaco', 1853, 'Distillers, Vintners, & Breweries',  
 'Philippines', 'Asia'),  
 ('Bochnia Salt Mine', 1248, 'Mining', 'Poland', 'Europe'),  
 ('Kim Chong-t'ae Electric Locomotive Works', 1945, 'Aviation & Transport',  
 'Korea, Democratic People's Republic of', 'Asia'),  
 ('CTT-Correios de Portugal SA', 1520, 'Postal Service', 'Portugal', 'Europe'),  
 ('Salam International Investment Limited', 1952, 'Conglomerate', 'Qatar',  
 'Asia'),  
 ('Ursus Breweries', 1878, 'Distillers, Vintners, & Breweries', 'Romania',

'Europe'),  
 ('Petrodvorets Watch Factory', 1721, 'Consumer Goods', 'Russian Federation',  
 'Europe'),  
 ('National Post Office', 1922, 'Postal Service', 'Rwanda', 'Africa'),  
 ('House of Alireza', 1845, 'Construction', 'Saudi Arabia', 'Asia'),  
 ('Bank of Khartoum', 1913, 'Banking & Finance', 'Sudan', 'Africa'),  
 ('Dakar-Niger Railway', 1924, 'Aviation & Transport', 'Senegal', 'Africa'),  
 ('Singapore Post', 1819, 'Postal Service', 'Singapore', 'Asia'),  
 ('Rokel Commercial Bank', 1917, 'Banking & Finance', 'Sierra Leone', 'Africa'),  
 ('HSBC El Salvador', 1891, 'Banking & Finance', 'El Salvador', 'North  
 America'),  
 ('Radio Mogadishu', 1943, 'Media', 'Somalia', 'Africa'),  
 ('Apatin Brewery', 1756, 'Distillers, Vintners, & Breweries', 'Serbia',  
 'Europe'),  
 ('Ivory Bank', 1994, 'Banking & Finance', 'South Sudan', 'Africa'),  
 ('Central Bank of São Tomé and Príncipe', 1975, 'Banking & Finance', 'Sao Tome  
 and Principe', 'Africa'),  
 ('Kremnica Mint', 1328, 'Manufacturing & Production', 'Slovakia', 'Europe'),  
 ('Gostilna Gastuž', 1467, 'Tourism & Hotels', 'Slovenia', 'Europe'),  
 ('Skylbergs bruk', 1346, 'Manufacturing & Production', 'Sweden', 'Europe'),  
 ('Swazi Rail', 1963, 'Aviation & Transport', 'Eswatini', 'Africa'),  
 ('Air Seychelles', 1977, 'Aviation & Transport', 'Seychelles', 'Asia'),  
 ('Bakdash', 1885, 'Cafés, Restaurants & Bars', 'Syrian Arab Republic', 'Asia'),  
 ('Cotontchad', 1971, 'Agriculture', 'Chad', 'Africa'),  
 ('La Poste du Togo', 1883, 'Postal Service', 'Togo', 'Africa'),  
 ('B.Grimm Group', 1878, 'Conglomerate', 'Thailand', 'Asia'),  
 ('House of Angostura', 1830, 'Distillers, Vintners, & Breweries', 'Trinidad and  
 Tobago', 'North America'),  
 ('La Poste Tunisienne', 1847, 'Postal Service', 'Tunisia', 'Africa'),  
 ('Çemberlitaş Hamamı', 1584, 'Tourism & Hotels', 'Turkey', 'Asia'),  
 ('Bank of Taiwan', 1897, 'Banking & Finance', 'Taiwan, Province of China',  
 'Asia'),  
 ('Tanzania Breweries Limited', 1933, 'Distillers, Vintners, & Breweries',  
 'Tanzania, United Republic of', 'Africa'),  
 ('Stanbic Bank Uganda Limited', 1906, 'Banking & Finance', 'Uganda', 'Africa'),  
 ('Drohobych salt plant', 1250, 'Manufacturing & Production', 'Ukraine',  
 'Europe'),  
 ('Cafe Brasileiro', 1877, 'Cafés, Restaurants & Bars', 'Uruguay', 'South  
 America'),  
 ('Shirley Plantation', 1638, 'Agriculture', 'United States', 'North America'),  
 ('Tashkent Aviation Production Association', 1932, 'Manufacturing &  
 Production', 'Uzbekistan', 'Asia'),  
 ('Hacienda Chuao', 1660, 'Food & Beverages', 'Venezuela, Bolivarian Republic  
 of', 'South America'),  
 ('Vietnam Railways', 1881, 'Aviation & Transport', 'Viet Nam', 'Asia'),  
 ('European Trust Company', 1991, 'Banking & Finance', 'Vanuatu', 'Oceania'),  
 ('Yemenia Airways', 1962, 'Aviation & Transport', 'Yemen', 'Asia'),

```
(('Premier FMCG', 1820, 'Manufacturing & Production', 'South Africa', 'Africa'),
('ZamPost', 1896, 'Postal Service', 'Zambia', 'Africa'),
('Standard Chartered Zimbabwe', 1892, 'Banking & Finance', 'Zimbabwe',
'Africa'),
('Meridian Corporation', 1999, 'Media', 'Kosovo', 'Europe'))]
```

## 0.8 8. Counting categories by continent

Having businesses joined to categories and countries together means we can ask questions about both these things together. For example, which are the most common categories for the oldest businesses on each continent?

```
[84]: %%sql

-- Count the number of businesses in each continent and category
WITH combined_tables AS (
SELECT businesses.business,
       businesses.year_founded,
       categories.category,
       countries.country,
       countries.continent
FROM businesses
INNER JOIN categories
ON businesses.category_code = categories.category_code
INNER JOIN countries
ON businesses.country_code = countries.country_code
)

SELECT continent,
       category,
       COUNT(business) AS n
FROM combined_tables
GROUP BY continent, category
ORDER BY n DESC;

* postgresql:///oldestbusinesses
56 rows affected.
```

```
[84]: [('Africa', 'Banking & Finance', 17),
('Europe', 'Distillers, Vintners, & Breweries', 12),
('Africa', 'Aviation & Transport', 10),
('Africa', 'Postal Service', 9),
('Europe', 'Manufacturing & Production', 8),
('Asia', 'Aviation & Transport', 7),
('Asia', 'Banking & Finance', 6),
('North America', 'Distillers, Vintners, & Breweries', 5),
('Europe', 'Banking & Finance', 5),
('Europe', 'Postal Service', 4),
```

('Africa', 'Media', 4),  
 ('North America', 'Banking & Finance', 4),  
 ('Europe', 'Consumer Goods', 3),  
 ('Asia', 'Conglomerate', 3),  
 ('Asia', 'Manufacturing & Production', 3),  
 ('Asia', 'Cafés, Restaurants & Bars', 3),  
 ('Africa', 'Distillers, Vintners, & Breweries', 3),  
 ('South America', 'Banking & Finance', 3),  
 ('Africa', 'Agriculture', 3),  
 ('Asia', 'Retail', 3),  
 ('Asia', 'Energy', 3),  
 ('Asia', 'Food & Beverages', 2),  
 ('South America', 'Food & Beverages', 2),  
 ('Europe', 'Tourism & Hotels', 2),  
 ('North America', 'Aviation & Transport', 2),  
 ('Asia', 'Distillers, Vintners, & Breweries', 2),  
 ('Oceania', 'Banking & Finance', 2),  
 ('Asia', 'Construction', 2),  
 ('South America', 'Manufacturing & Production', 2),  
 ('Europe', 'Cafés, Restaurants & Bars', 2),  
 ('Asia', 'Postal Service', 2),  
 ('North America', 'Tourism & Hotels', 1),  
 ('Europe', 'Media', 1),  
 ('Asia', 'Agriculture', 1),  
 ('South America', 'Defense', 1),  
 ('Africa', 'Energy', 1),  
 ('Europe', 'Mining', 1),  
 ('North America', 'Media', 1),  
 ('Europe', 'Agriculture', 1),  
 ('Asia', 'Mining', 1),  
 ('Africa', 'Food & Beverages', 1),  
 ('Asia', 'Telecommunications', 1),  
 ('North America', 'Food & Beverages', 1),  
 ('Africa', 'Manufacturing & Production', 1),  
 ('Asia', 'Defense', 1),  
 ('North America', 'Agriculture', 1),  
 ('Asia', 'Tourism & Hotels', 1),  
 ('Europe', 'Defense', 1),  
 ('Europe', 'Medical', 1),  
 ('Europe', 'Telecommunications', 1),  
 ('Asia', 'Media', 1),  
 ('South America', 'Cafés, Restaurants & Bars', 1),  
 ('North America', 'Retail', 1),  
 ('Oceania', 'Postal Service', 1),  
 ('Africa', 'Mining', 1),  
 ('North America', 'Manufacturing & Production', 1)]

## 0.9 9. Filtering counts by continent and category

Combining continent and business category led to a lot of results. It's difficult to see what is important. To trim this down to a manageable size, let's restrict the results to only continent/category pairs with a high count.

```
[86]: %%sql

-- Repeat that previous query, filtering for results having a count greater
↳ than 5

WITH combined_tables AS (
SELECT businesses.business,
       businesses.year_founded,
       categories.category,
       countries.country,
       countries.continent
FROM businesses
INNER JOIN categories
ON businesses.category_code = categories.category_code
INNER JOIN countries
ON businesses.country_code = countries.country_code
),

cont_cat_bus AS (
SELECT continent,
       category,
       COUNT(business) AS n
FROM combined_tables
GROUP BY continent, category
ORDER BY n DESC
)

SELECT * FROM cont_cat_bus
WHERE n > 5;
```

```
* postgresql:///oldestbusinesses
7 rows affected.
```

```
[86]: [('Africa', 'Banking & Finance', 17),
      ('Europe', 'Distillers, Vintners, & Breweries', 12),
      ('Africa', 'Aviation & Transport', 10),
      ('Africa', 'Postal Service', 9),
      ('Europe', 'Manufacturing & Production', 8),
      ('Asia', 'Aviation & Transport', 7),
      ('Asia', 'Banking & Finance', 6)]
```

```
[ ]:
```