# How does developer pay vary by company type, experience, and working model?

The dataset used is the 2017 Stack Overflow Annual Developer Survey data.

Introduction

Salary, years of programming experience and working model (remote/ hybrid / office-based) are significant factors that most of us consider when looking for jobs.

So I decided to use the 2017 Stack Overflow Annual Developer Survey to find out what types of companies pay the most, along with how the number of years of experience and the ability to work remotely impact pay.
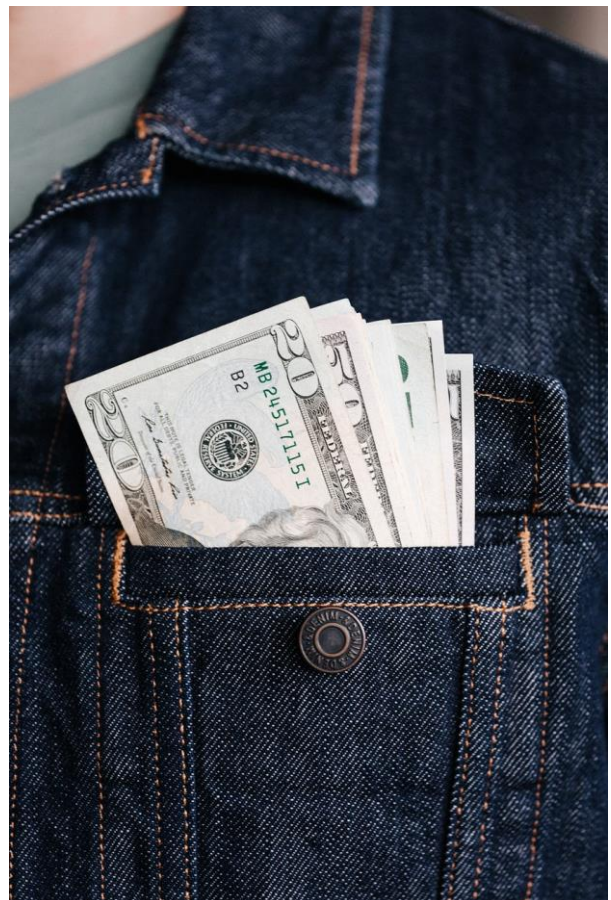
The dataset covers 201 countries from over 51k reviews. There were 154 questions in the survey covering various aspects of data and software related jobs. I'll focus on the questions below:

"Which of the following best describes the type of company or organization you work for?"
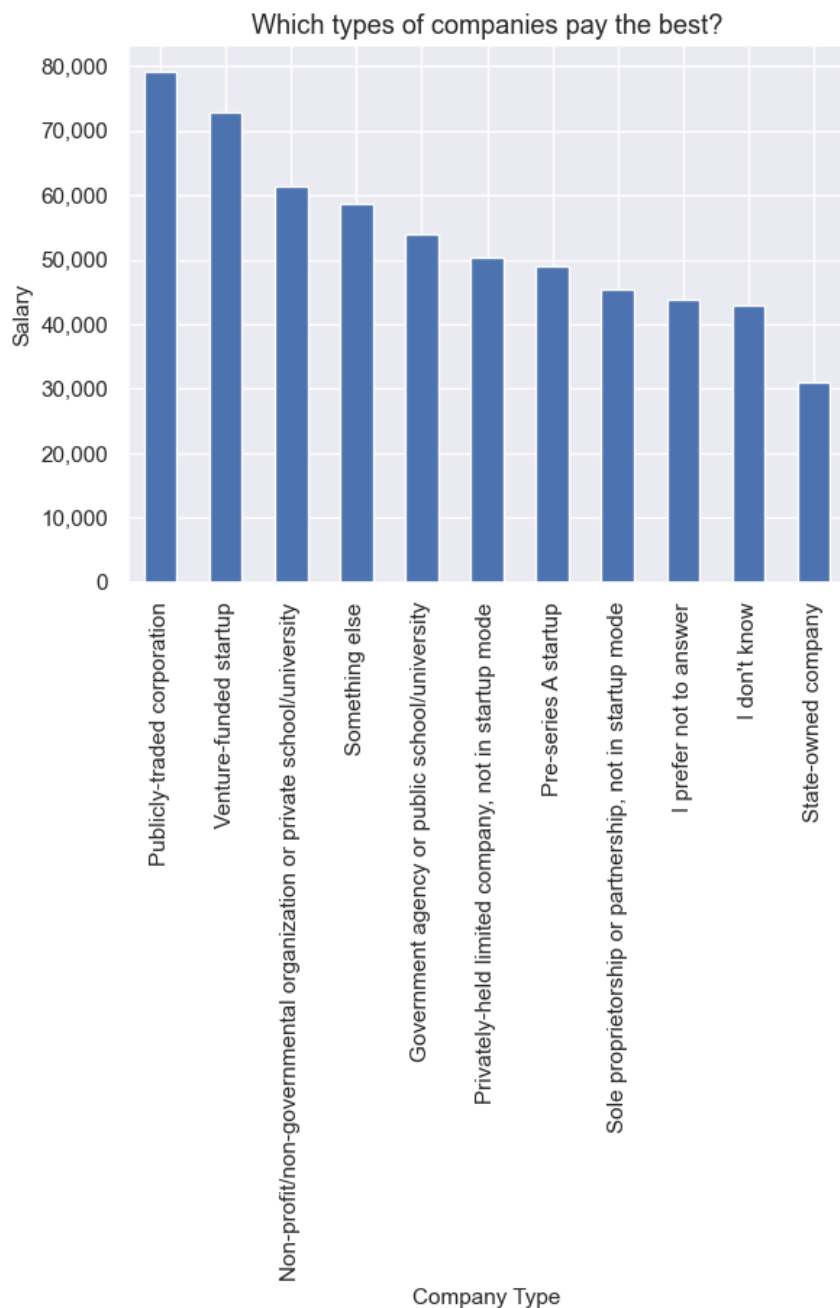
"How often do you work from home or remotely?"

"How long has it been since you first learned how to program?"

"What is your current annual base salary, before taxes, and excluding bonuses, grants, or other compensation?"

"Job satisfaction rating"

Question 1 — At what types of companies do developers get paid the most?
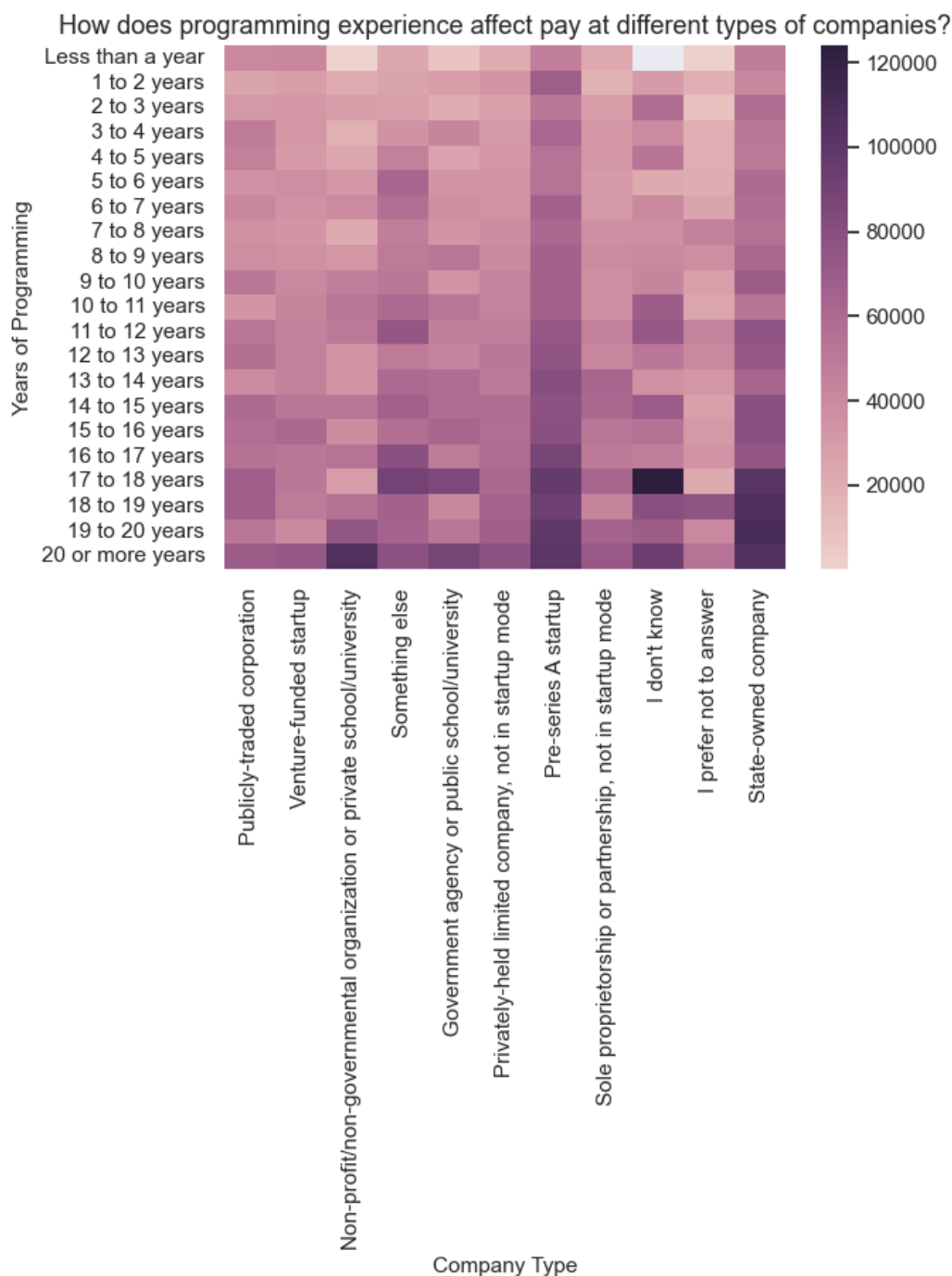
We can see in descending order the average salaries for the types of companies in the survey.

Key points:

- Publicly-traded corporations and venture-funded startups pay the best on average (79k and 73k respectively)
- This is more than double of what the employees receive at state-owned companies (31k)

Question 2 — How does programming experience affect pay at different types of companies?

We can see a heatmap showing the average salaries for the types of companies and the amount of programming experience.

The darker the data point, the higher the salary — i.e. people who answered 'I don't know for company type' with 17–18 years of programming experience tend to receive the highest average salaries.
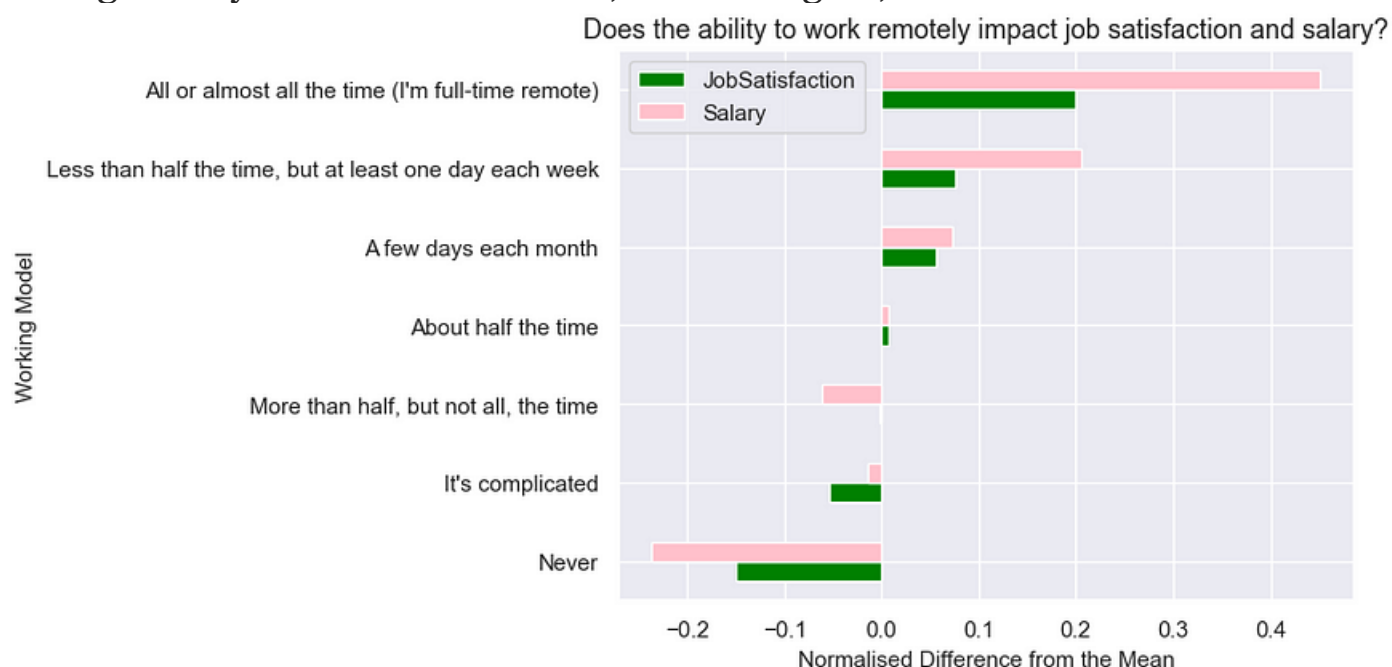
Key points:

- In general, the more programming experience you have, the more you get paid. This trend is true across all company types.

- But the difference in average salaries depending on experience varies by company type.

- For publicly-traded corporations and venture-funded start-ups, the salary difference between employees with more years of programming experience and employees with fewer years of programming is significantly less than for pre-series A start-ups or state-owned companies.

- Employees with 17+ years of programming experience at state-owned companies make much more than their peers at publicly traded corporations or venture-funded startups with the same amount of programming experience. (This is despite the fact that publicly traded corporations and venture-funded startups on average pay over twice as much as state-owned companies.)

Question 3— Does the ability to work remotely impact job satisfaction and salary?

Next we'll focus on working models, more specifically how remote working affects job satisfaction and salary.

The green bar chart compares the working model group average job satisfaction to the average job satisfaction of all survey participants, which is shown at 0.0.

The pink bar chart compares the working model group average salary to the average salary of the entire dataset, which is again, shown at 0.0.

Does the ability to work remotely impact job satisfaction and salary?

Key points:

- We can clearly see that employees who work remotely all or almost all of the times are much happier than the average, and also make much more money than the average developer.

- We can clearly see that employees who are office-based all the times make less money and are much less satisfied with their jobs than the average.

Conclusion

In this article, we looked how salary varies across the types of companies. We also looked at how the years of programming experience and type of working model (remote/ hybrid / office-based) impact pay and job satisfaction using the 2017 Stack Overflow Annual Developer survey data.

Key findings:

1. Publicly traded corporations and venture-funded startups pay the most on average, and pay more than twice as much as the state-owned companies, who pay the least on average.

2. In general, the more programming experience you have, the more you get paid. But the difference between employees with fewer years of programming experience and more varies across company types. At state-owned companies, people with the most experience make significantly more compared to their peers with less programming experience. The difference for publicly traded corporations and venture-funded startups is much less noticeable.

3. Employees who work remotely all / almost all of the times are significantly happier and higher paid than their peers who are completely office-based.