DATA MARKET IN BARCELONA

IF YOU WANT TO BECOME A DATA ANALYST

BY ALBERT COCA

Agenda

- Tools

- The Method

- Global Analysis

  - Part I: Category, Modality & Seniority

  - Part II: Tools

  - Part III: Hard Skills & Soft Skills (Top 5)

- Analysis between Categories

  - Part I: Modality & Seniority

  - Part II: Programming Tools differences

  - Part III: Hard Skills differences

  - Part IIII: Soft Skills differences

- Recap...If you want to become a Data Analyst

- *Bonus Track: Top companies in need of talent*

- Next Steps

Tools

The Method

Webpages

316 jobs scraped from last 2 months in Barcelona

Web Scraping

- HTML
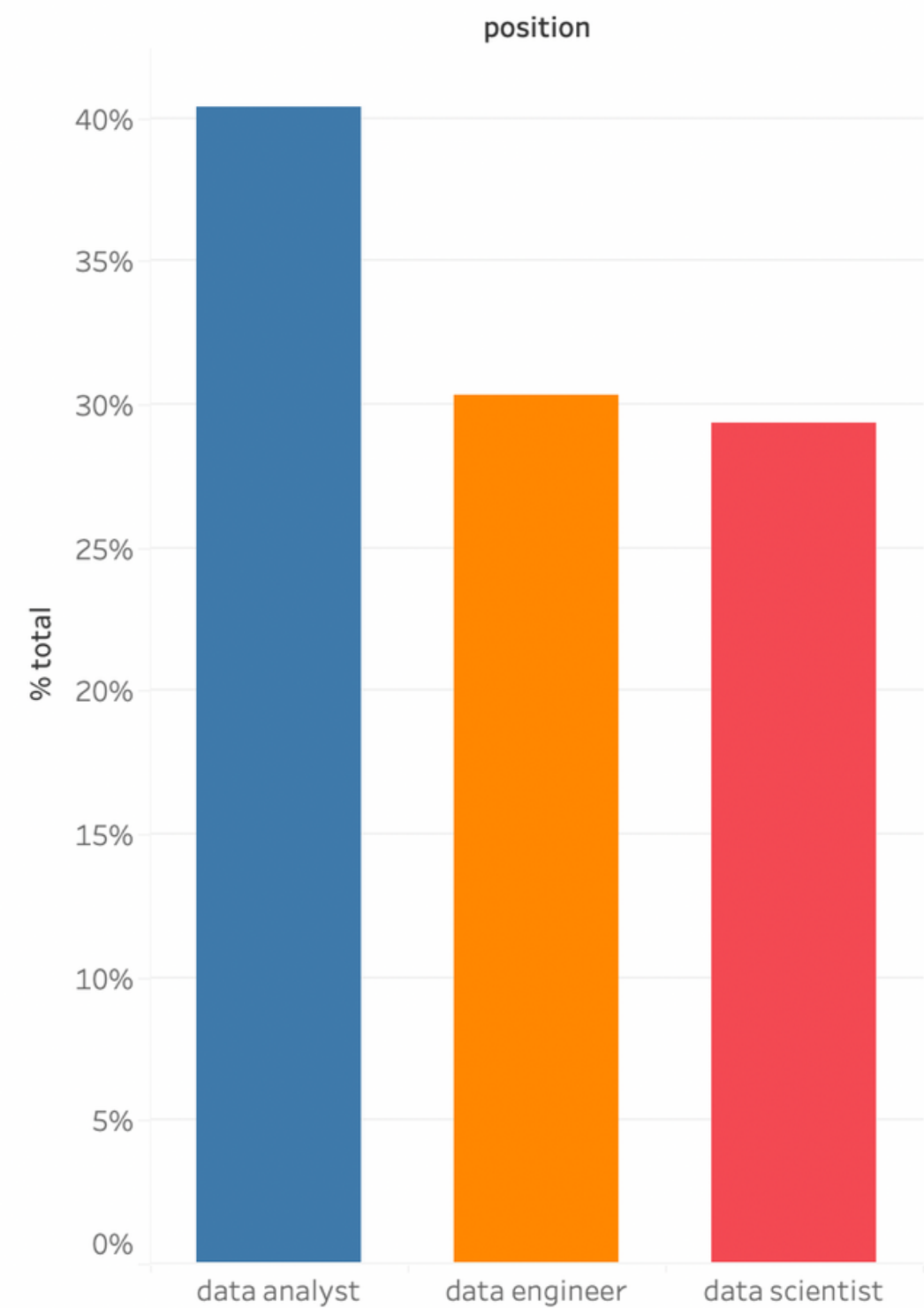- BeautifulSoup (python)
- Selenium (python)

Structured data

- Data Cleaning
  - Python
  - NLTK
- Extracted Data: Title, Company, Location, Modality & Description
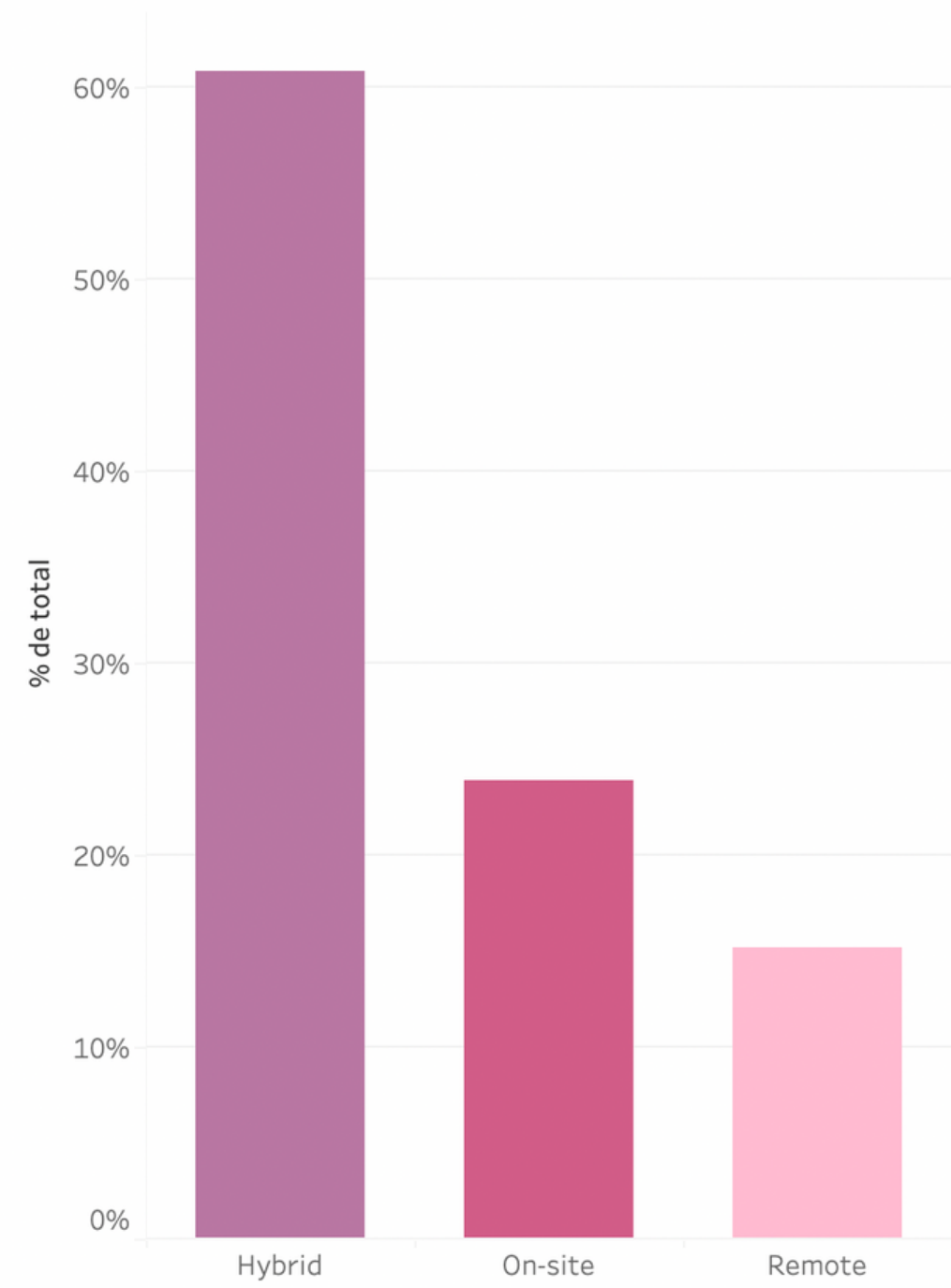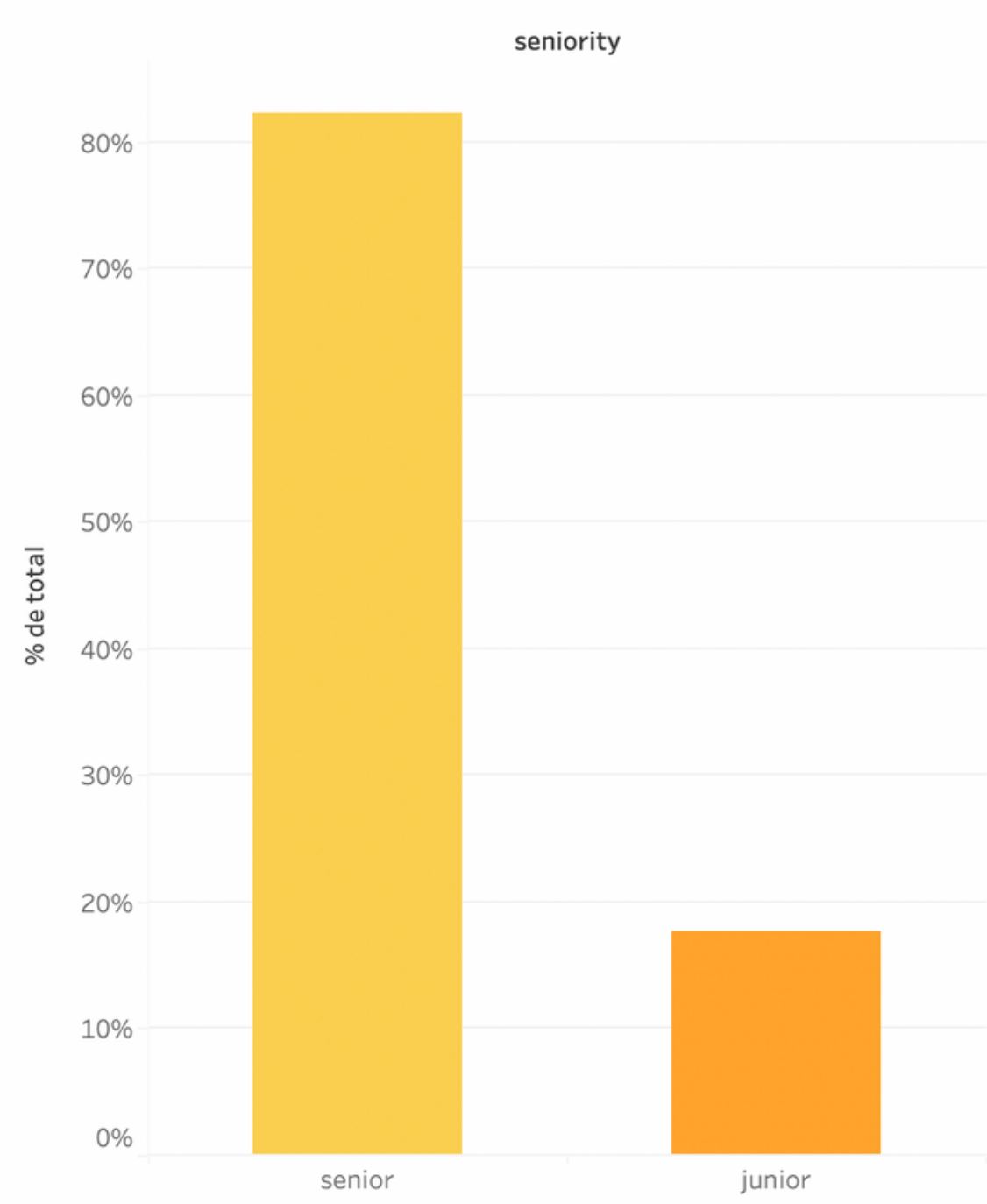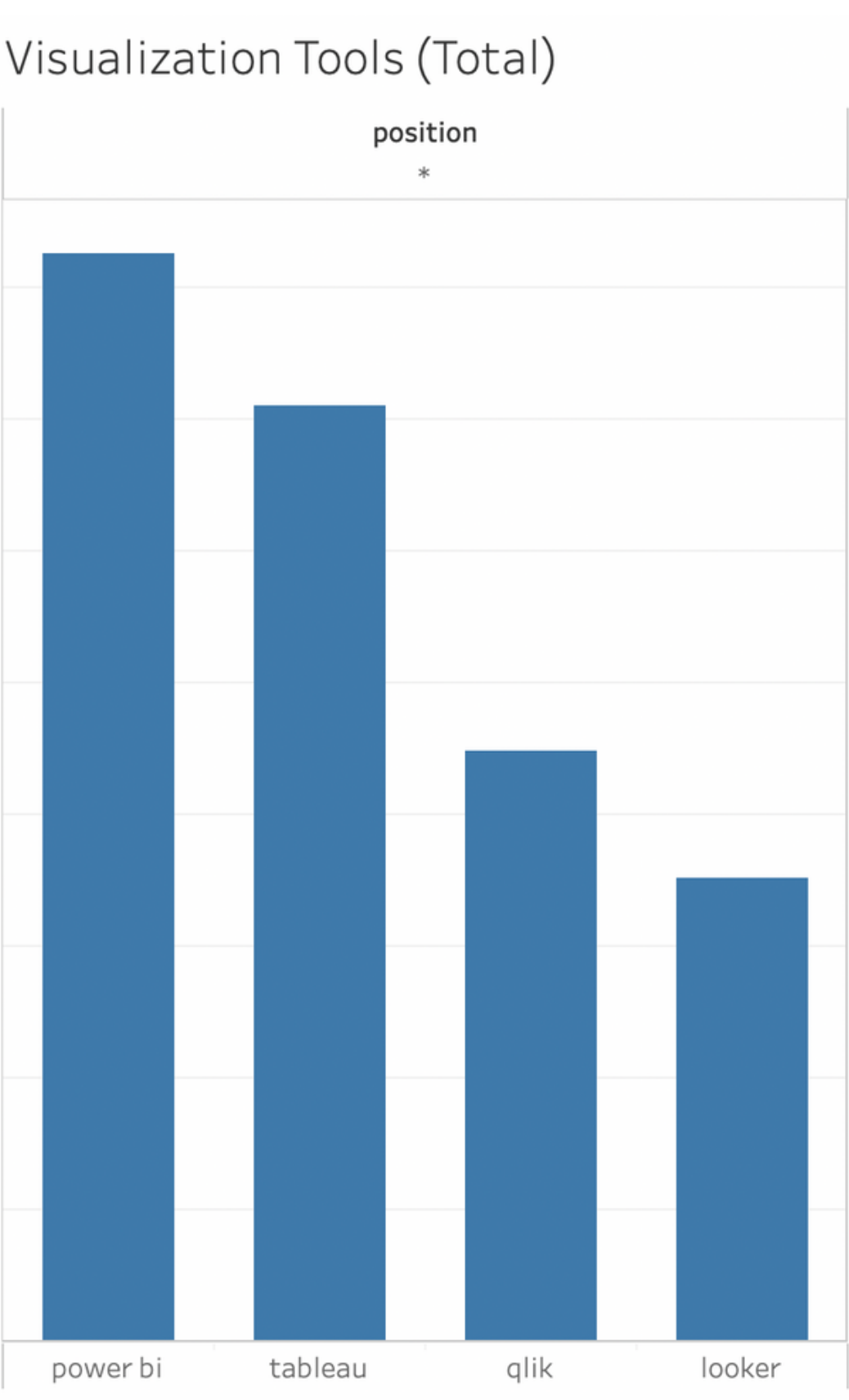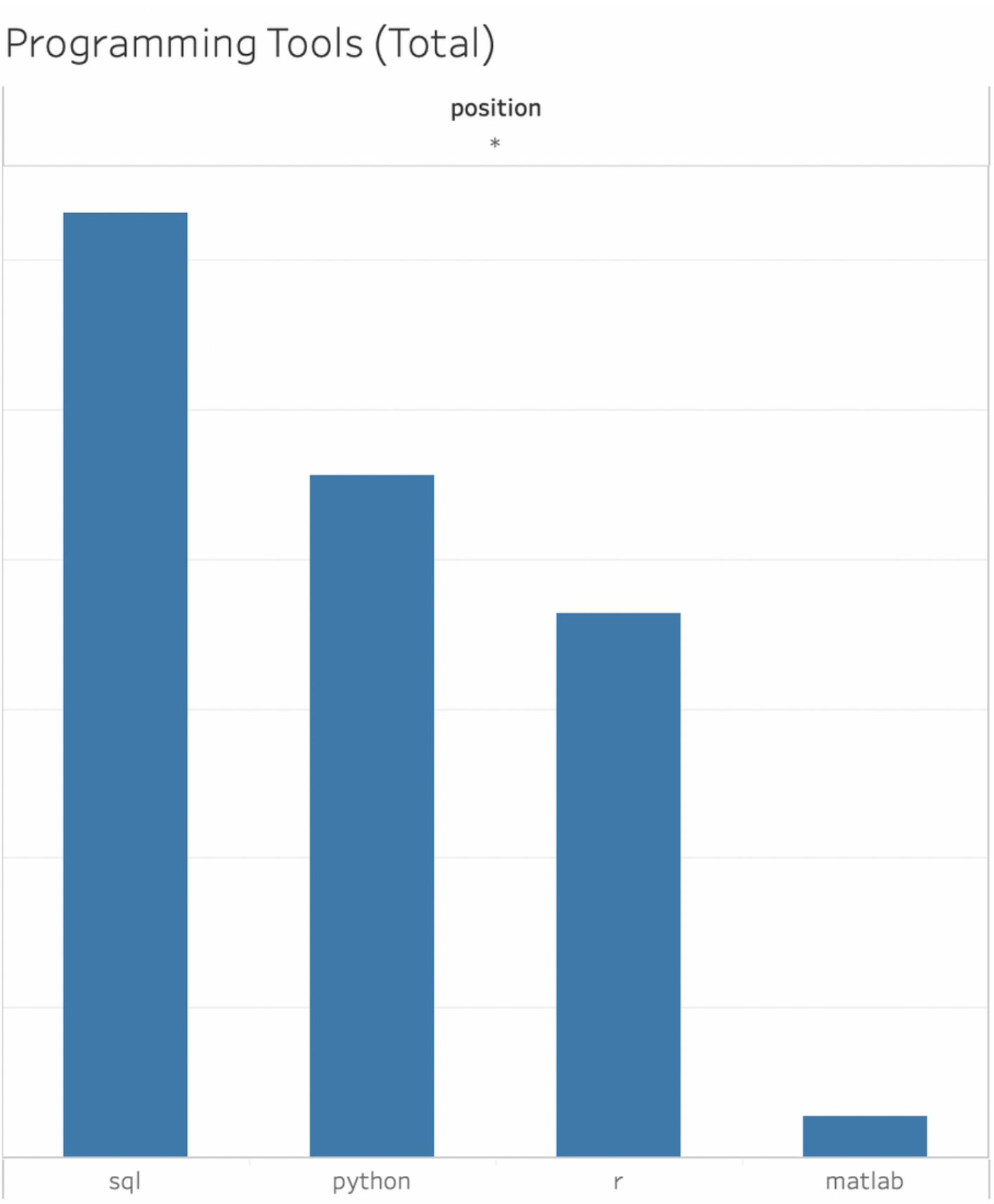
Global Analysis

Global Analysis (I)

Global Analysis (II) - Tools

Programming Tools (Total)

position
*

sql · python · r · matlab

Visualization Tools (Total)

position
*

power bi · tableau · qlik · looker

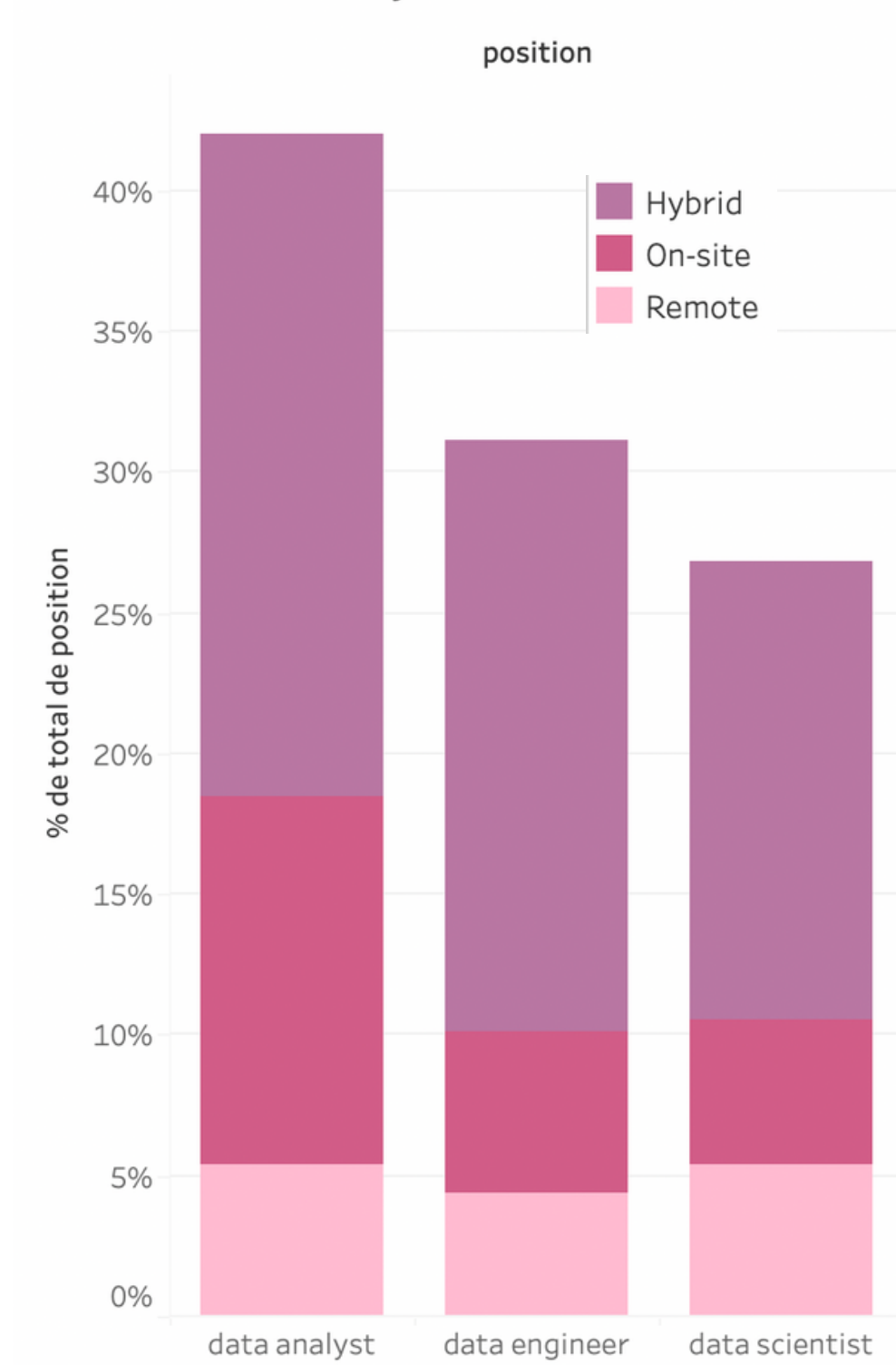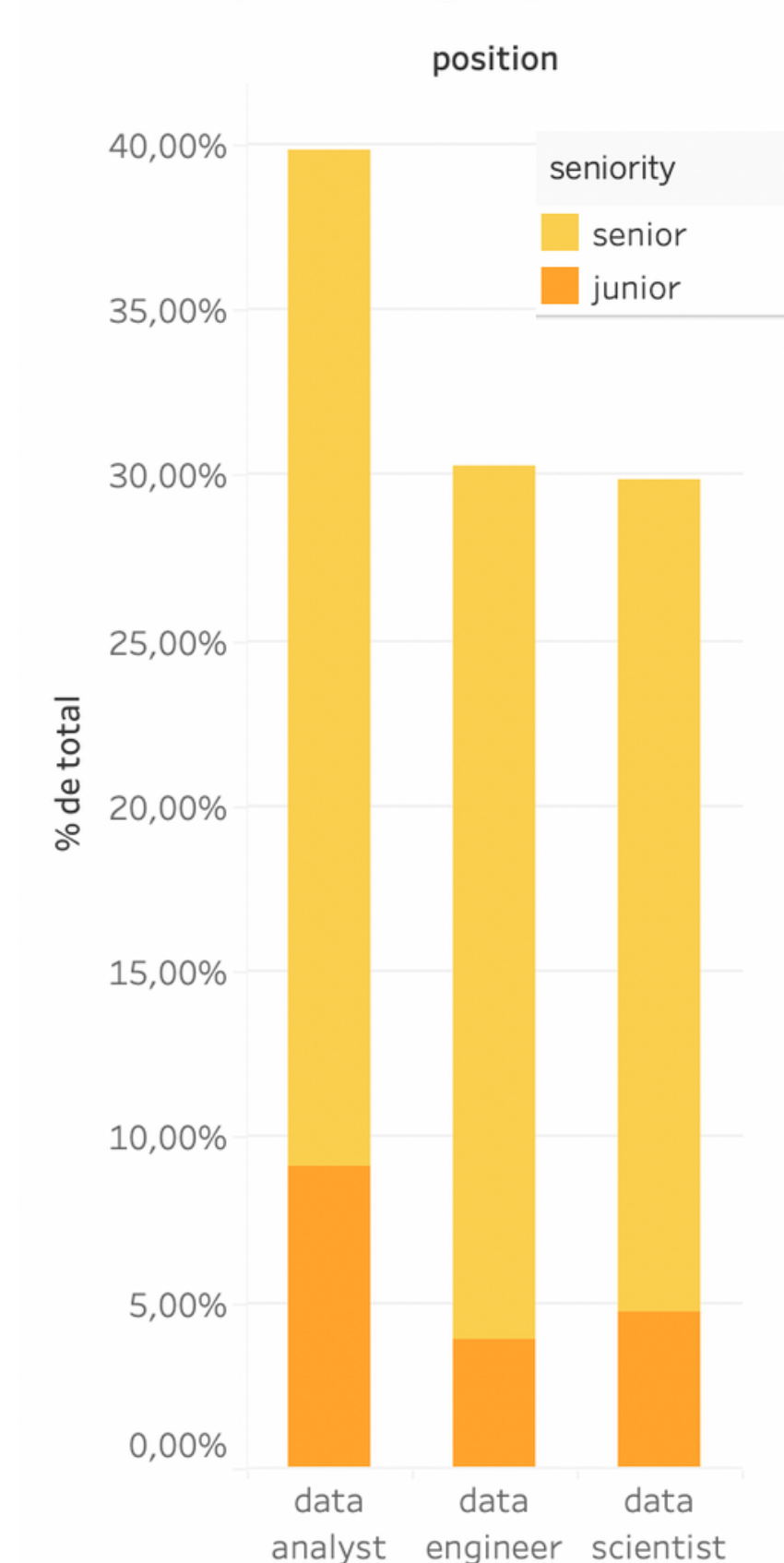# Global Analysis (III) - Hard Skills & Soft Skills (Top 5)
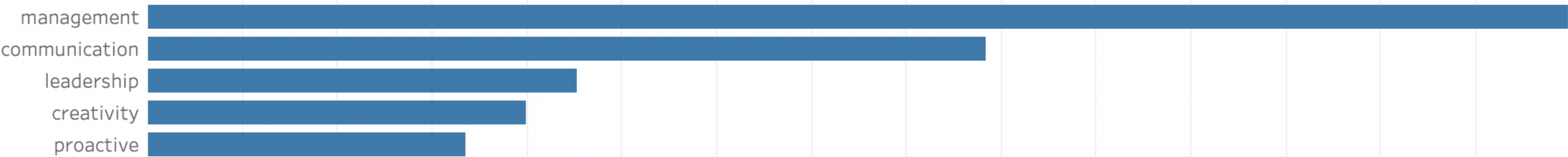
Analysis between Categories

Analysis between Categories (I)

Global x Seniority

Seniority x Category

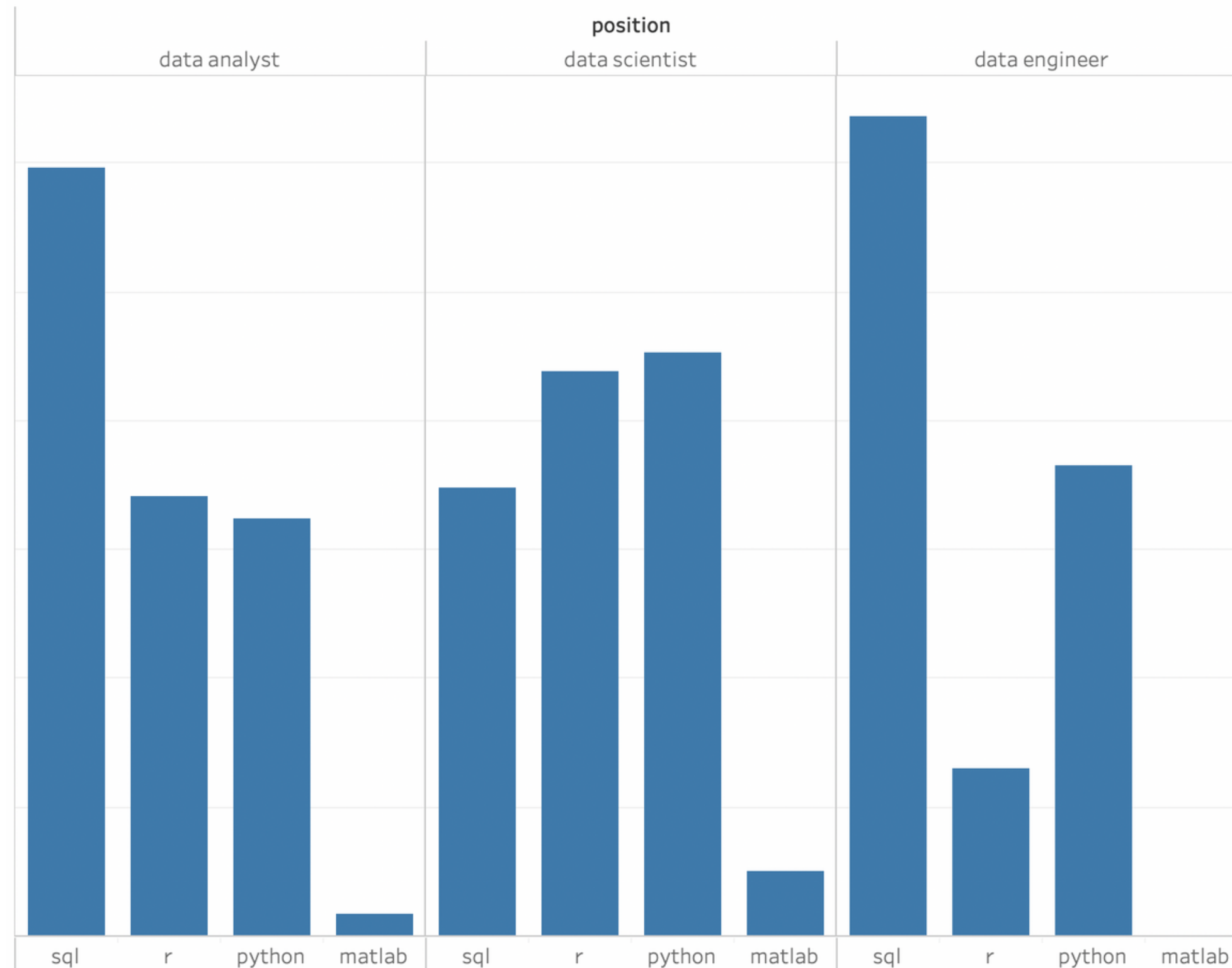**Insights**:
- More On-site positions on DA jobs
- A bit more junior positions on DA jobs

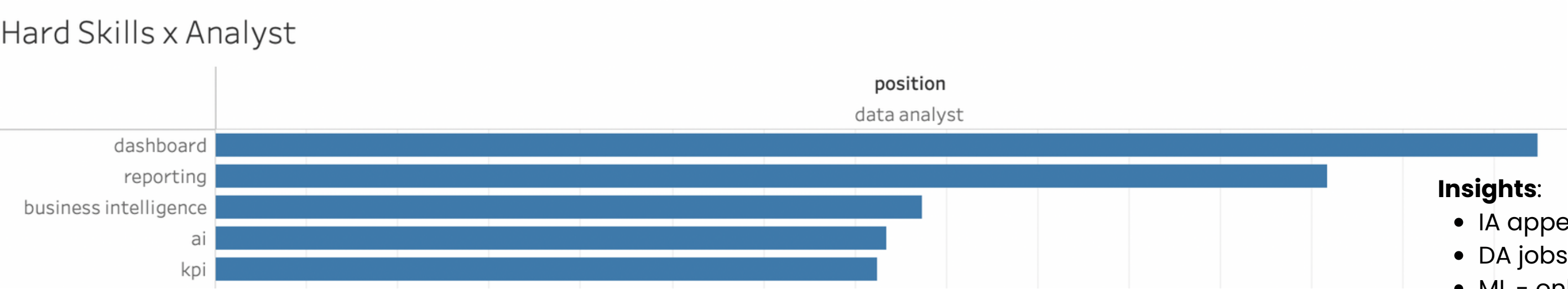# Analysis between Categories (II) - Programming Tools
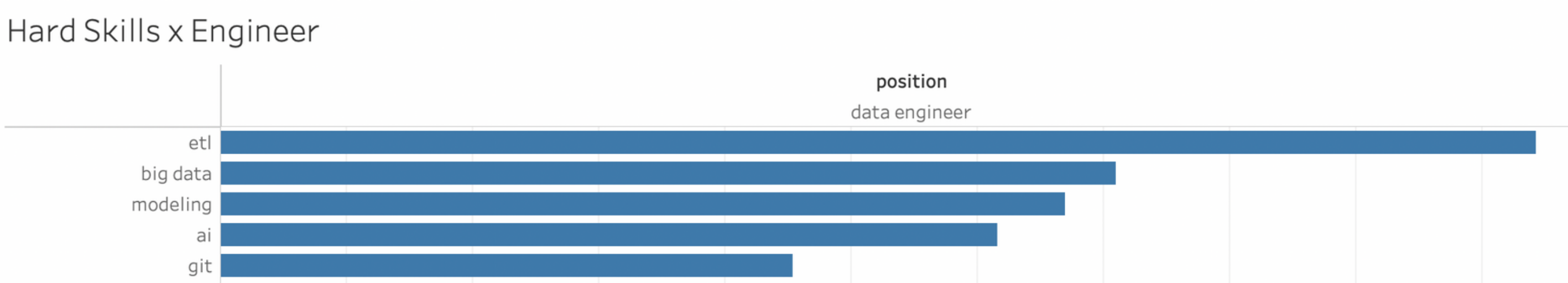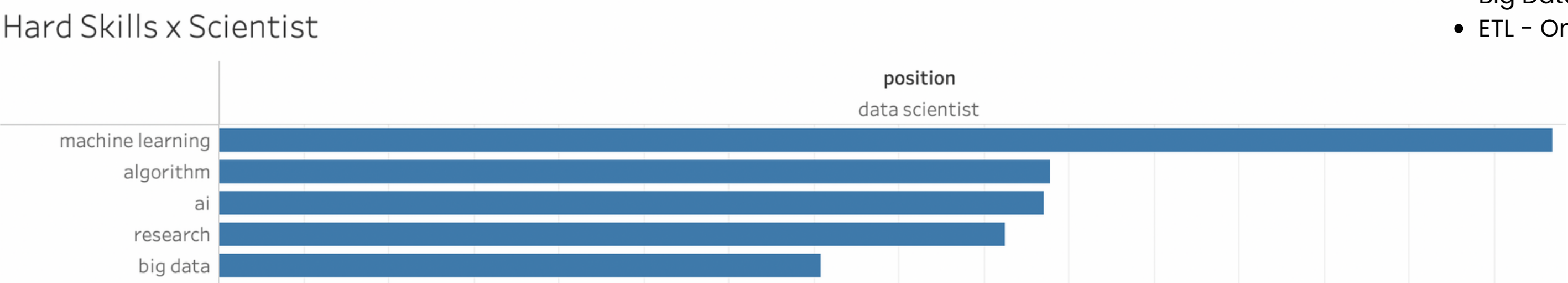

Programing Tools x Category

Insights:.
- DA and Engineer ask more SQL than python
- Scientist positions demand more python & r than SQL.
- DA and Scientist jobs – r and python very close
- Engineer jobs – Python > r

Analysis between Categories (III) - Hard Skills

Hard Skills x Analyst

position
data analyst

- dashboard
- reporting
- business intelligence
- ai
- kpi

Insights:
- IA appears in all three categories.
- DA jobs – hard skills related to visualization
- ML – only Scientist jobs
- Big Data – Scientist and Engineer jobs
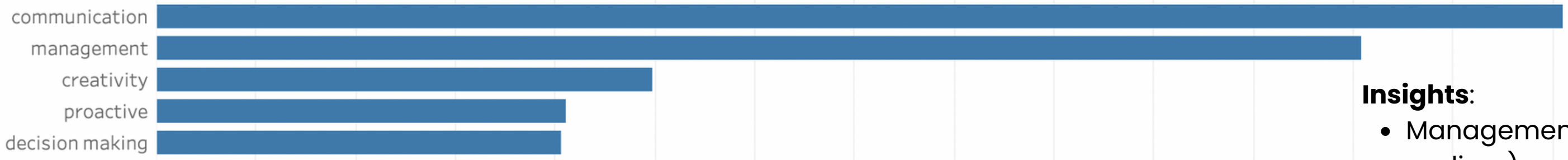- ETL – Only Engineer jobs and top 1 (all process)

Hard Skills x Scientist

position
data scientist

- machine learning
- algorithm
- ai
- research
- big data

Hard Skills x Engineer

position
data engineer

- etl
- big data
- modeling
- ai
- git

Analysis between Categories (IIII) - Soft Skills

Soft Skills x Data Analyst

- management
- communication
- leadership
- decision making
- proactive

Soft Skills x Scientist
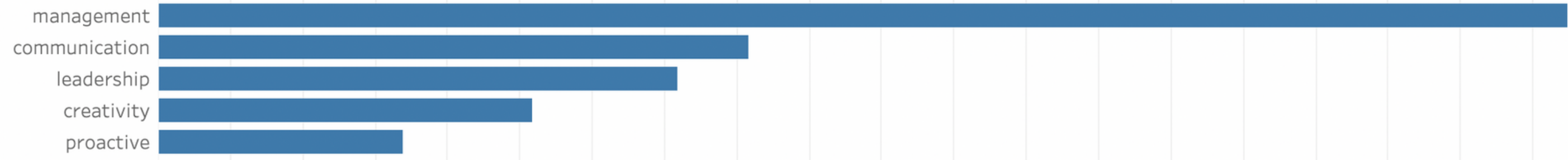
- communication
- management
- creativity
- proactive
- decision making
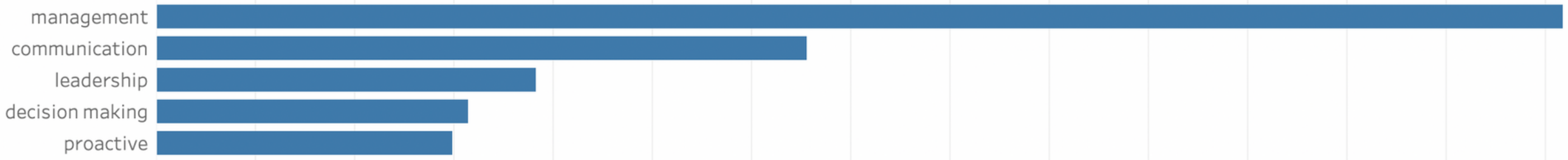
Insights:
- Management, Communication (always in the podium) and Proactive skills are in all three categories
- Leadership appears in DA and Engineer jobs

Soft Skills x Engineer

- management
- communication
- leadership
- creativity
- proactive

Recap...If you want to become a Data Analyst

- Although the **hybrid format predominates**. It is the category with the **most on-site positions.** Maybe one of the **reasons** is that it is the category with **more junior positions**
- **SQL** is by far the **most demanded** programming tool. It is **followed**, of course, by **Python and r** (very close to each other)
- **Power BI and Tableau** are requested more or less equally
- **Hard skills** most in demand for Data Analyst jobs are closely related to **visualization (Dashboard & Reporting)**
- Most popular **Soft Skills** for a Data Analyst are Management, Communication, Leadership, Decision Making and Proactivity.
  - *This is why it is so important that if in our background we have been in roles where we have enhanced these skills, we must make them shine in the selection process!!!!*

*Bonus Track: Top companies in need of talent

Bonus Track: Top Companies

company (df_keys.csv)

Recuento de position
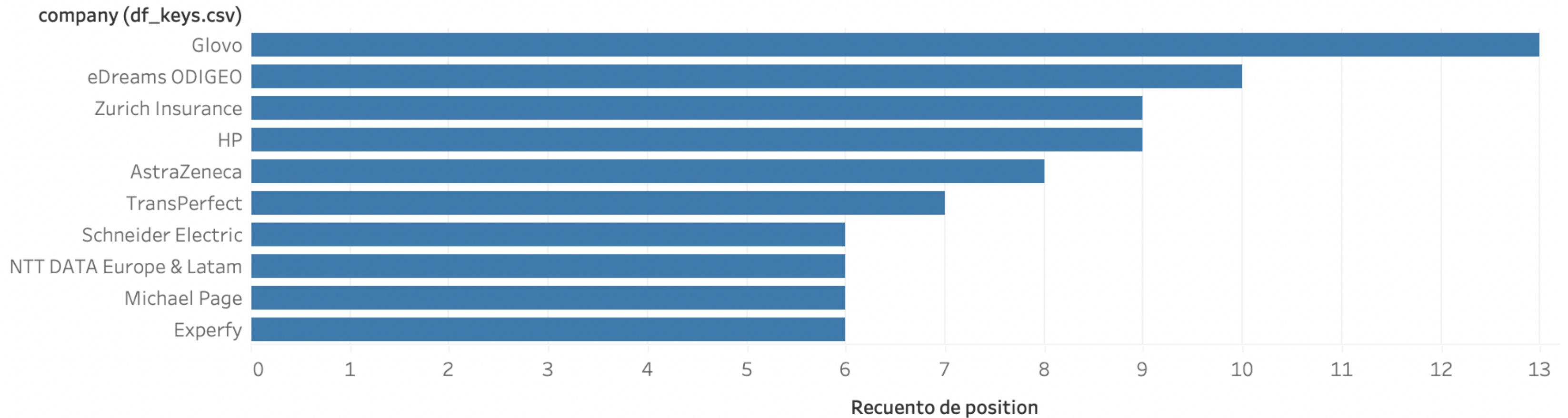
Next Steps

- Use this project for other fields and locations.

- See differences over time

- Try to introduce the salary feature, as it could provide incredible insights.

- Use SQL to be able to have a model.

THANK YOU!