

BUKELWA MOERANE'S

Desktop Platform usage in the
developer community





NOTES FROM AUTHOR

My name is Bukelwa Moerane, I am a 27 year old overly passionate female. Data interpretation is my super power and my Hero name is BK.I use data to validate facts, validate myself as well. Cracking data problems boosts my confident.

I hope you enjoy this analysis for the platform usage survey.While I was working on this project I realised my strongest Data Science skill is slicing, cleaning and dicing the data, my data engineering skills are good.

I loved this challenge it reminded me of why I decided to start my journey of becoming a behavioural data scientist.

I hope we can work together so I can feel like this often.

Enjoy, BK :) VINCERA

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Desktop Platform Usage

Question we want to answer from the analysis

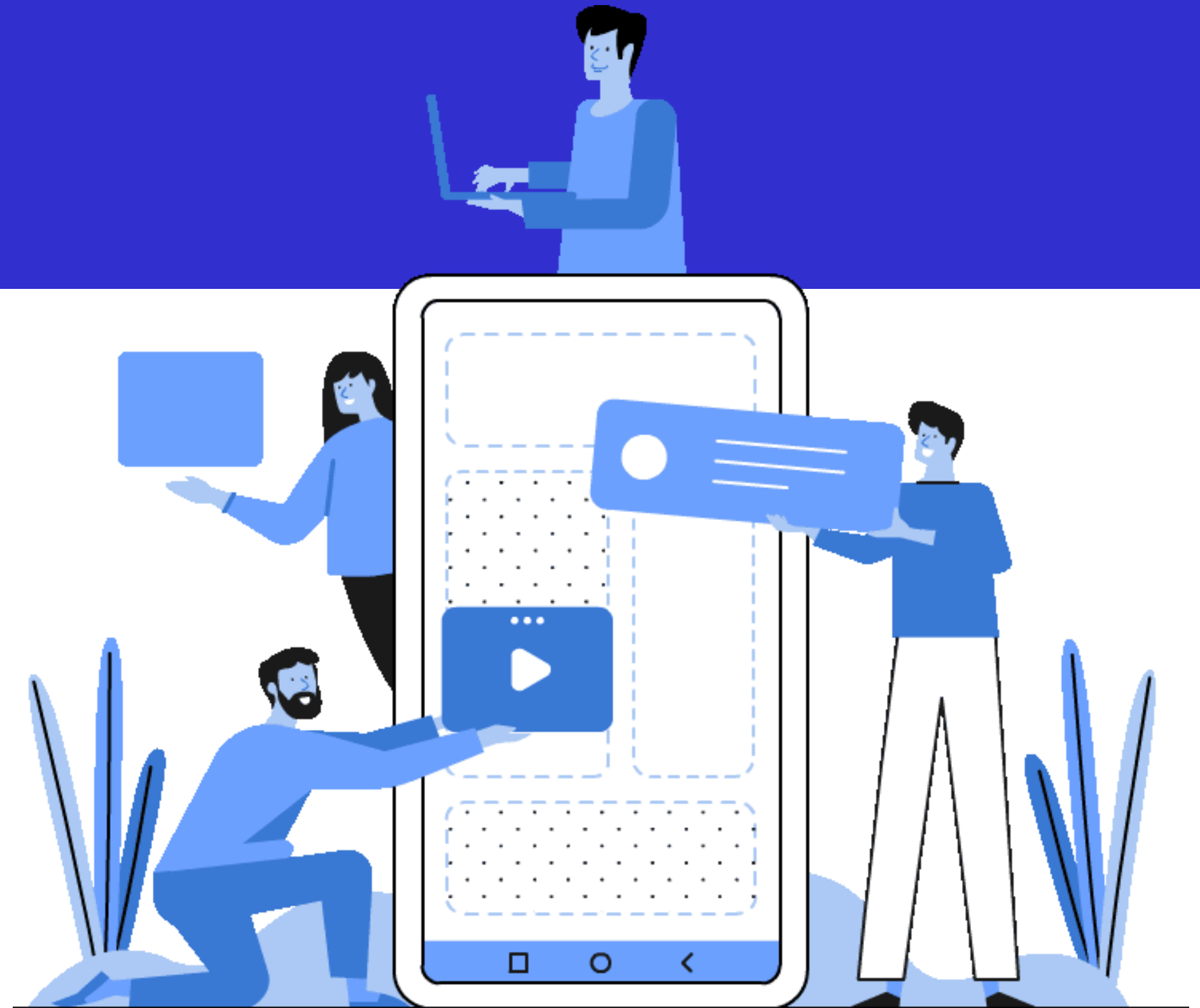
- Platform Usage
- How does the profile of developers who use Platform 1 as primary compare to that of those who use it as secondary, and to that of those who use it as a third option?
- How is the usage of different platforms linked?
- Which combinations of primary, secondary and tertiary platforms are the most common?
- What is the correlation between language and platform?
- Is there a correlation between Role level, Experience, Developer Involvement and the platform they use?



Deep dive into Analysis

Some general questions we will explore:

- Generally which is the most used platform?
- Generally what Platforms do respondents say they've used?
- Are there platforms that are commonly used together?
- Do respondents who use specific platforms typically have more years of experience?
- Do specific roles, language trend toward specific platforms?
- Are there other respondent details that correlate with the platform they use?
- What are the top 4 platform combinations?



Platform Usage

Generally which is the most used platform?

- Jupyter is a big favorite, with 39.1% of respondents using it. These are respondents that said they used platform 1 as their primary, secondary or third platform.
- Platform 3 is the least used platform, with 6.43% Yes(1) responses. These are respondents said they used platform 3 as their primary, secondary or third platform.

* Generally what Platforms do respondents say they've used?

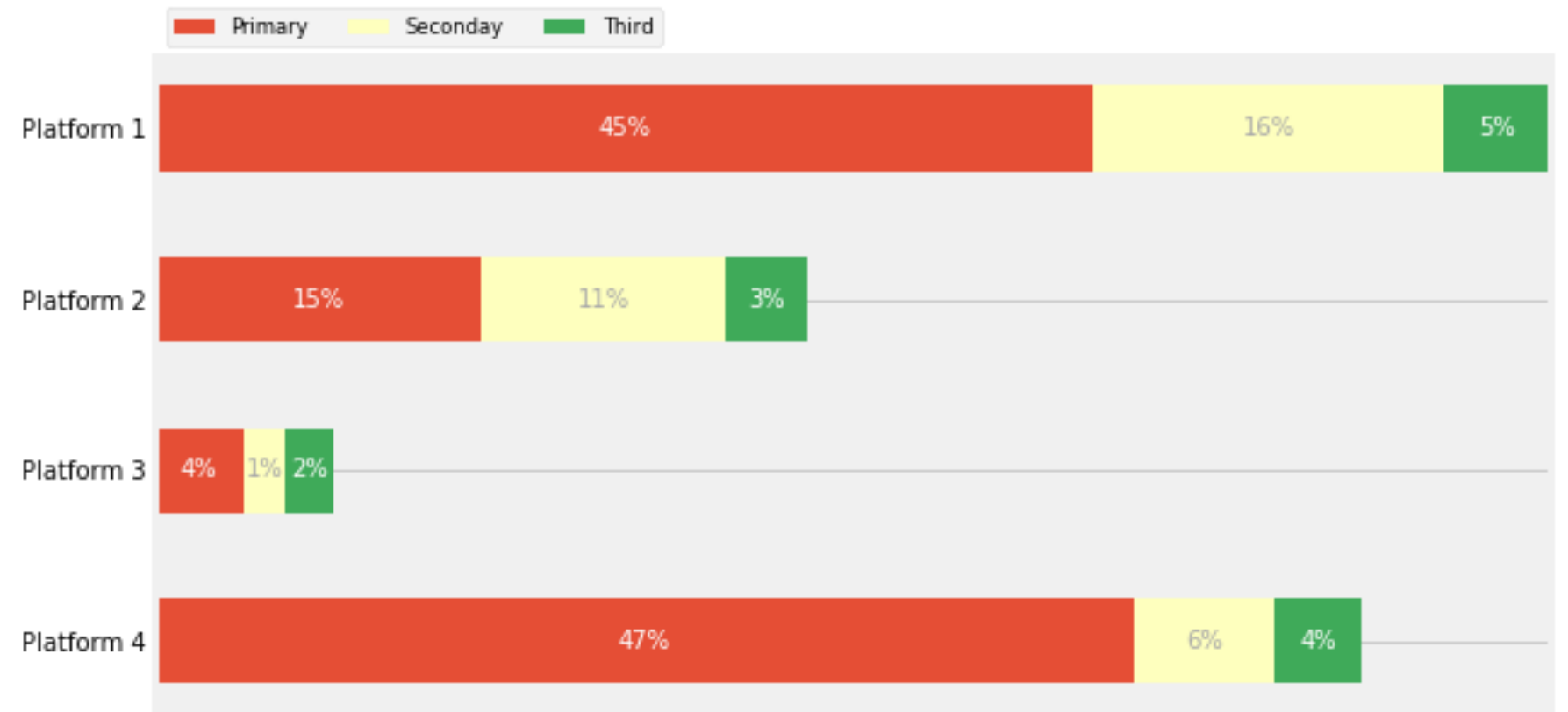
* A lot of respondents use platform 1, with 45% and platform 4 with 47% the most.

* A lot of users seem to be drawn to Platform 4 and use it as their primary Platform.

* The most used secondary Platform is Platform 1.

* The third preferred platform is Platform 1.

* Unfortunately Platform 3 is the least used platform for primary, secondary and third preference.

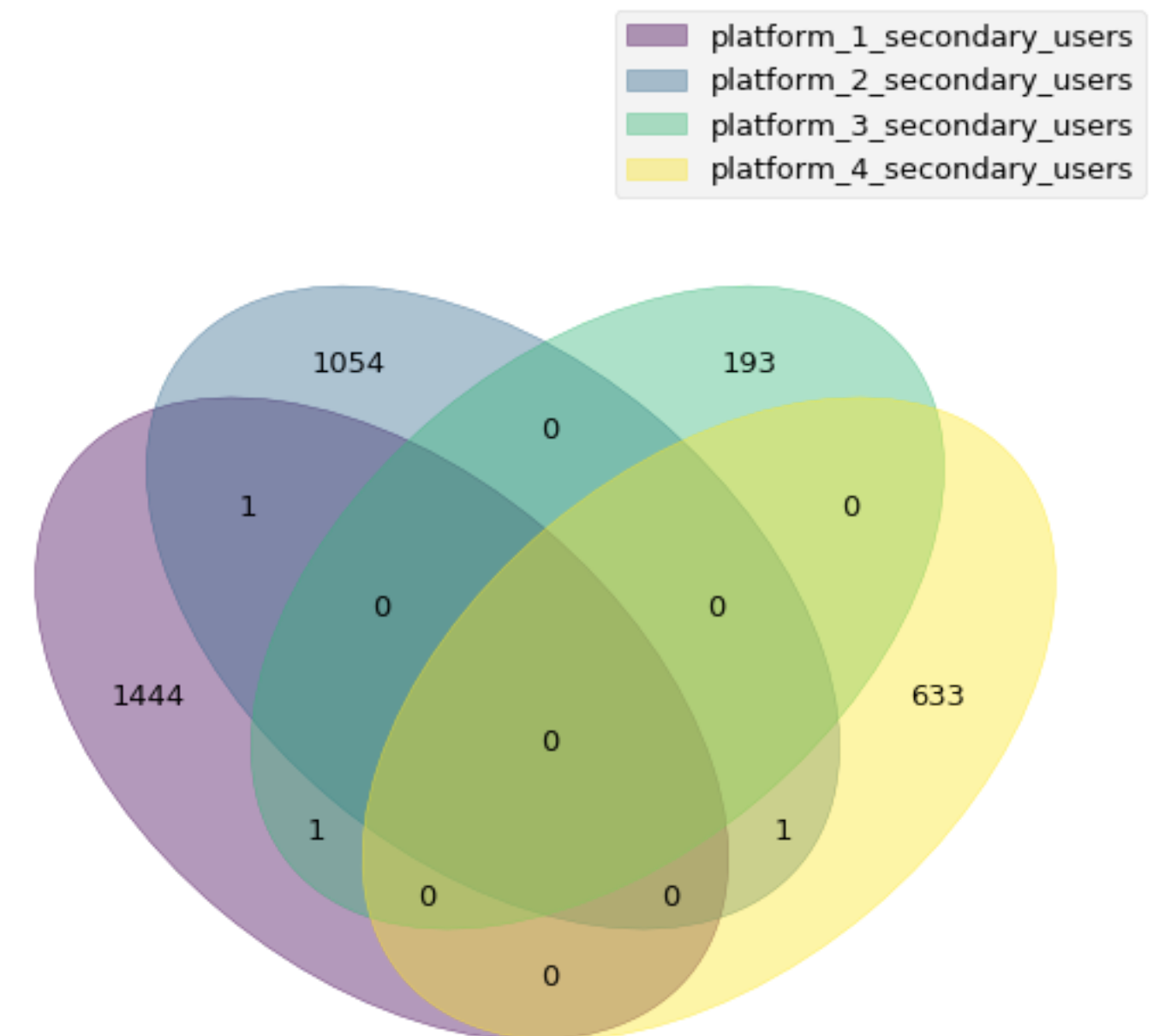


Are there platforms that are commonly used together?

Are there platforms that are commonly used together?

Overall there was a significant overlap in platform use. Most users preferred to use one platform as their primary, secondary or third option, based on the amount of effort they spend on them. There was an overlap from 3 users who had multiple Secondary preference.

- Platform 1 and 3
- Platform 1 and 2
- Platform 2 and 4



Developer involvement / Years of experience / Role and Platforms

	Involvement in development	Experience	Role 1	Role 2	Role 3	Role 4	Role 5
Platform 1-Primary	9%	2%	2%	-4%	-2%	-5%	-2%
Platform 1-Secondary	14%	10%	-2%	3%	3%	-4%	2%
Platform 1-Third	4%	7%	1%	7%	1%	1%	1%
Platform 2-Primary	21%	10%	-6%	2%	5%	-6%	4%
Platform 2-Secondary	17%	13%	-2%	2%	2%	-6%	-1%
Platform 2-Third	9%	9%	1%	4%	1%	-2%	-0%
Platform 3-Primary	11%	7%	0%	1%	-2%	-3%	-3%
Platform 3-Secondary	3%	5%	2%	5%	3%	1%	2%
Platform 3-Third	8%	8%	-1%	1%	4%	-1%	1%
Platform 4-Primary	-24%	-16%	2%	-0%	-1%	10%	1%
Platform 4-Secondary	1%	5%	3%	3%	1%	1%	0%
Platform 4-Third	12%	5%	-4%	2%	2%	-3%	1%

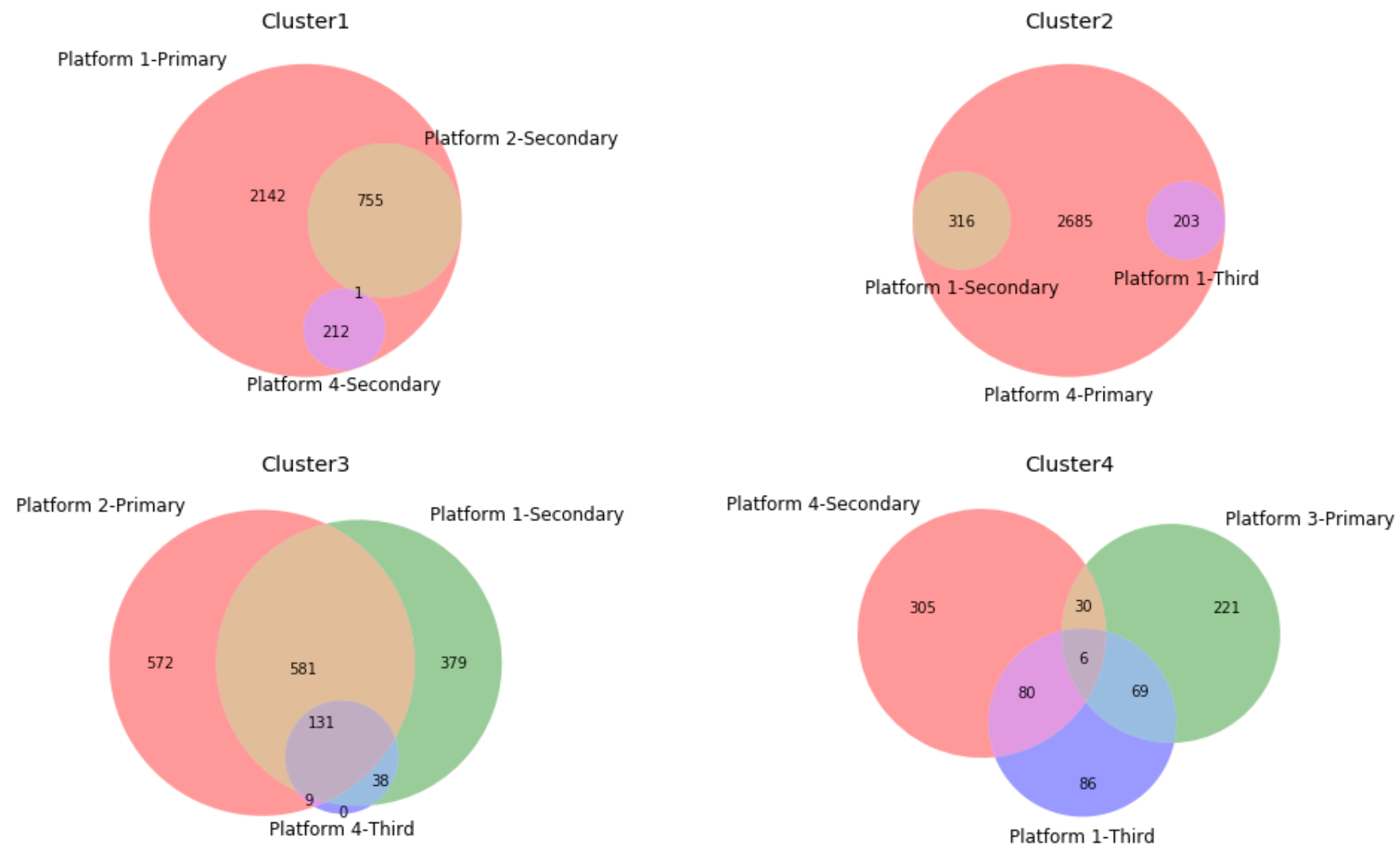
- There was a 21% correlation between Involvement and Platform 2 Primary usage.
- There was a 13% correlation between Experience and Platform 2 Secondary usage.
- It doesn't matter what role a developer is in, it doesn't affect their platform usage.
- There was a 42% average correlation between Involvement and Platform 1 Primary usage.
- correlations could also be caused by the involvement level requires to use specific Platforms because of company regulations or the programming language used.
- Platform 1 seems to be used most by respondents with 4 - 6 years experience. Platform 4 seems to be used more by respondents with 1 - 3 Years experience.
- Platform 4 is easy to use that is why entry level developers are drawn to it. Platform 1 is preferred by experienced developers, maybe because of security features or advanced coding features that entry level developers might not have a use for right now.

Language and Platforms

- There was a 59% correlation between Language 1 and Platform 1 Primary usage. This could be the most used language for this specific platform for respondents who have 4 - 6 years experience.
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- Platform 2 Primary and Language 2 Primary had the highest correlation. This means that there is a positive relationship between the 20% respondents with 6 years experience, the Platform 2 Primary usage respondents and the Language 2 Primary respondents.

	Language 1-Primary	Language 1-Also using	Language 2-Primary	Language 2-Also using	Language 3-Primary	Language 3-Also using	Language 4-Primary	Language 4-Also using	Language 5-Primary	Language 5-Also using	Language 6-Primary	Language 6-Also using
Platform 1-Primary	59%	7%	-16%	-3%	-2%	-1%	-33%	-2%	-10%	0%	-3%	-5%
Platform 1-Secondary	-15%	2%	20%	9%	3%	1%	-5%	-1%	6%	1%	-6%	-2%
Platform 1-Third	-9%	3%	2%	3%	4%	3%	6%	3%	1%	2%	-1%	1%
Platform 2-Primary	-17%	-3%	62%	17%	-3%	-3%	-16%	-2%	-5%	0%	-8%	-4%
Platform 2-Secondary	13%	6%	-8%	6%	5%	1%	-10%	1%	-1%	0%	-4%	-3%
Platform 2-Third	-1%	2%	-5%	2%	2%	2%	1%	1%	2%	0%	-1%	2%
Platform 3-Primary	-7%	4%	-5%	1%	27%	-0%	-7%	6%	-6%	-5%	-5%	0%
Platform 3-Secondary	2%	1%	2%	1%	4%	7%	-4%	0%	-0%	-0%	-2%	2%
Platform 3-Third	-0%	1%	3%	3%	-1%	7%	0%	0%	-3%	1%	-1%	2%
Platform 4-Primary	-29%	-5%	-17%	-7%	-11%	2%	52%	3%	-8%	-0%	13%	7%
Platform 4-Secondary	3%	2%	-0%	0%	0%	2%	7%	6%	-3%	4%	-1%	4%
Platform 4-Third	1%	3%	6%	3%	2%	-1%	-5%	3%	-2%	2%	-3%	1%

What are the top 4 platform combinations?



- Cluster 1 = These could be users who are entry level developers, who are learning different tool for different languages / different use.
- Cluster 2 = These could be users who have a lot of experience in the industry or are forced to stick to a certain platform because of company regulation, safety features or coding features.
- Cluster 3 = These are developers who are not afraid of using multiple platforms. Young energetic professionals is the image that comes to mind.
- Cluster 4 = These are Professionals who are forced to stick to either platform 4 or 3. But they would rather move to 4 as the main Platform because of the extra features.

Further analysis and Conclusion



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- I would want to see the different ages of respondents, this will help me validate the correlation between experience and platform preference.
- I would also want to know where the users are, so that I know which states, countries to reach out to (advertise).
- I would check which countries are most interested in the platform, and make sure I develop the platform to suite their independent needs. The year when the data was collected is important so that we know that the trend we are following is recent.