



DILAN'S TRAVEL GUIDE

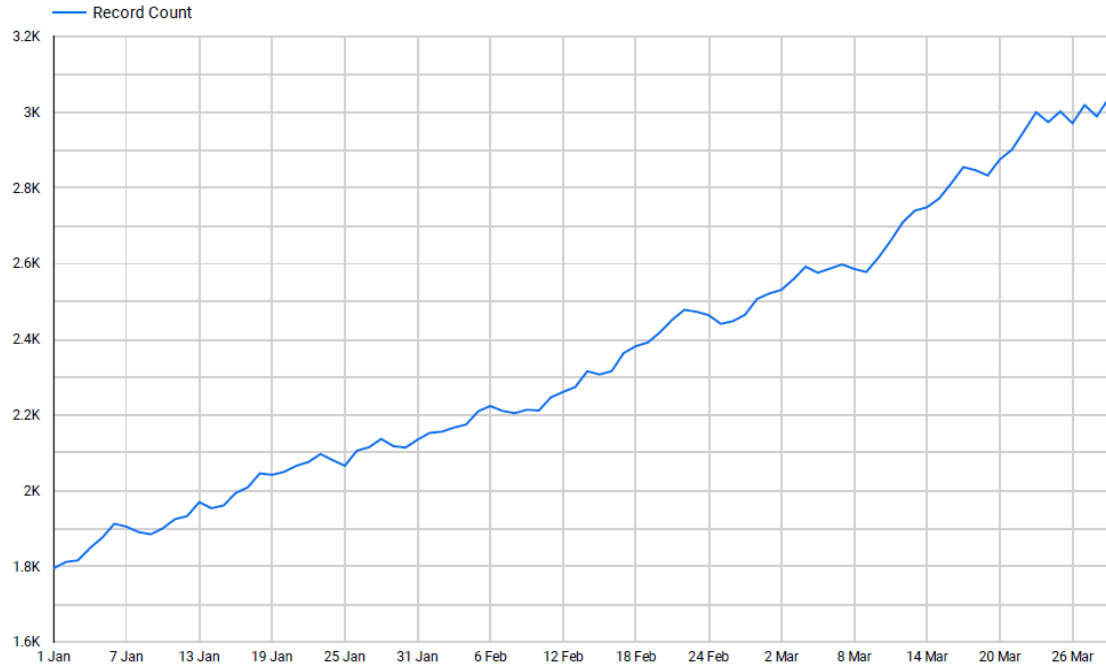
THE FINAL TASK

JUNIOR DATA SCIENTIST'S FIRST MONTH

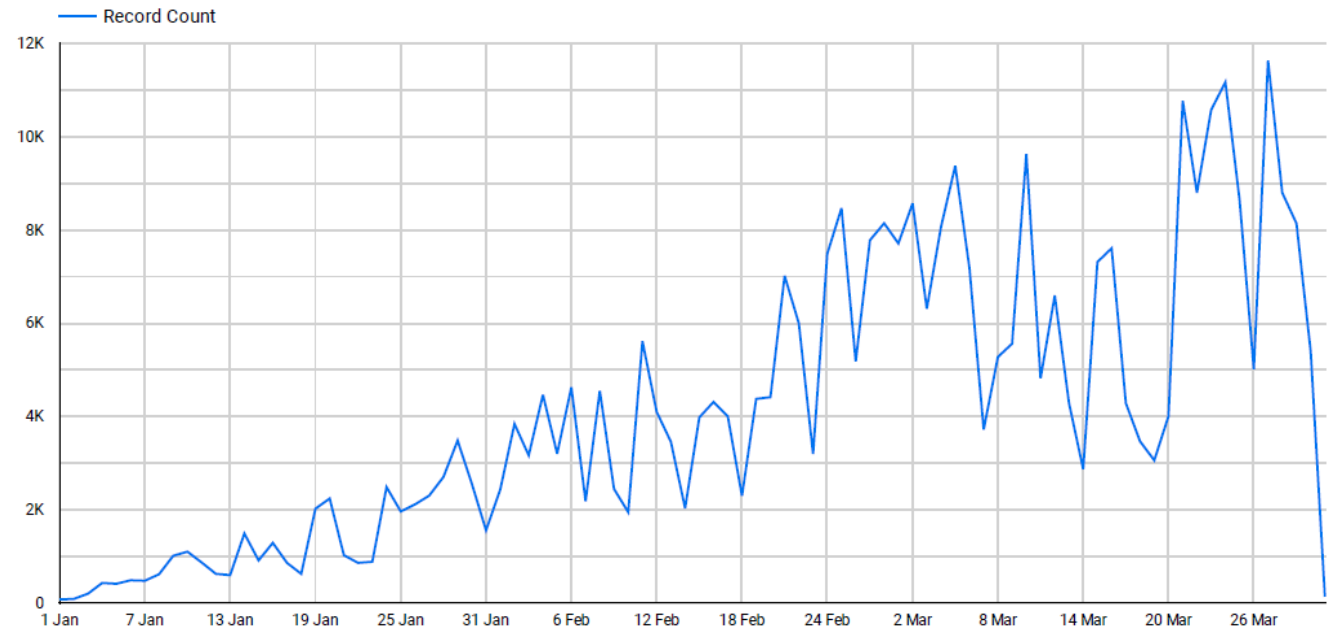
ÉVA GORDOS

BASIC TRENDS

First-time readers



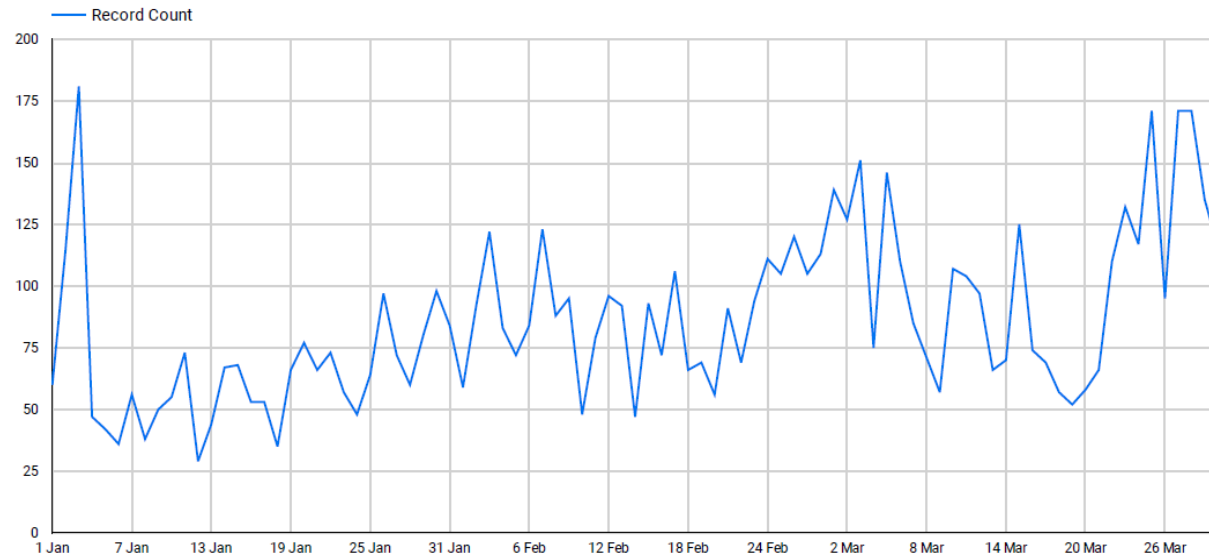
Returning reads



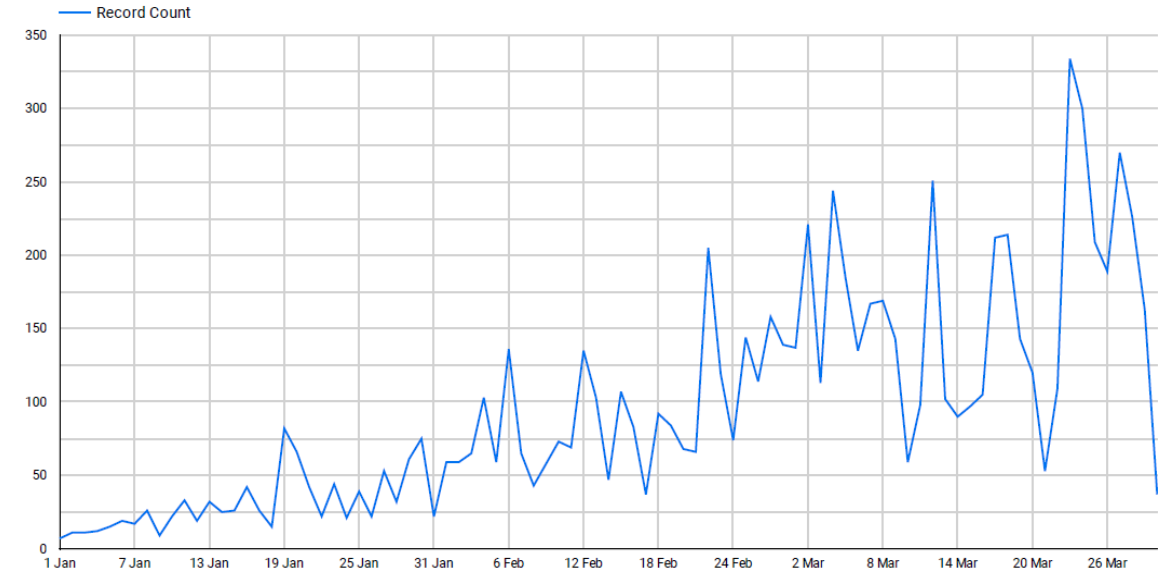
- ❖ constantly growing number of first-time readers, but last data is from 30/03/2018
- ❖ volatile but increasing trend for returning reads; considerable decrease after 29/03/2018
- ❖ returning reads data available until 31/03/2018 05:04:50 - not a whole day, needs to be monitored

BASIC TRENDS

Subscriptions



Number of purchase



❖ subscriptions:

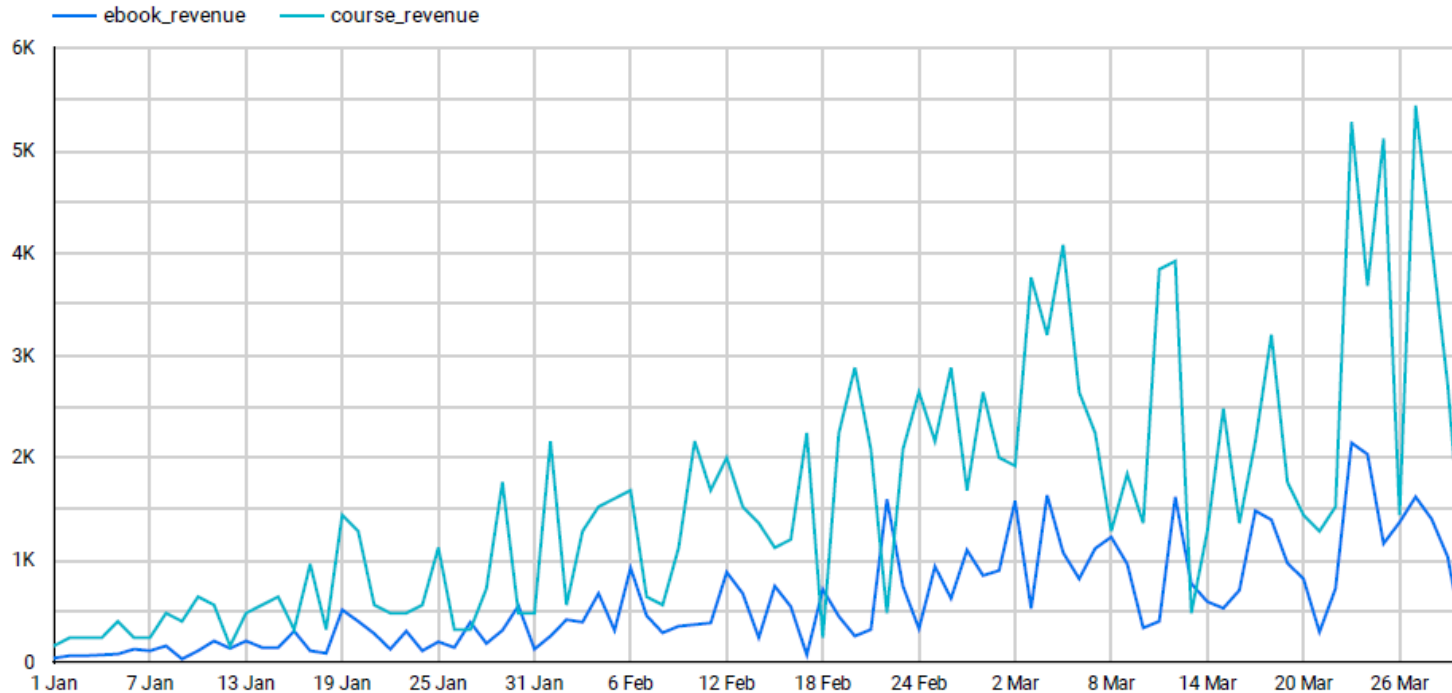
- the peak was at the beginning of January; considerable downfall right after
- slightly increasing, volatile trend
- last data point available on 30/03/2018

❖ number of purchase:

- volatile but increasing trend, significant decrease in the last couple of days - needs to be checked
- last data point available on 30/03/2018

BASIC TRENDS

E-book and course revenue (USD)



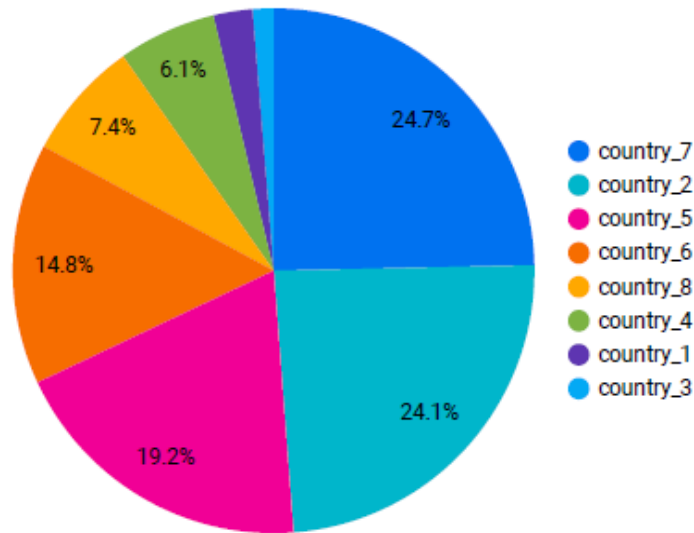
Overview 01/01/2018-31/03/2018

- total first-readers: 210k
- total returning reads: 372k
- total returning readers: 66k
- total subscriptions: 7,6k
- total purchase: 8,4k
- total paying customers: 6,6k
- total revenue: 194k USD

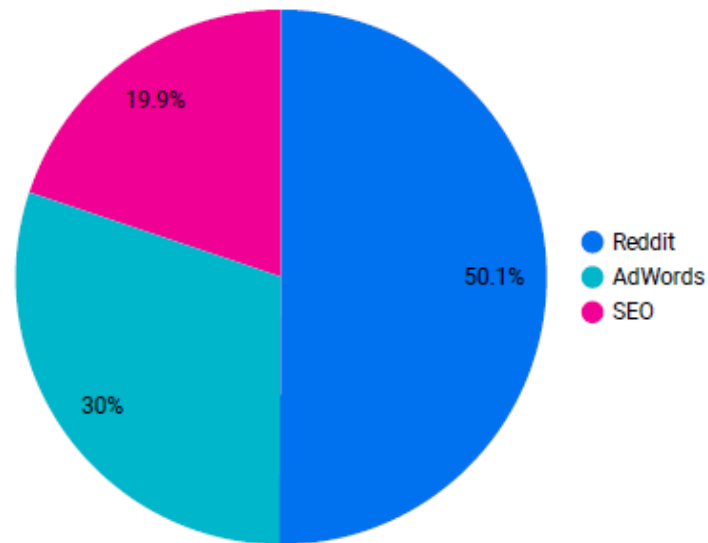
- ❖ volatile but increasing revenue trend for both products, significant decrease in the last couple of days - needs to be checked
- ❖ last data point available on 30/03/2018

BASIC DISTRIBUTIONS

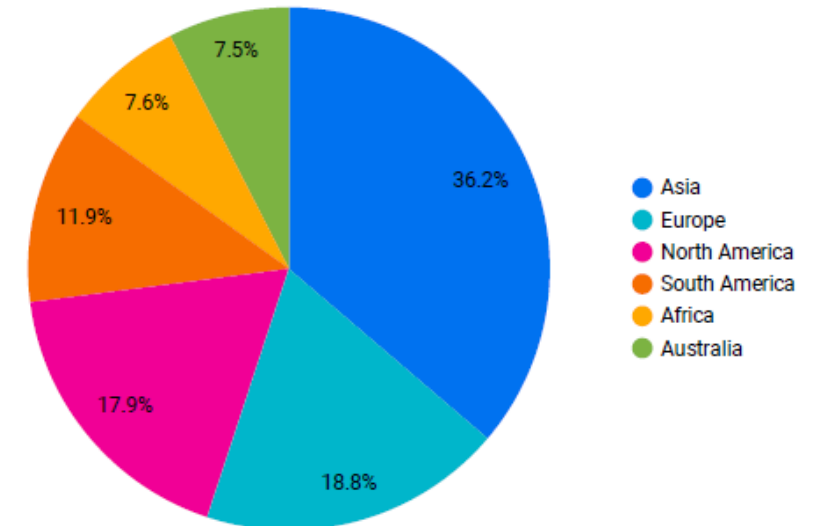
First-time readers by country



First-time readers by source



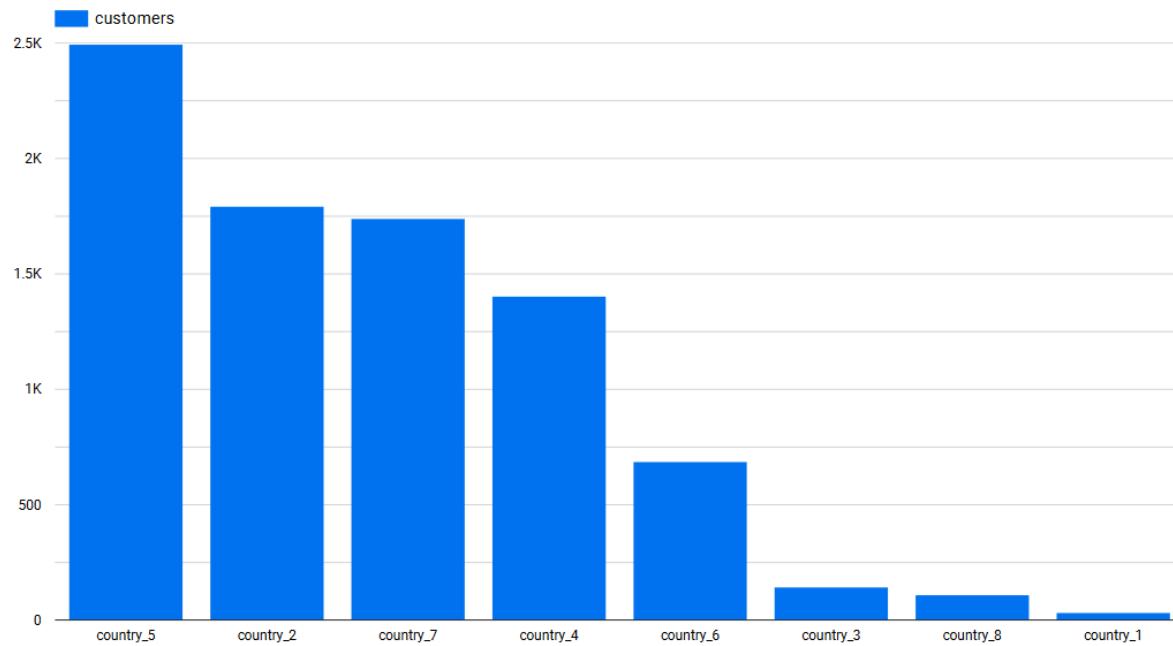
First-time readers by topic



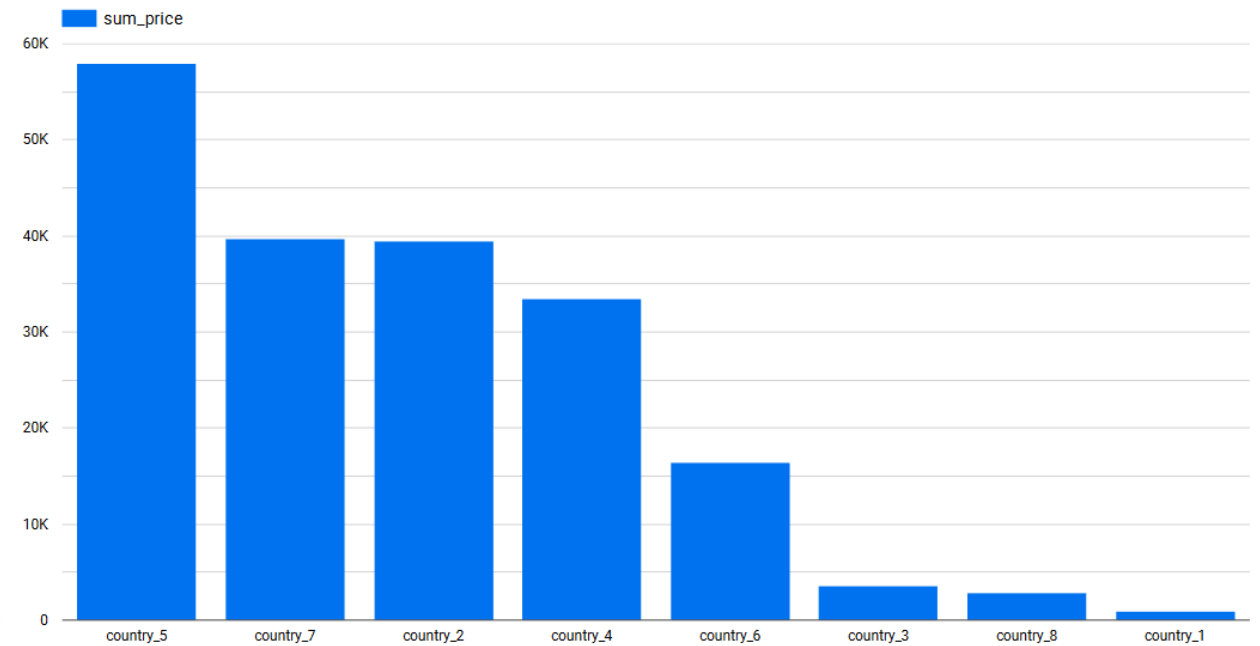
- ❖ the majority of first-time readers comes from country_7
- ❖ the most important source for first-time readers is Reddit (more than 50%)
- ❖ first-time readers' most popular topic is Asia

BASIC DISTRIBUTIONS

Purchase per country



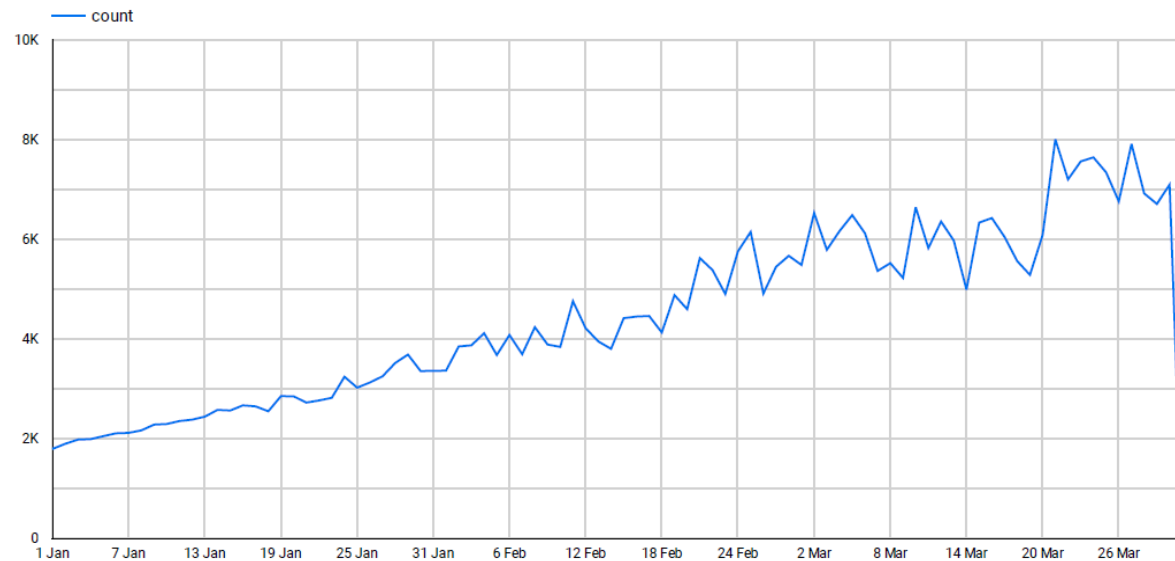
Revenue per country (USD)



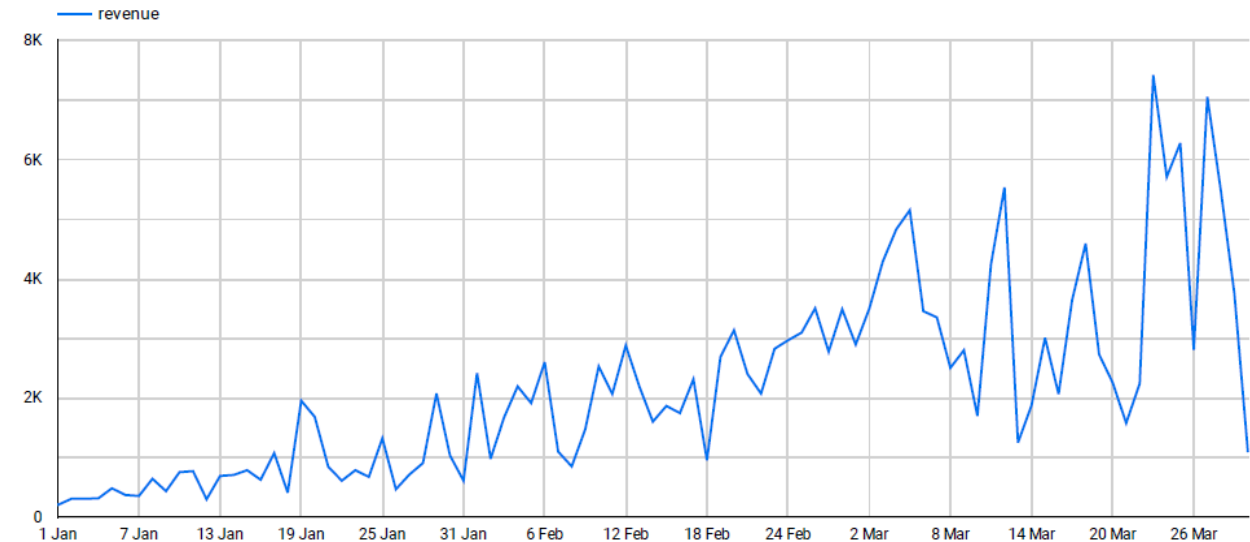
- ❖ the majority of purchases comes from country_5
- ❖ the highest revenue is produced in country_5

KPIs

KPI_1 - Daily visitors



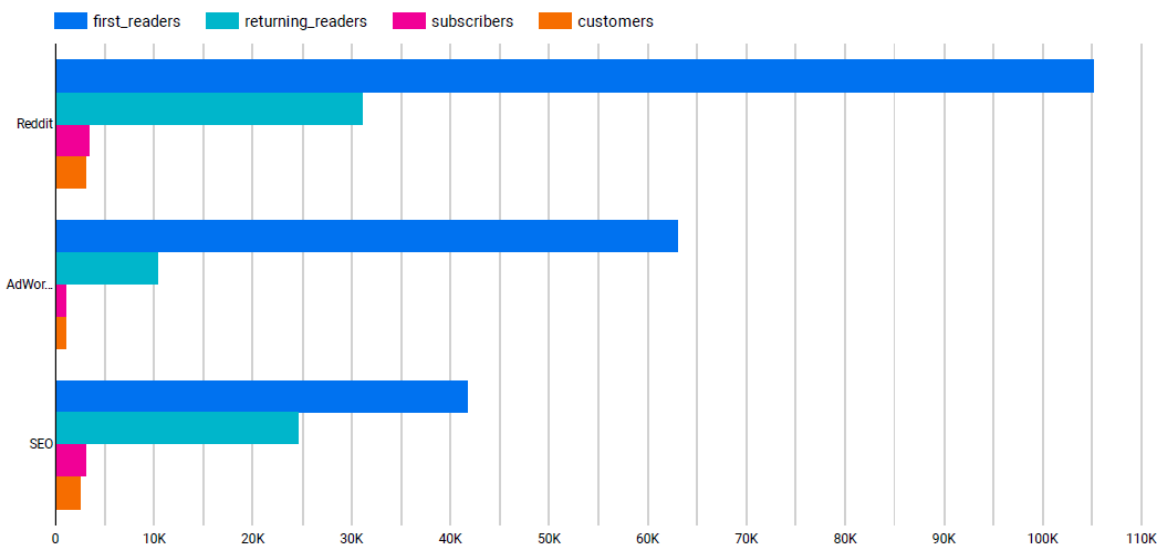
KPI_2 - Daily revenue (USD)



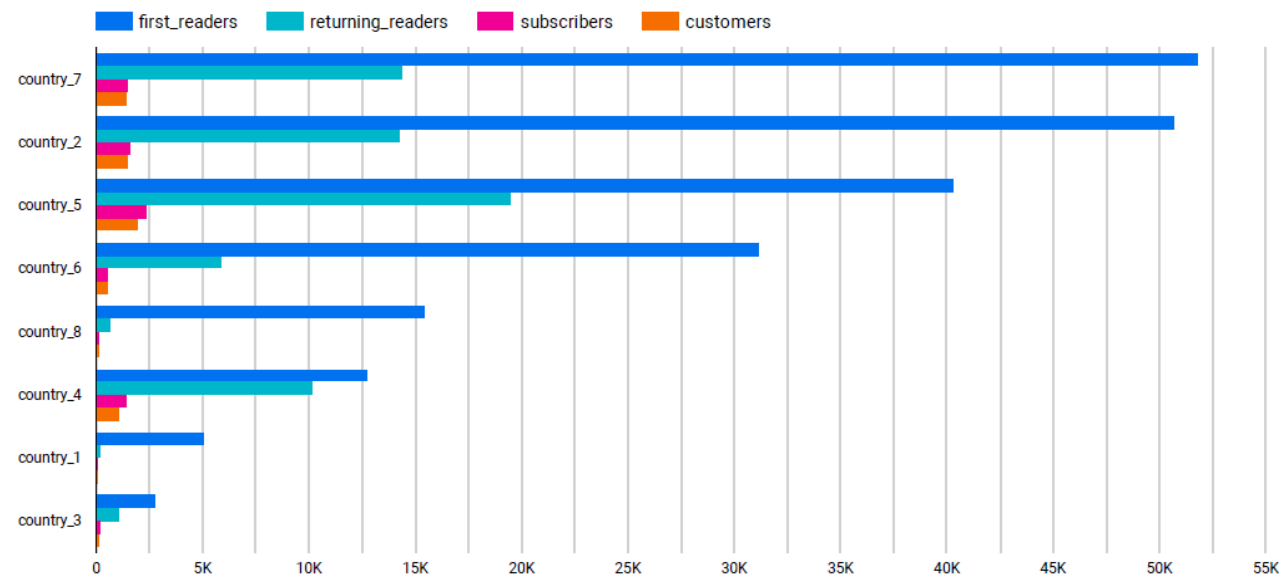
- ❖ visitor: first-time reader or returning reader or subscriber or paying customer (unique user interaction)
- ❖ the number of daily visitors increases, but there is a drop in the last two days that needs further investigation
- ❖ revenue: sum of the price of e-books and video courses purchased
- ❖ the daily revenue trend is quite volatile but increasing; there is a significant drop in the last two days that needs to be checked

FUNNEL ANALYSIS

Funnel analysis by source



Funnel analysis by country



- ❖ only 31,5% of the first-time readers become returning readers and only 12% of returning readers become subscribers
- ❖ almost 90% of subscribers become paying customers
- ❖ the most important source for each funnel step is Reddit
- ❖ AdWords performs better than SEO in case of first-time readers, but SEO brings more loyal visitors
- ❖ visitors from country_5 turn out to be more loyal than visitors from country_7 (more returning readers, more subscribers and more customers come from country_5 than from country_7)
- ❖ practically no subscribers and customers come from country_1 (no returning readers either), country_3 and country_8

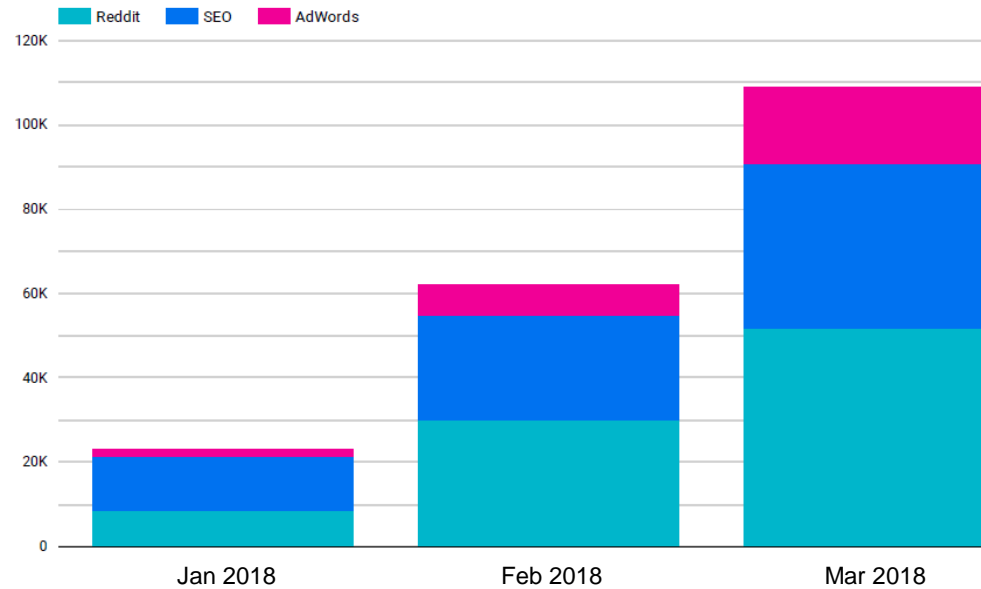
COHORT ANALYSIS

cohort	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
2018-01-01	47	37	28	35	26	25	17	23	36	29	25	28	19	25	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-02	41	42	51	42	38	29	34	39	33	29	24	19	27	23	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-03	38	52	43	36	23	28	34	20	16	18	14	17	10	13	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-04	56	56	42	31	34	42	38	41	33	23	29	26	25	22	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-05	54	48	34	34	30	29	27	28	21	28	21	15	14	5	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-06	79	68	50	53	35	26	19	17	24	27	27	23	8	27	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-07	62	67	61	49	40	32	24	26	23	23	20	8	29	23	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-08	95	91	65	55	44	34	34	32	32	25	5	25	20	12	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-09	110	89	48	39	28	36	28	17	14	5	18	15	9	7	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-10	107	103	69	52	53	38	34	29	22	28	26	15	12	8	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-11	91	103	72	75	54	51	39	25	35	33	25	19	12	25	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-12	132	128	114	82	64	49	39	40	28	20	18	15	24	15	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-13	130	126	93	81	56	33	45	37	19	15	14	24	20	24	1 0 0 0 0 0 0 0 0 0 0 0 0
2018-01-14	122	109	92	61	41	54	37	21	17	14	36	27	31	28	

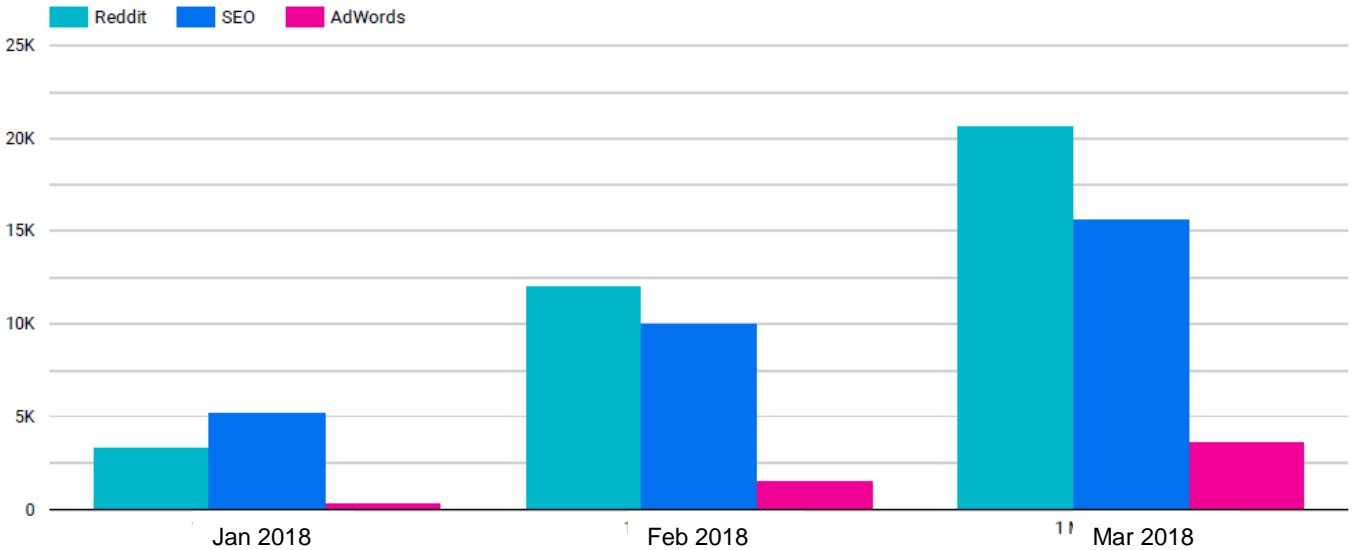
- ❖ user retention analysis for a 14 days timeframe
- ❖ column 0-13: daily number of returning readers compared to first-time readers (by days passed)
- ❖ no significant similarities/patterns can be detected in the user behaviour

RETURN ON MARKETING COST

Revenue distribution by source (USD)



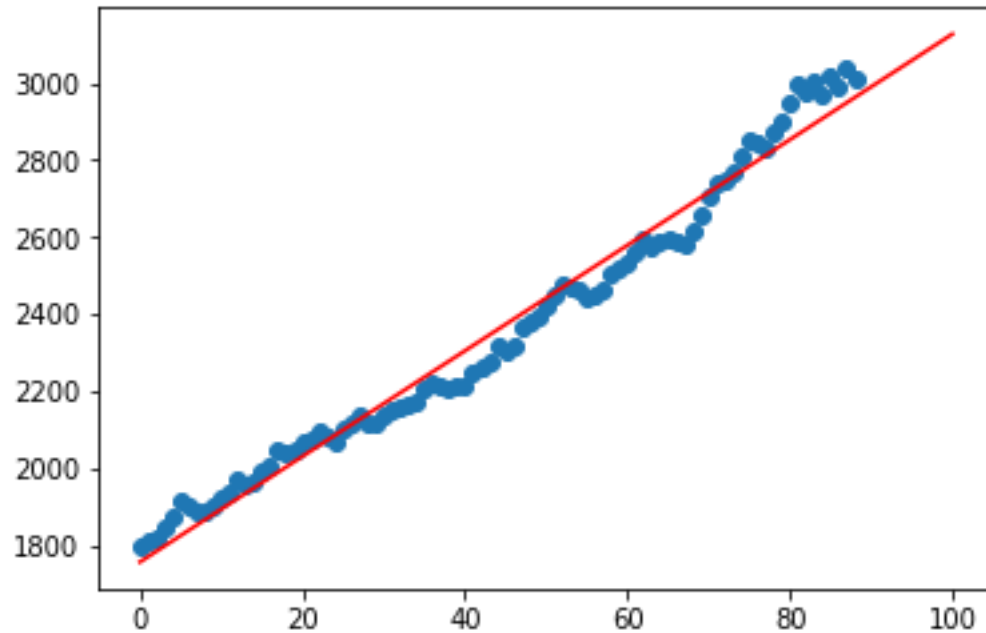
Return on marketing cost (%)



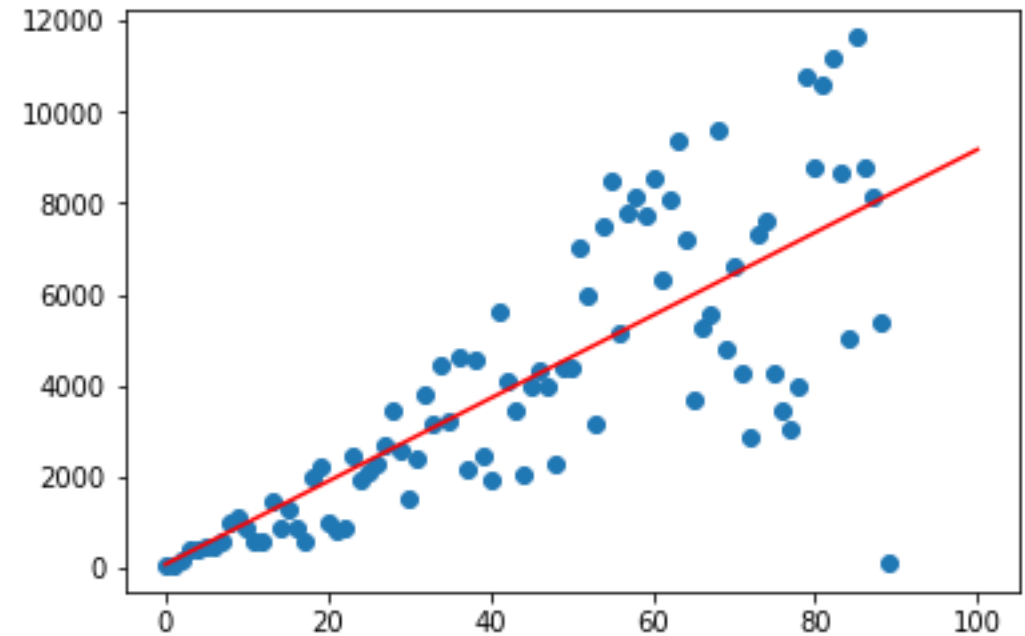
- ❖ the highest share of the revenue in January came from SEO, but in February and March Reddit became more important
- ❖ in January, SEO performed the highest return on marketing cost, but in February and March Reddit was the best performer
- ❖ the return on marketing cost increases month by month for each source type, but AdWords is the least efficient method for revenue-generating

FUTURE TRENDS

First-time readers



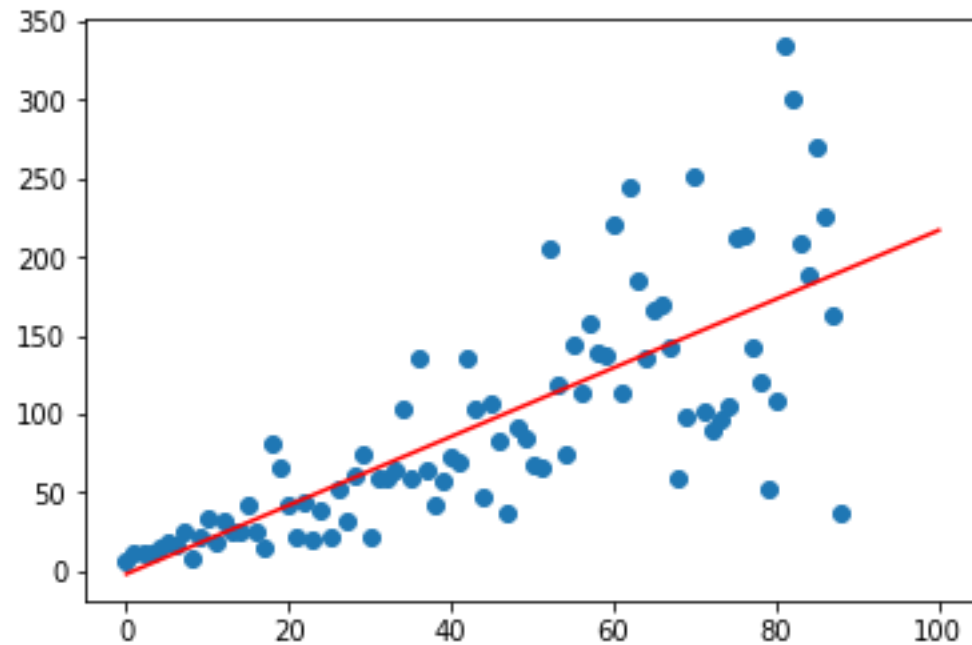
Returning reads



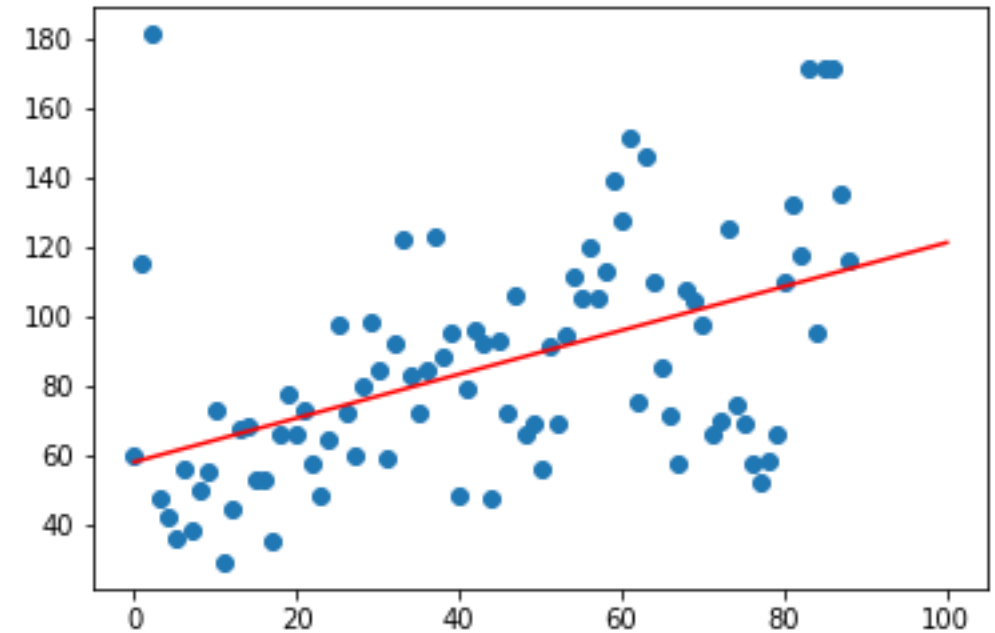
- ❖ regression shows a constant increase in the number of first-time readers
- ❖ according to the analysis, the trend will remain increasing in case of the number of returning reads, but the last days' activity needs to be monitored (as the last data point available is 31/03/2018 05:04:50, we do not have all data for 31/03/2018 which can alter the analysis)

FUTURE TRENDS

Subscriptions



Purchases



- ❖ for the number of subscriptions and purchases, the trend line is moderately reliable according to the analysis, but in both cases it shows increasing activity for the future

CONCLUSION

❖ Countries to be prioritised: country_5 and country_7

❖ Investments:

– marketing budget:

- budget to be increased for Reddit & SEO
- budget to be decreased for AdWords

– time:

- focus on blog posts primarily about Asia, then North-America and Europe
- less focus on South-America, Australia and Africa

CONCLUSION

- ❖ Investigation needed for the last days' drop in the number of returning readers, subscribers and purchases (revenue)
- ❖ Focus on turning
 - first readers into returning readers
 - returning readers into subscribers
 - what was the root of the peak at the beginning of January? if e. g. a campaign, it seemed to be efficient, could be used again