

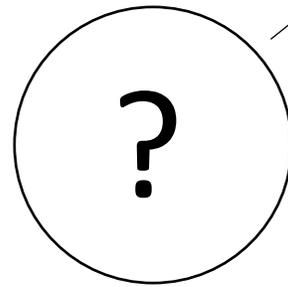
# Investigating Developer Questions on Social Media

Master Thesis of Mathias Birrer

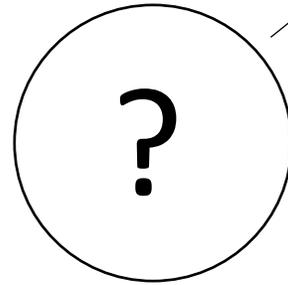
Supervised by Pooja Rani

Developers have a lot of questions!

Tools



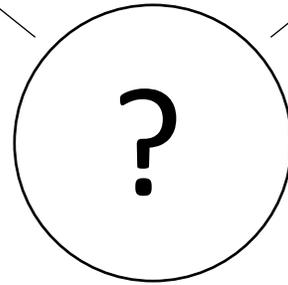
Tools



Technologies

Practices

Tools



Technologies

Where do they ask the questions?





Where do developers seek information on social media?

Researchers want to support developers!

# Main sources used



Popularity

Ease of data extraction



Large open source projects

History

# Combining sources



Topic scattered over different sources



Comparing kind of data on different sources

# Sources are different

- Data
- Structure
- Extraction
- Preprocessing



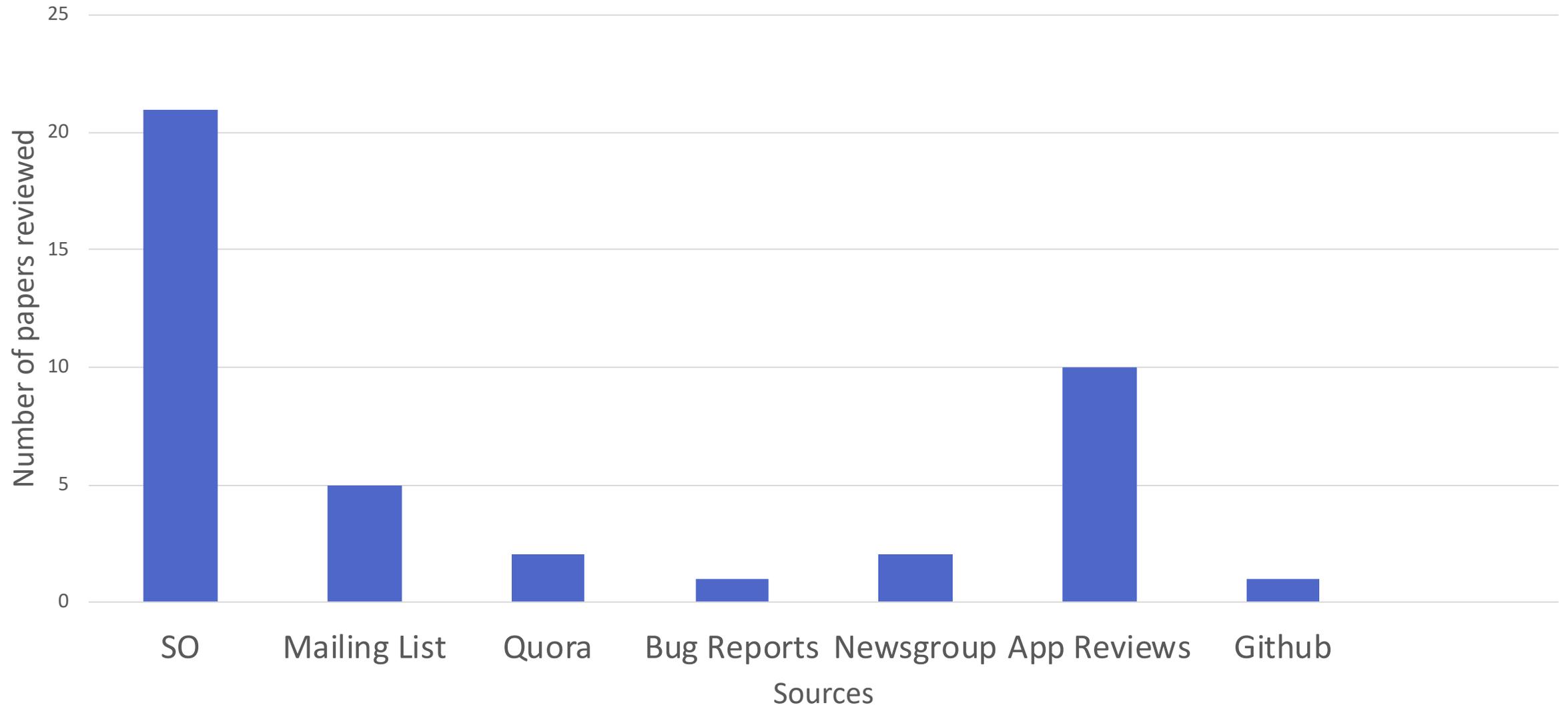
How do researchers analyze developers information needs on social media?

# Pilot study

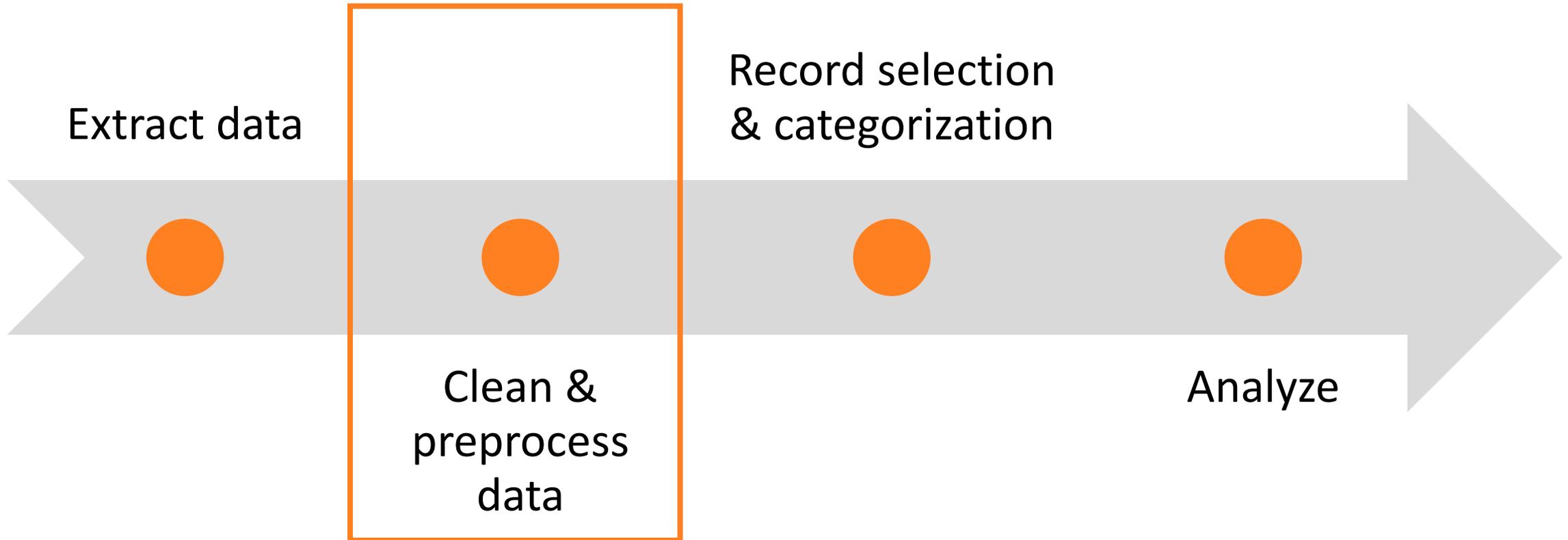
**41 papers** on the topic “**Developer Information needs**” reviewed

- What sources are considered?
- How is the process?
- What tools & technologies are used?

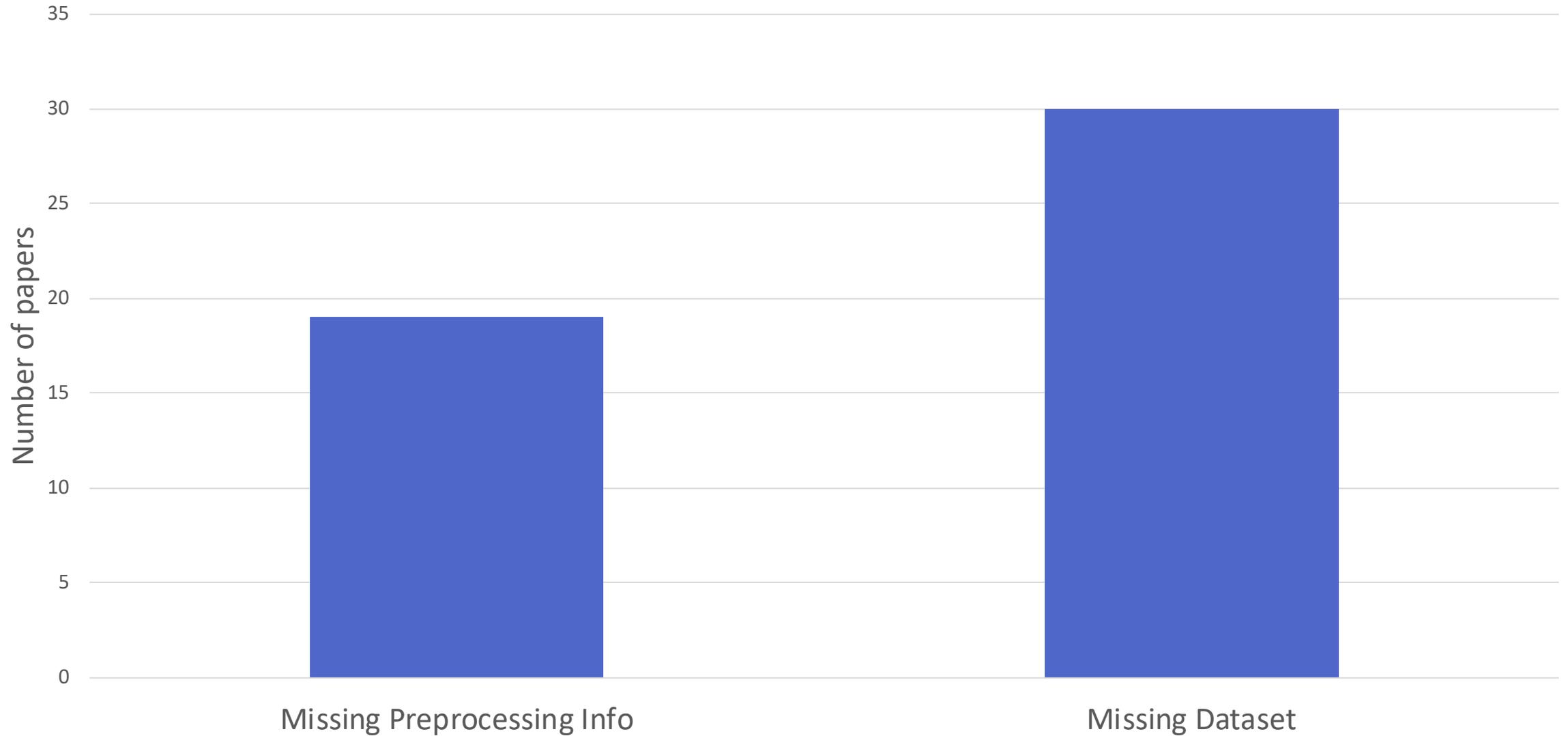
# What are the sources considered?



# Analysis process



# Problems found in data preprocessing phase



# Problems found

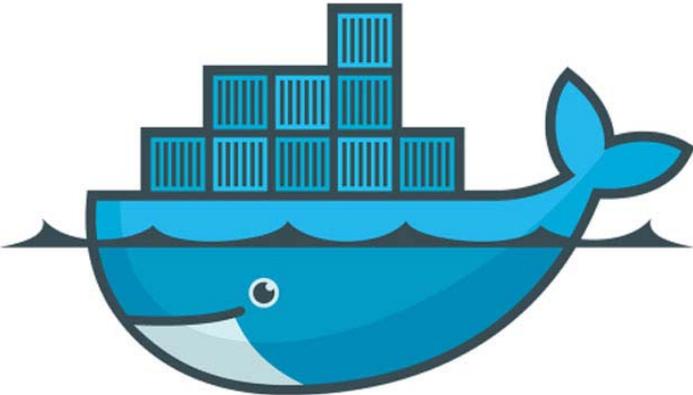
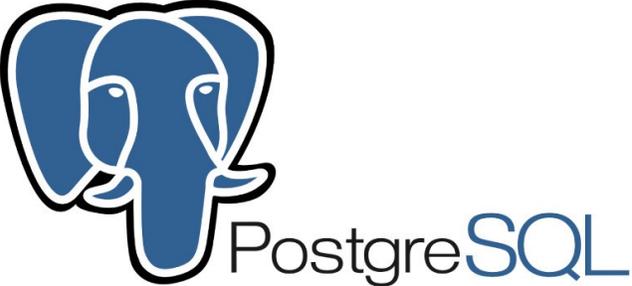
-  Incomplete description of data preprocessing
-  No access to dataset
-  Only 9 papers have used some tools for preprocessing

**Impossible or very hard to reproduce results**

# Data Management Tool from seminar project

-  Heterogeneous sources
-  Data preprocessing
-  Export for analysis

# Technologies



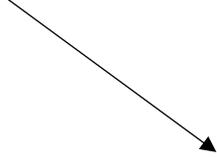
Demo



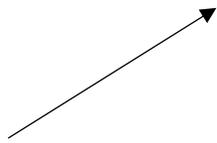
## Case Study

What are the developers questions about code commenting?

# Case study: Code comment practices

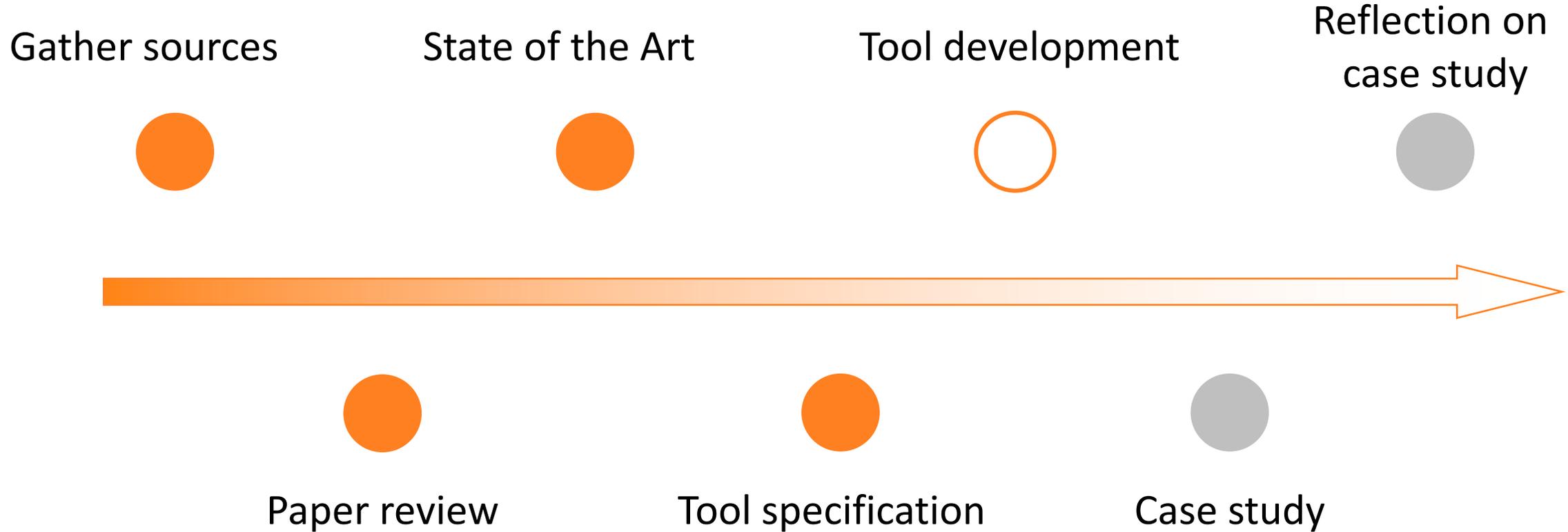


Data Management Tool



What do developers ask on social media about code comments and how do the questions differ on Quora and SO?

# Roadmap



A prudent question is one-half of wisdom.

*Francis Bacon*