Data Analysis for *TransWorld* Travel Blog*
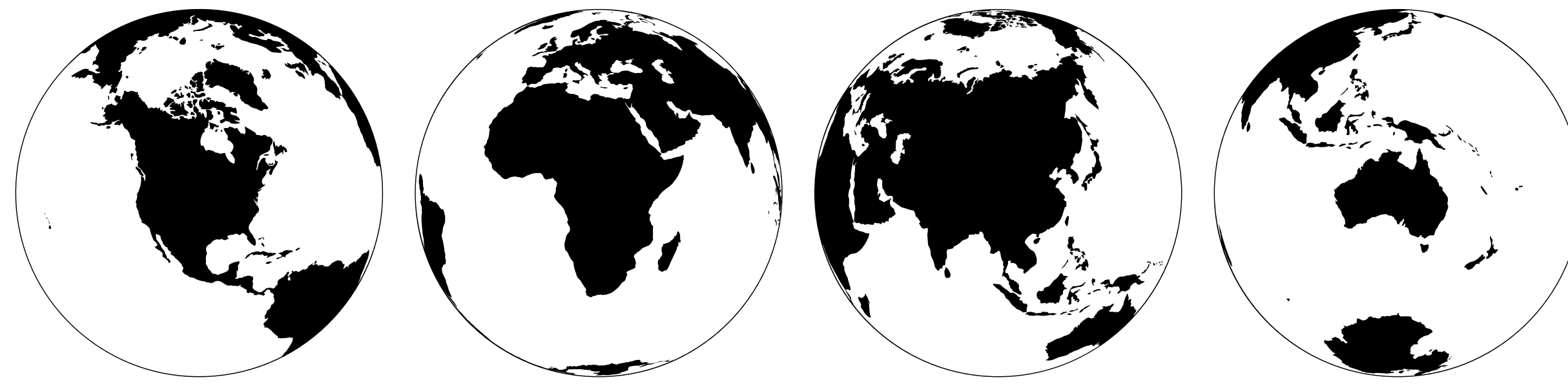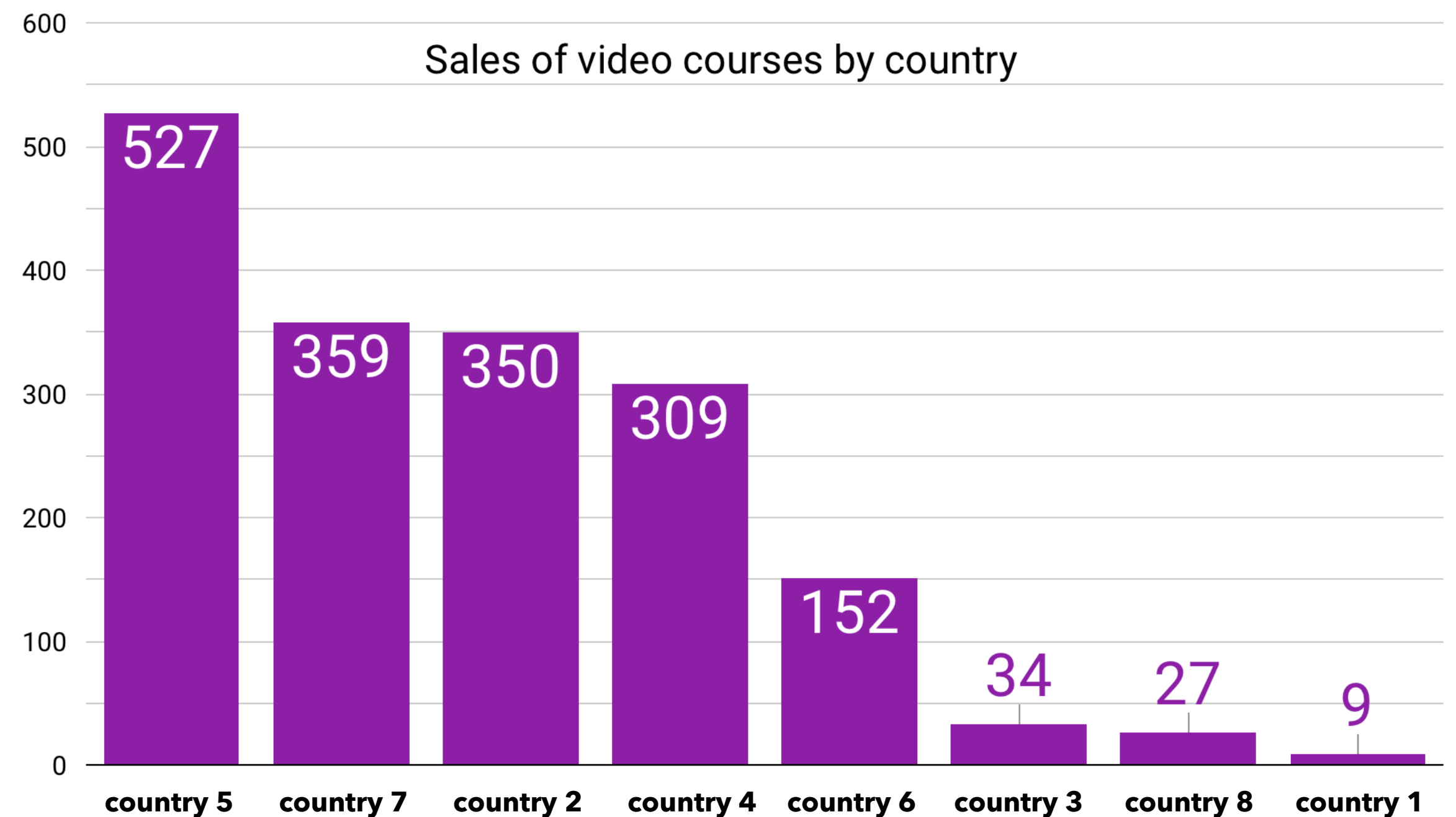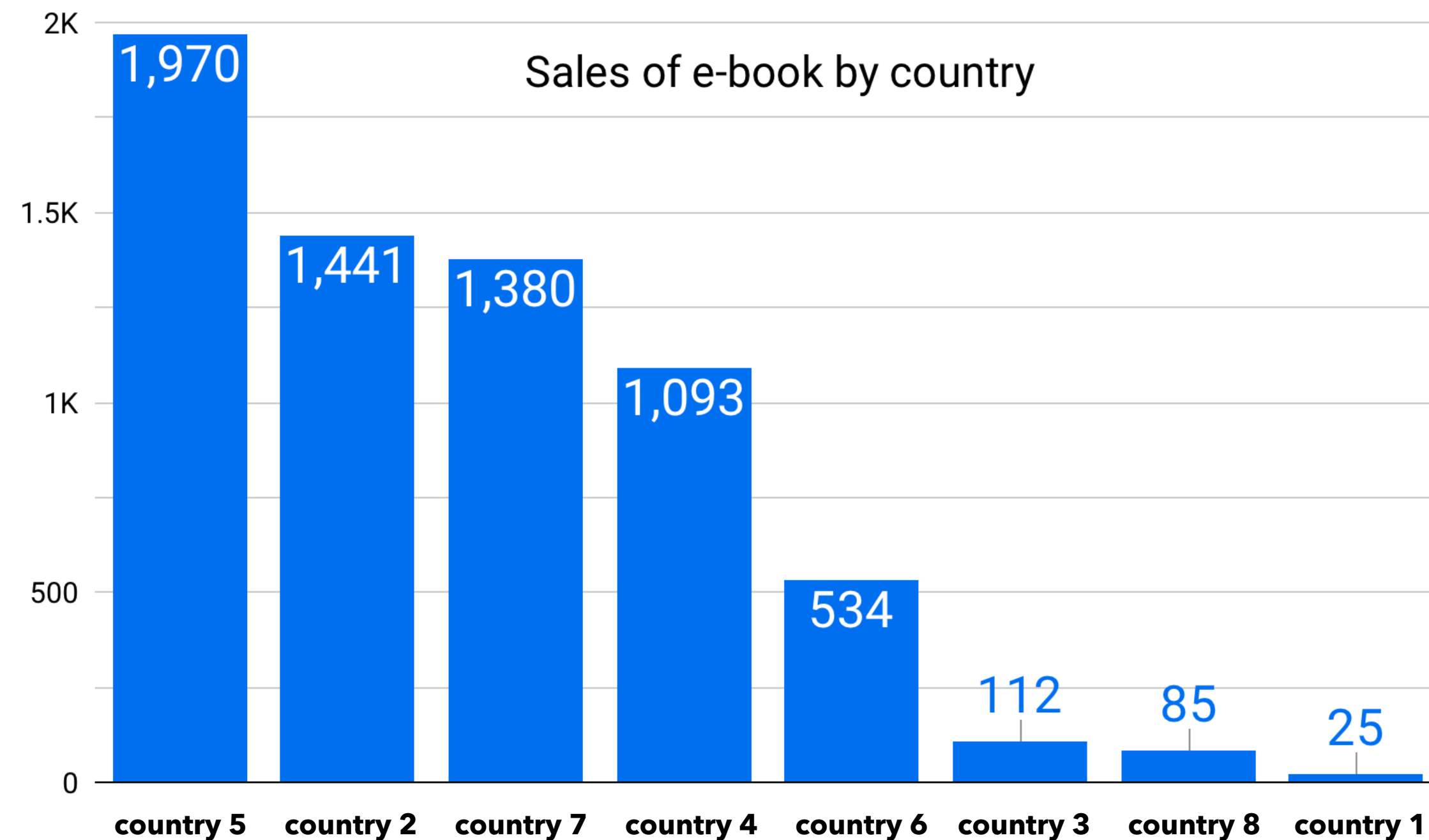
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*Based on a hypothetical business model/scenario. Does not reflect or represent any business and/or website existing in the past, present or any phase of development. Any similarities in name or nature to such a business and/or website is purely coincidental.
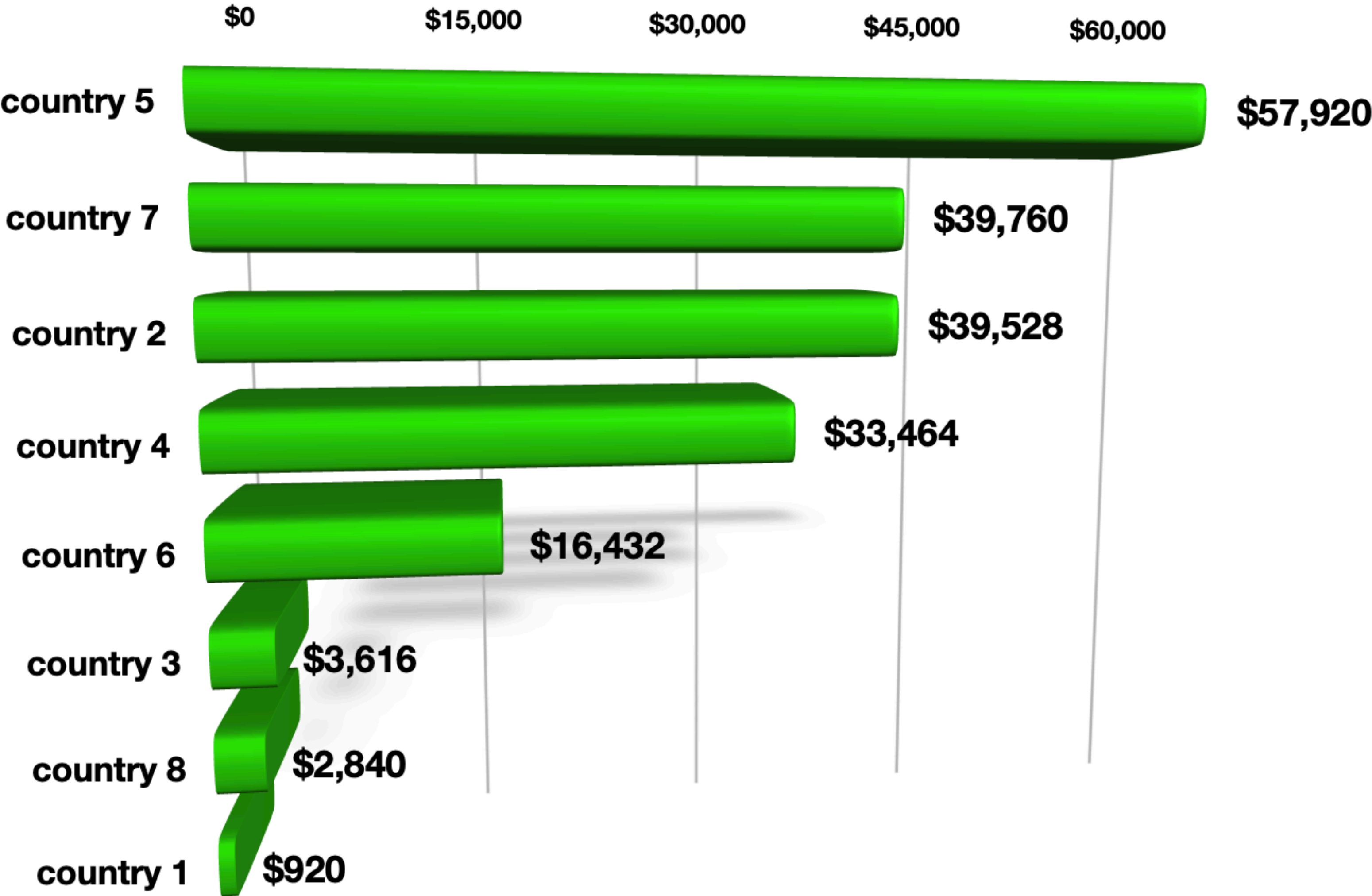
- ❖ Visitors to *TransWorld* can purchase materials covering an array of travel related topics, either in e-book ($8) or video format ($80).

- ❖ Articles and stories cover all 6 continents.

- ❖ This data analysis focused on 8 countries from which the *TransWorld* blog regularly receives unique visitors.

- ❖ Key areas of interest in this analysis include patterns in sales, popularity of travel topics, and Internet sources that visitors used to discover the *TransWorld* blog.
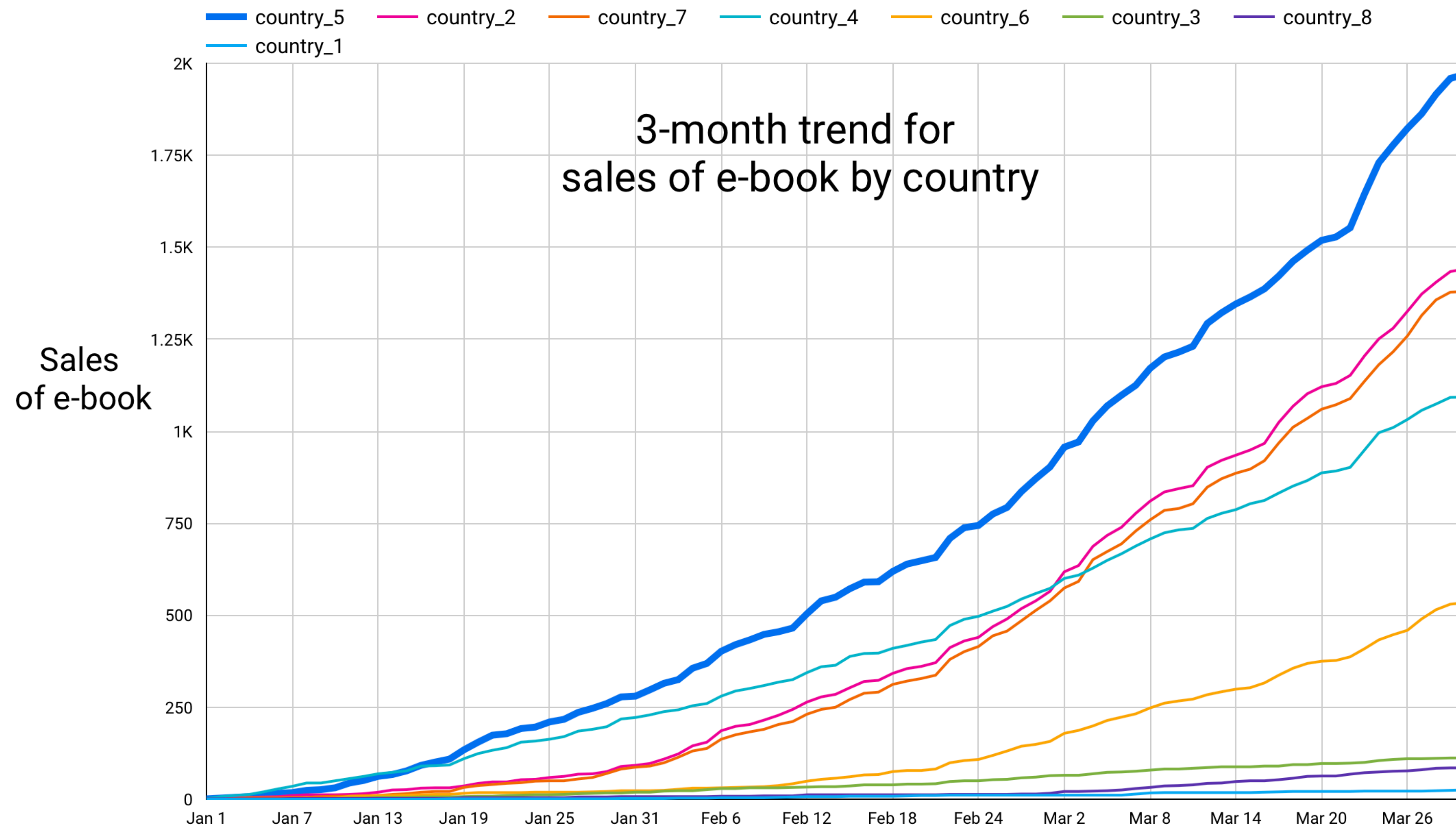
Sales by Country

Sales of e-book by country

country 5	1,970
country 2	1,441
country 7	1,380
country 4	1,093
country 6	534
country 3	112
country 8	85
country 1	25

Sales of video courses by country

country 5	527
country 7	359
country 2	350
country 4	309
country 6	152
country 3	34
country 8	27
country 1	9

✱ Country 5 is the clear leader with respect to both e-book (1,970) and video course (527) sales.

✱ Overall, there appears to be two tiers of countries with respect to sales activity:

  ✱ In addition to country 5, countries 2, 7 and 4 comprise the first tier, which involves comparably robust sales.

  ✱ In the second tier, the most active country (#6) has approximately half the sales of the least active country (#4) in tier one.

  ✱ The rest of the second tier involves comparably meager sales, where the combined sales from countries 3, 8, 1 were less than half of country 6, with respect to both the e-book and video course.

Total Revenue by Country

	$0	$15,000	$30,000	$45,000	$60,000

country 5 — $57,920

country 7 — $39,760

country 2 — $39,528

country 4 — $33,464

country 6 — $16,432

country 3 — $3,616

country 8 — $2,840

country 1 — $920

✱ Not surprisingly, Country 5 is the also the clear leader with respect to total revenue.

✱ Countries 7 and 2 have provided nearly identical revenue figures at just under $40K each.

✱ The country with the lowest revenue in tier 1 (#4) still provides nearly $10K more revenue than all of the countries in tier 2 (6,3,8,1) combined.

✱ By the same token, country 6 provides over twice the revenue of countries 3, 8 and 1 combined.

3-month trend for sales of e-book by country

Sales of e-book

Legend: country_5, country_2, country_7, country_4, country_6, country_3, country_8, country_1

* In addition to total sales and revenue, the sales trends over the last three months also follow two tiers.

* The first tier has been quite active, typified by country 5, where sales have doubled in the last month.

* Conversely, sales from countries in the second tier (especially 3, 8 and 1) have never achieved any marked rate of increase and remain flat.

3-month trend for
video sales by country
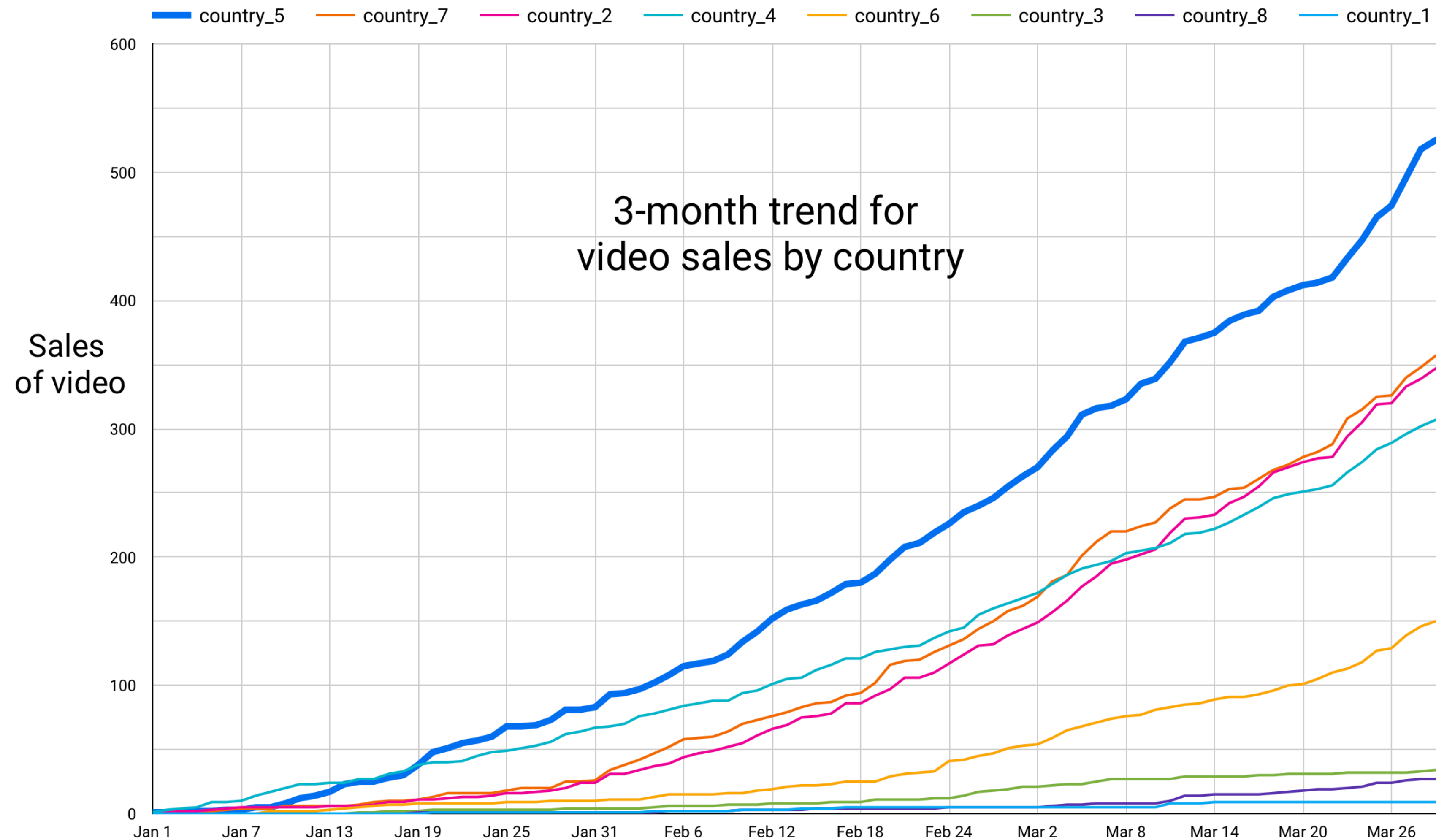
Sales
of video

* The sales trends for the video course follow the same pattern as those for the e-book over the past 3 months.

* Unlike with e-book sales however, there is not as much separation between countries 7 & 2 and country 4
 in terms of their sales trajectories beginning in the month of March.

Total Revenue by Country, Source

Total revenue (country X source)

	Reddit	SEO	AdWords
Country 1	$0	$920	$0
Country 2	$18,688	$17,552	$3,288
Country 3	$1,848	$1,520	$248
Country 4	$15,032	$9,096	$9,336
Country 5	$28,056	$20,184	$9,680
Country 6	$7,536	$8,200	$696
Country 7	$18,600	$16,752	$4,408
Country 8	$0	$2,832	$8
Total $ by source	$89,760	$77,056	$27,664

✳ Nearly half (48.4%) of the revenue from Country 5 arrives from readers of Reddit. (This is also the most lucrative country/source combination by nearly 40%.)

✳ Readers from Reddit overall provide nearly half (46%) of total revenue, with Reddit as part of 3 of the 5 most lucrative country/source combinations (with Countries 5, 7 and 2).

✳ Readers from SEO provide the other 2 of the 5 most lucrative country/source combinations (with Countries 5 and 2).

✳ Conversely, revenue from readers arriving via AdWords notably lags behind, with none of its combinations with countries reaching $10K.

✳ Overall readers from Reddit and SEO provide significantly greater revenue (over 3X greater and 2.8X greater respectively) than readers from AdWords.
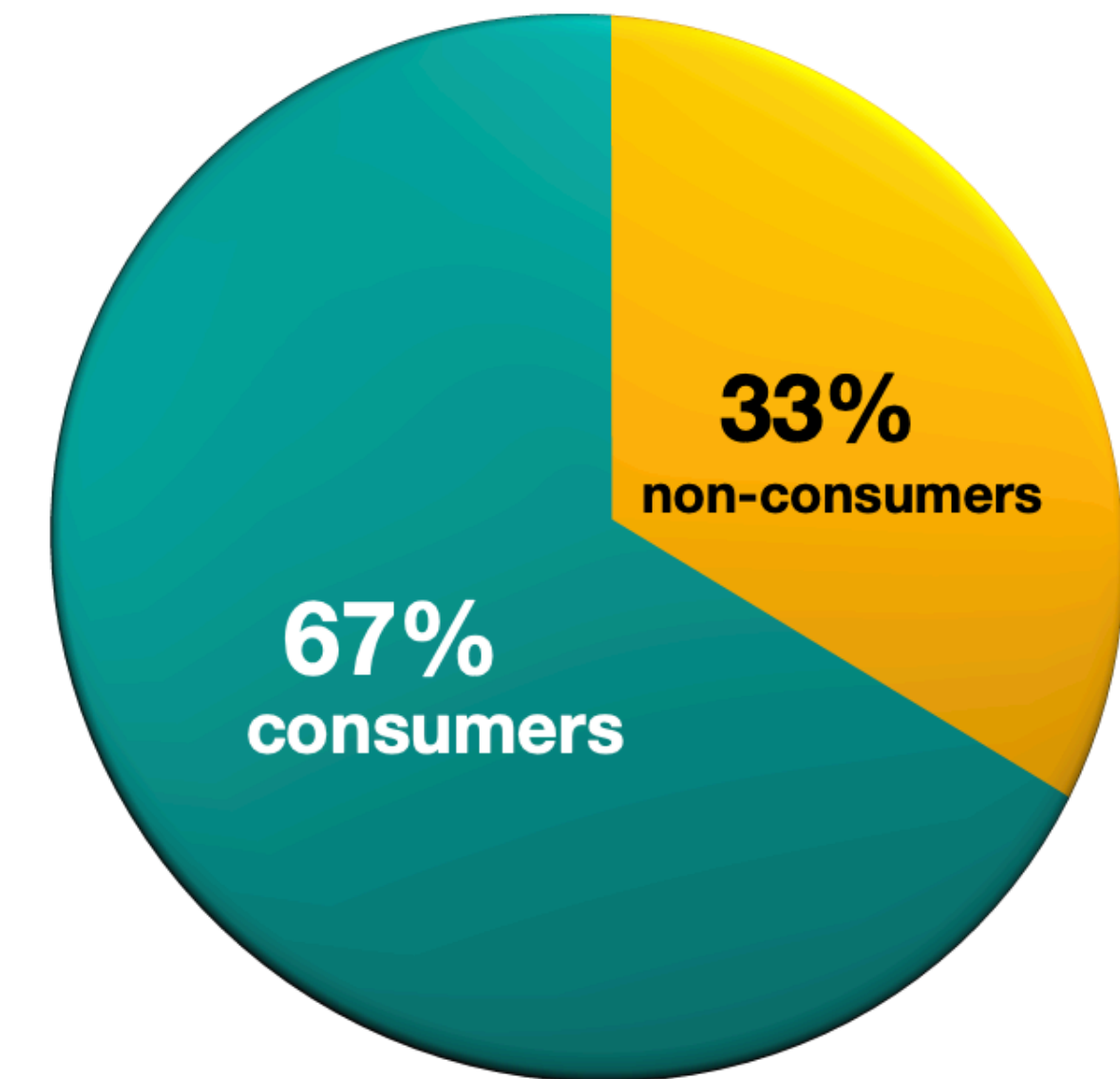
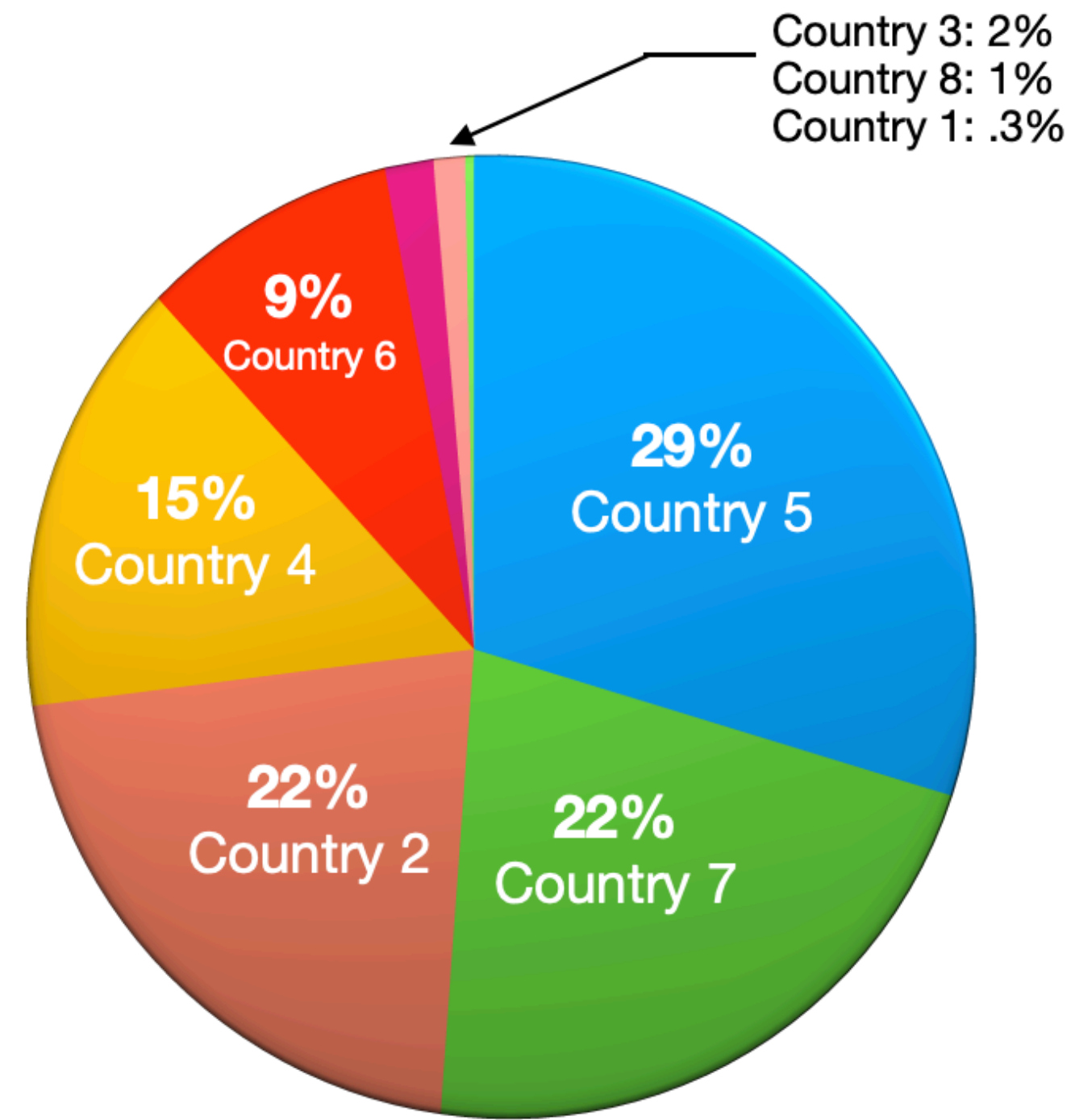# Subscribers by Country, Source
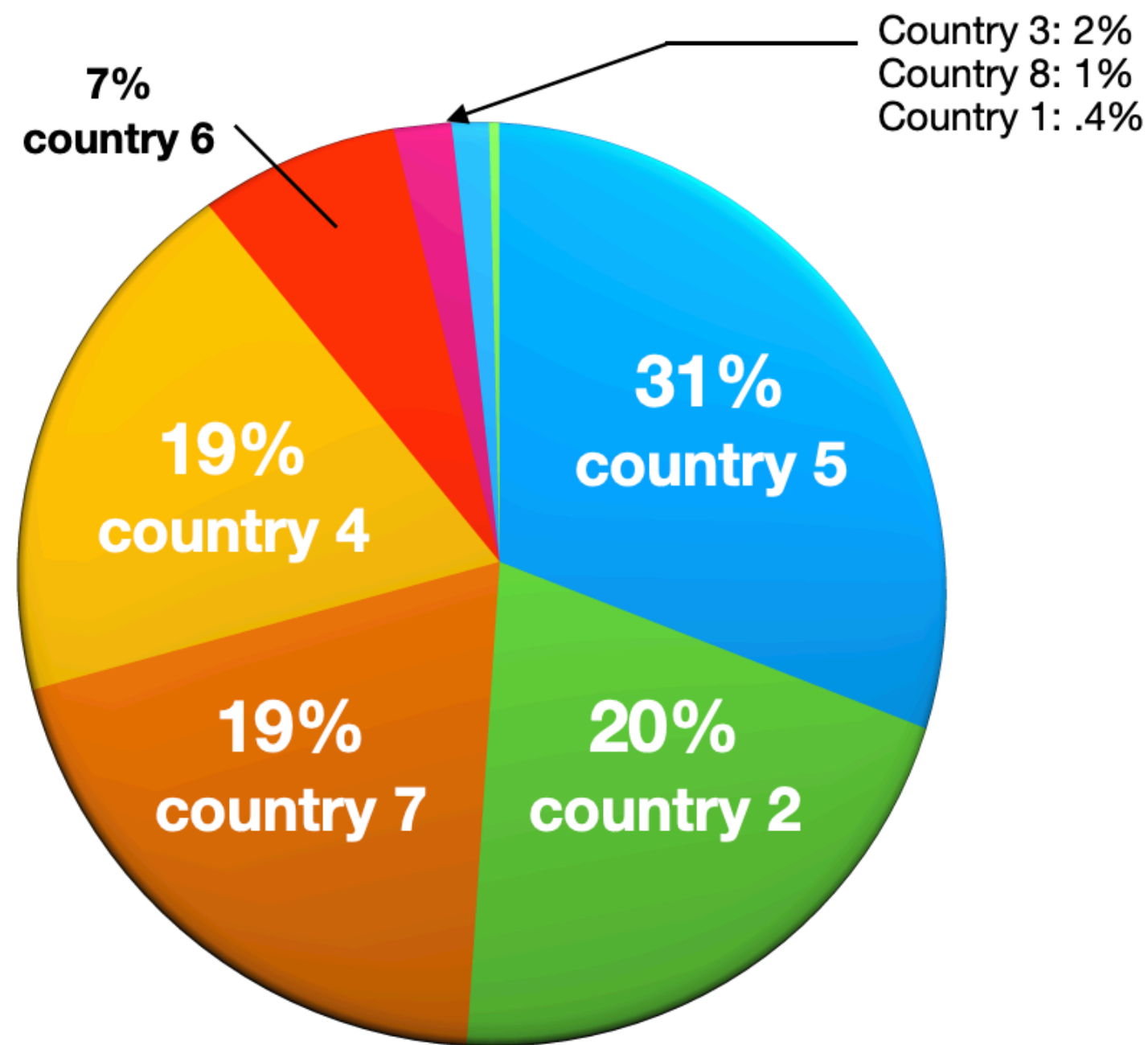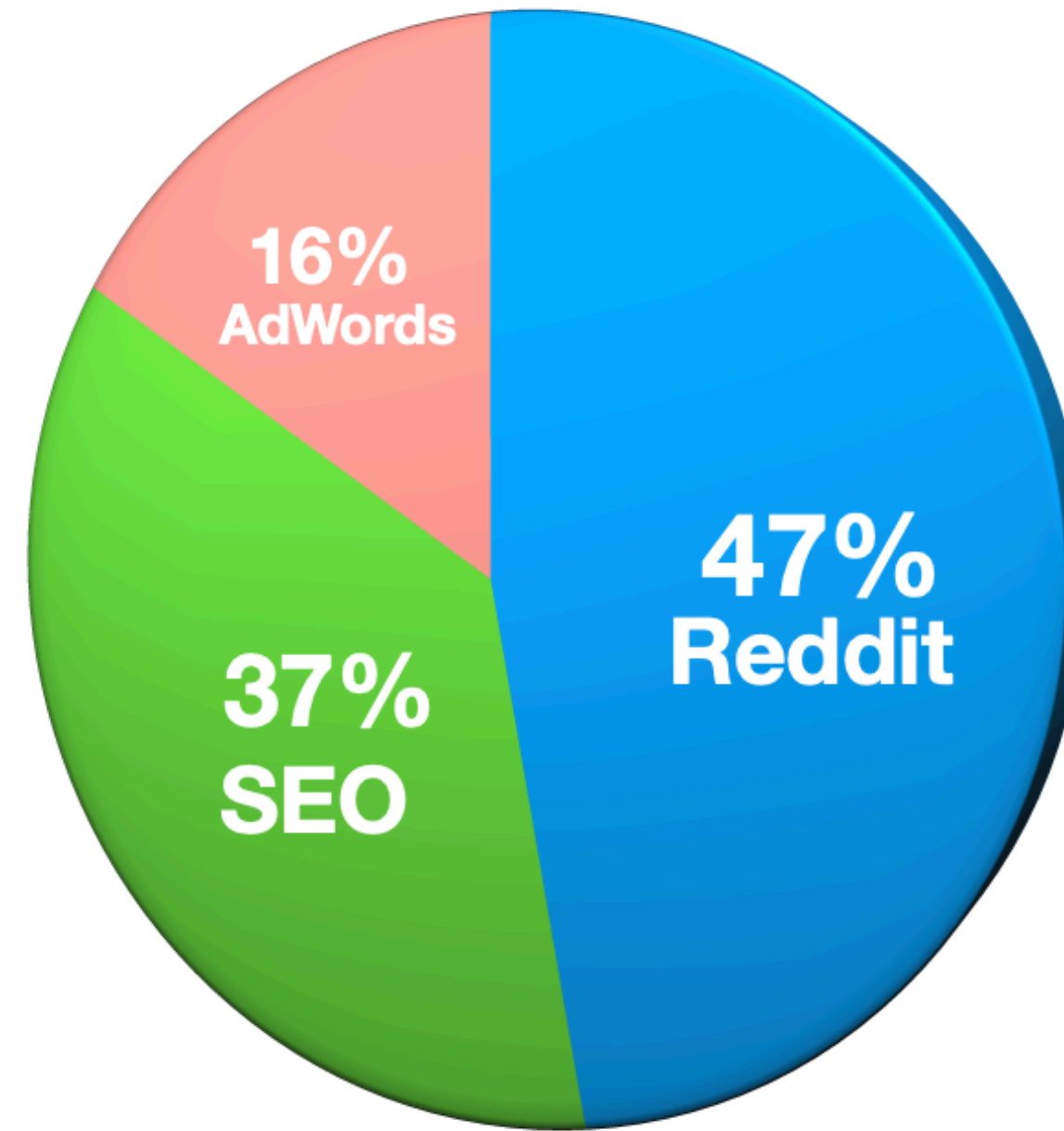

Subscribers by Country
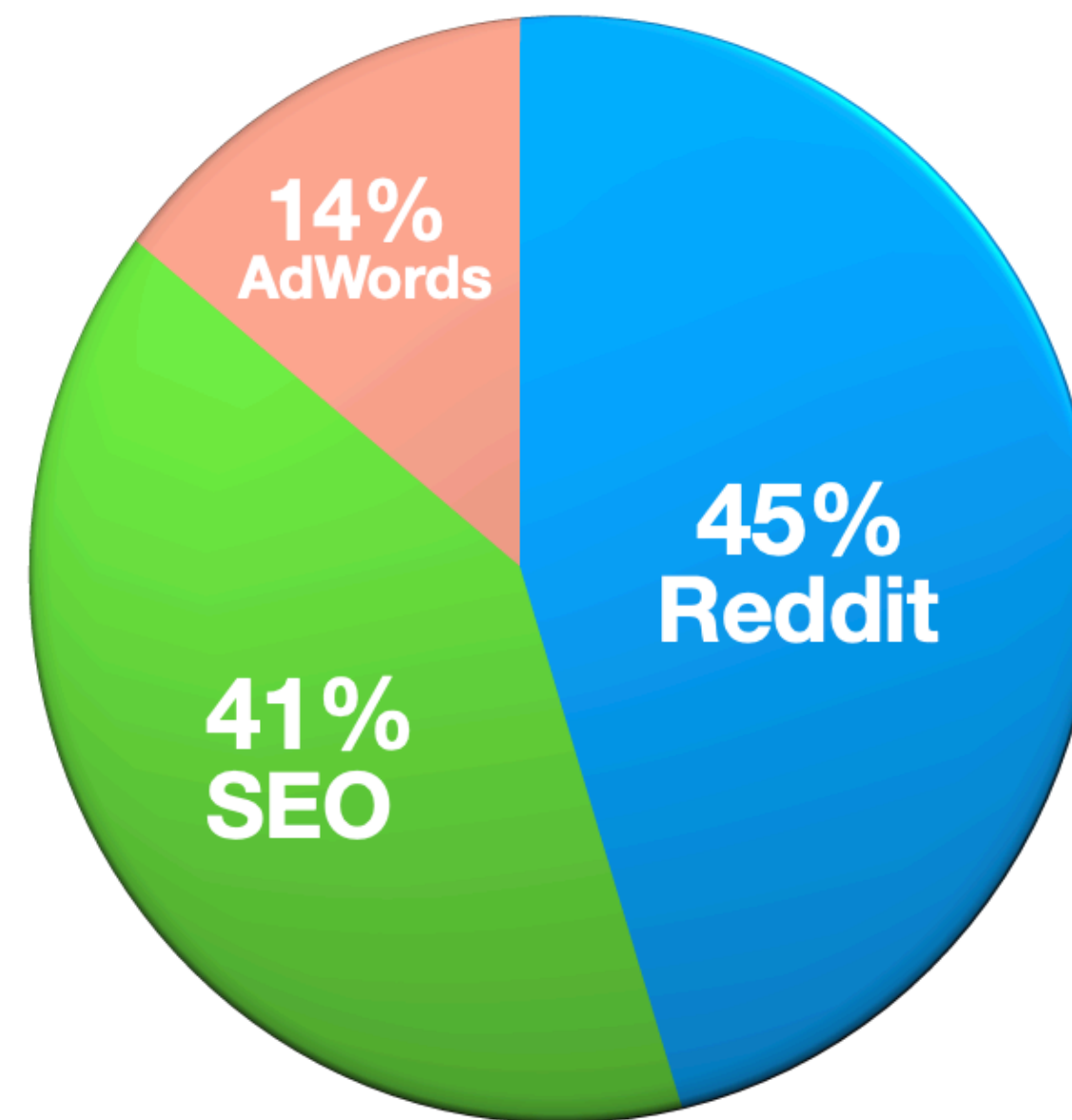
Subscribers by Source

Subscribers as Consumers

* Nearly 1/3rd of all readers who subscribed to the newsletter were from country 5.
  One in five subscribers were from country 2, with nearly the same percentages from countries 4 and 7.

* Reddit and SEO provided comparable numbers of subscribers, with well over 8 in 10 subscribers arriving from either of these two sources.

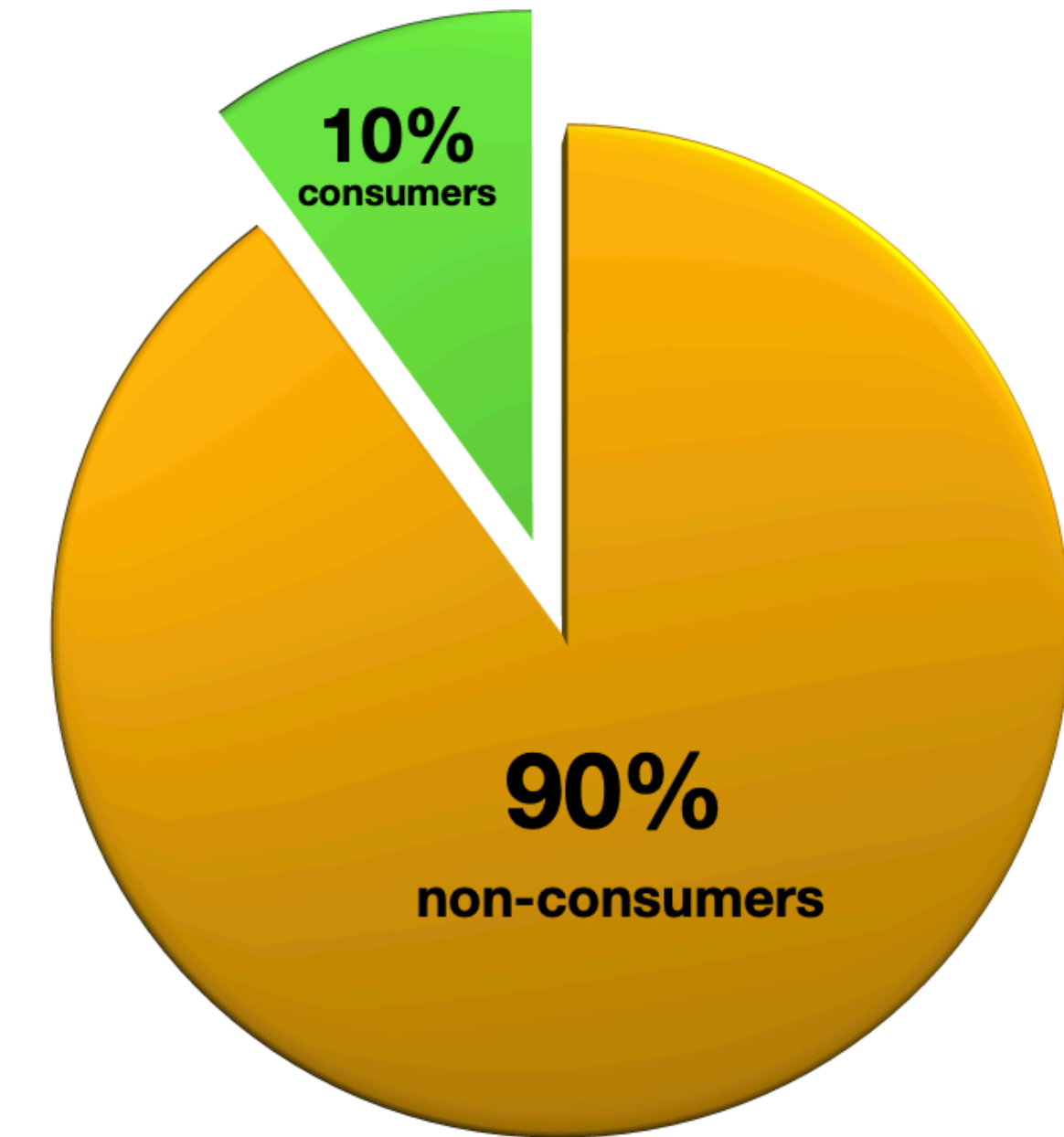* It is worth noting that 2 out of 3 subscribers also made purchases from the website.

Returning Readers by Country, Source

Country 3: 2%
Country 8: 1%
Country 1: .3%

29%
Country 5

9%
Country 6

15%
Country 4

22%
Country 2

22%
Country 7

16%
AdWords

47%
Reddit

37%
SEO

10%
consumers

90%
non-consumers

Returning Readers by Country   Returning Readers by Source   Returning Readers as Consumers

∗ Among readers choosing to return to the website, nearly 3 in 10 were from Country 5.
  Over 4 in 10 were from either country 7 or 2.

∗ Nearly half (47%) of returning readers originally arrived to the blog via Reddit, with nearly 4 in 10 (37%)
  arriving via SEO.

∗ Repeat traffic to the blog, however, is not readily associated with sales, as only 1 in 10 readers returning
  to the blog ultimately made a purchase.

Popularity of Topics Among Consumers
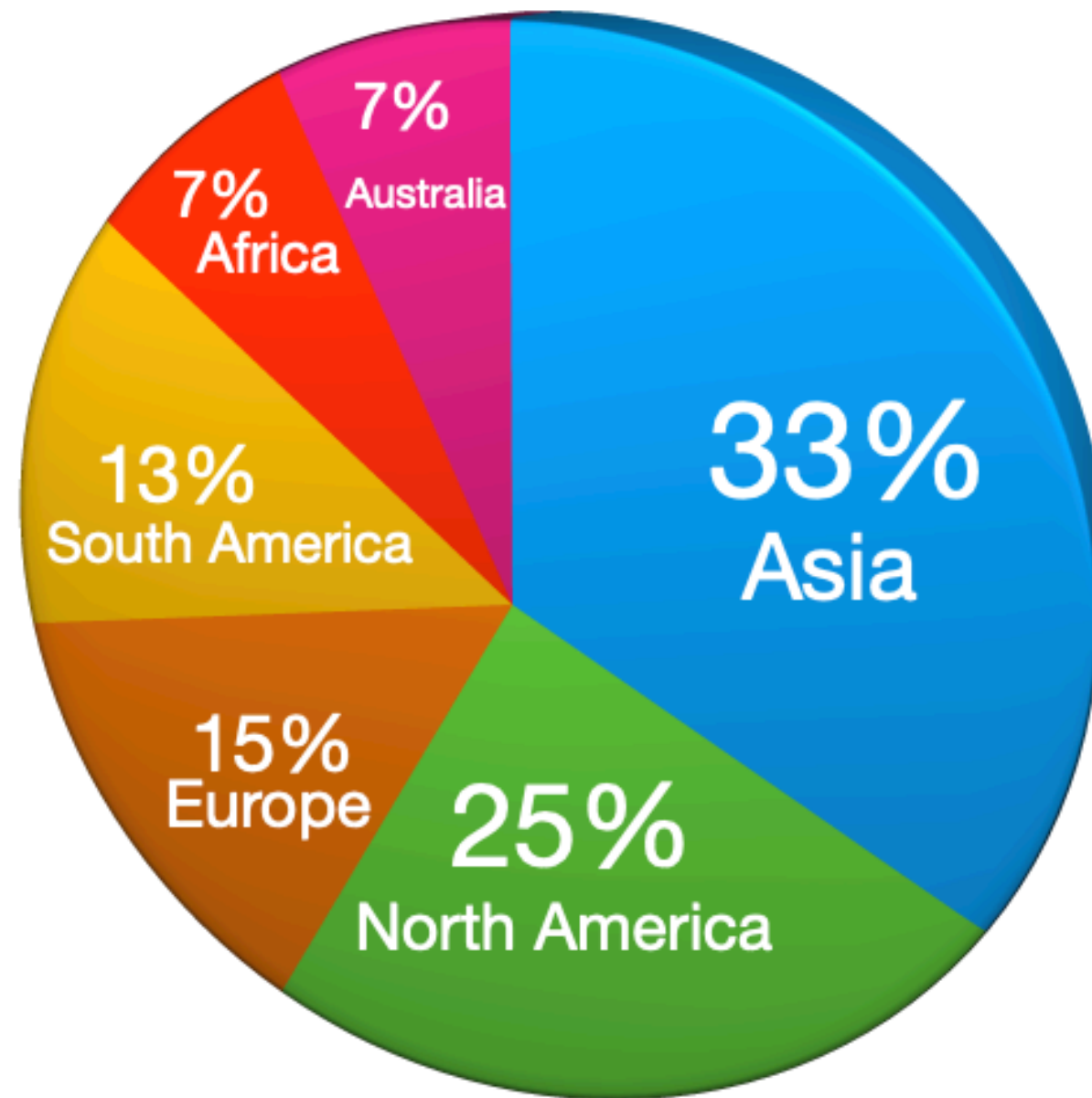
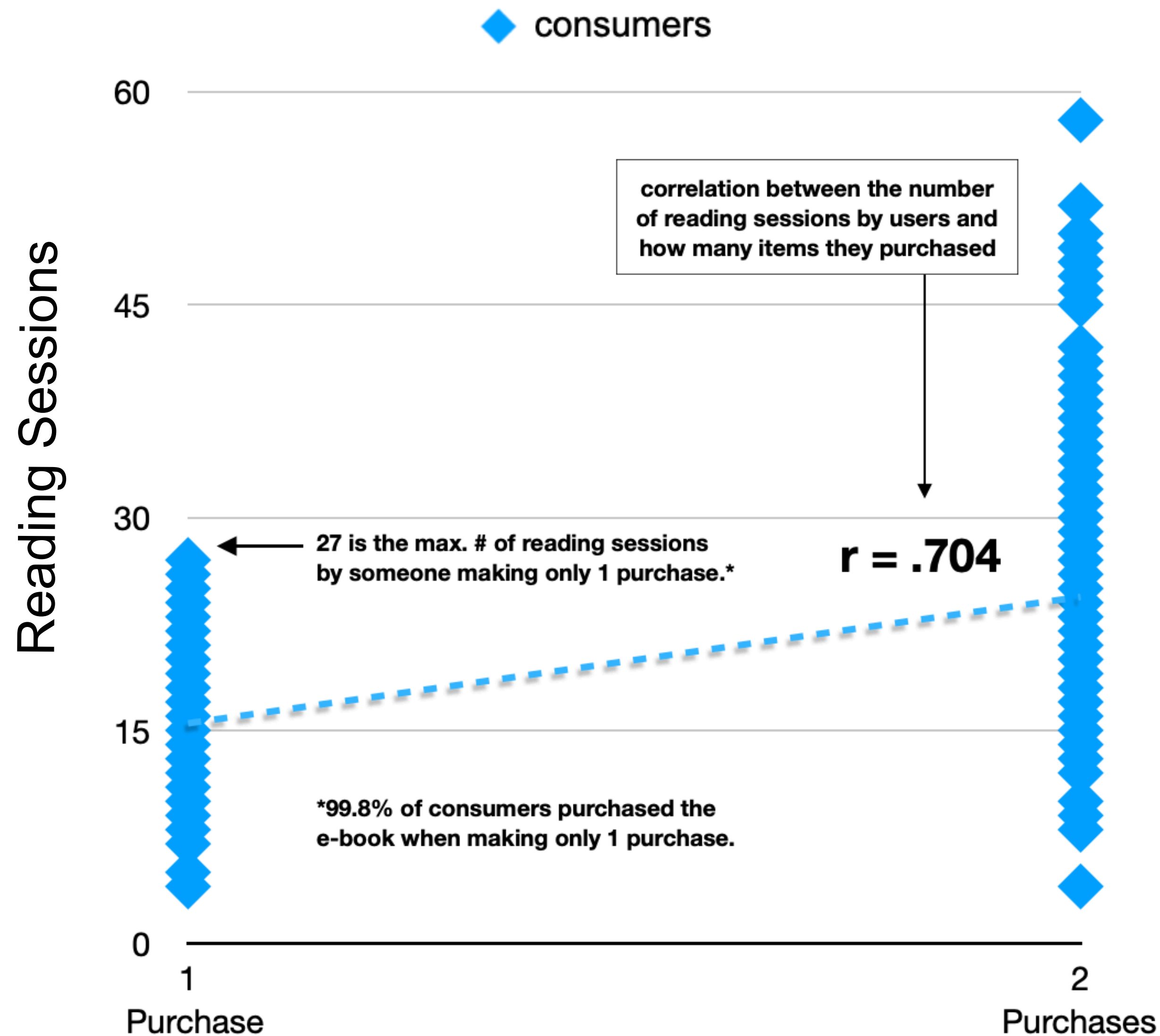Percentage of reading sessions by topic for consumers of e-book only (75604 sessions), as well as both items (85856 sessions)
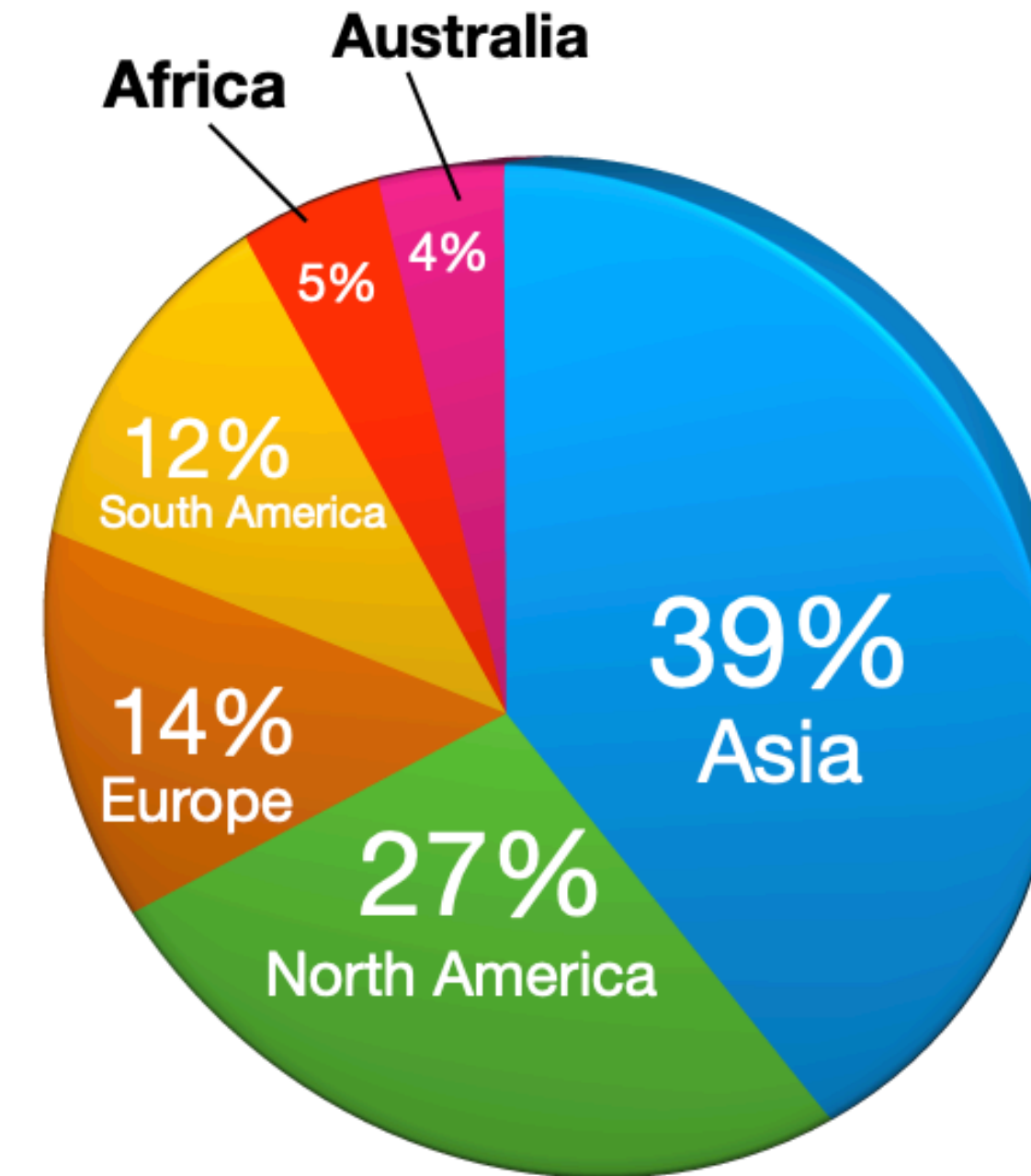
Percentage of reading sessions by topic for consumers of video only (132 sessions)

* Among those who made purchases, Asia was clearly the most popular topic during their reading sessions. Together with North America, these continents comprised the majority of topics chosen by consumers.

Correlation between number of reading sessions and purchases

consumers

Reading Sessions (y-axis: 0, 15, 30, 45, 60)

correlation between the number of reading sessions by users and how many items they purchased

27 is the max. # of reading sessions by someone making only 1 purchase.*

r = .704

*99.8% of consumers purchased the e-book when making only 1 purchase.

1 Purchase   2 Purchases

* Among consumers, there is a very strong correlation between the number of reading sessions they engage in and the number of items they purchase.

* Any consumer that engaged in more than 27 sessions bought both items (e-book & video).

* Nearly all (99.8%) consumers making only one purchase bought the e-book.

Model for Daily Revenue Forecast

$R^2 = .578$

$\hat{y} = 47.88(x) + 78.1$

Daily Revenue ($)

Last 3 mos. (most recent 89 Days)
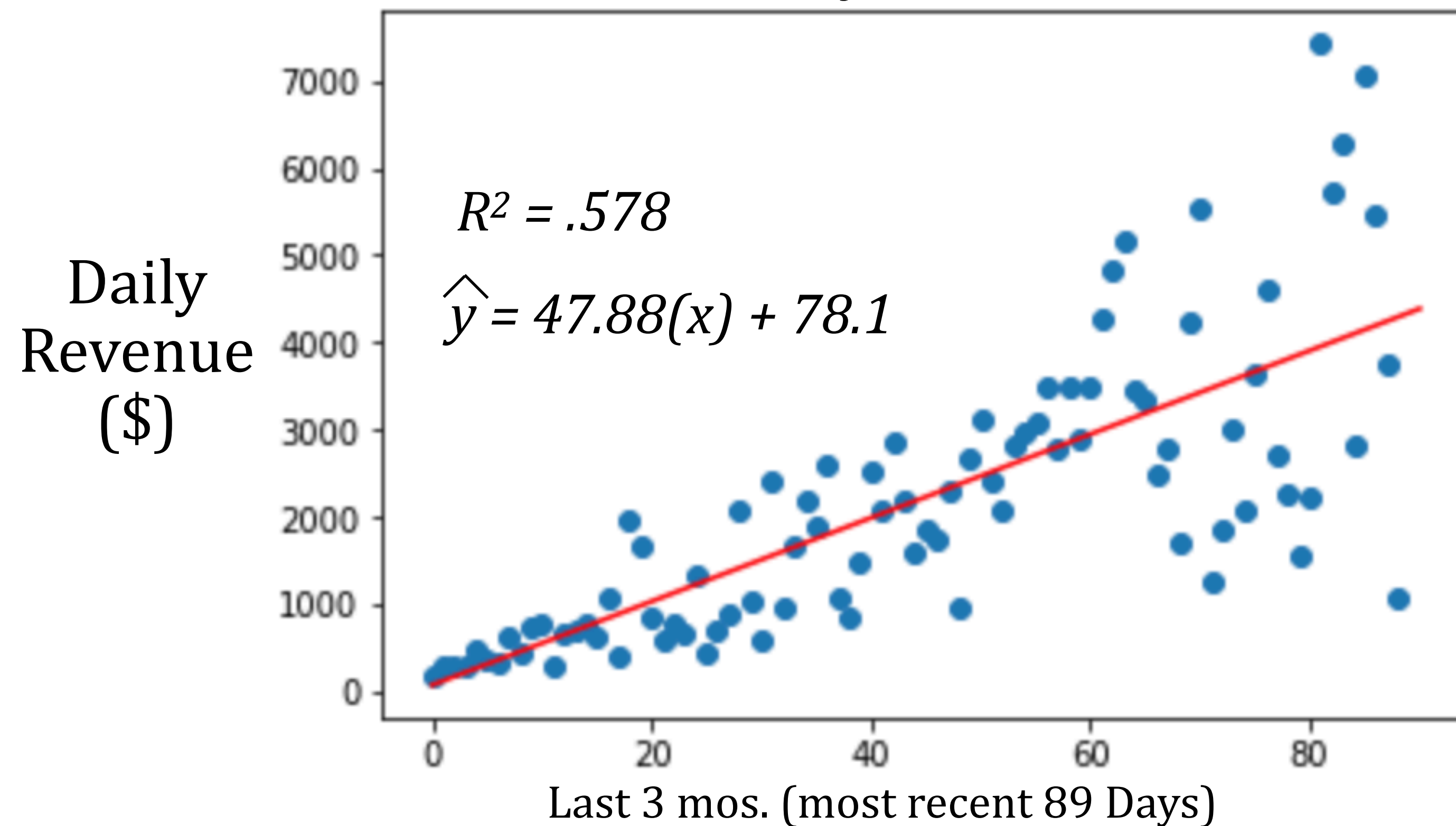
Predicted daily revenue*
in 30 days - $5729
in 60 days - $7165
in 90 days - $8602

*This linear regression model accounts for approximately 57.8% of the variance in daily revenue. All projected figures should be considered as general guides for future performance rather than attempts at precise predictions of actual sales figures.

Regression models using 2nd, 3rd and 4th degree polynomials did not appear to improve upon the predictions garnered by this model.

∗ Echoing the trends identified in the sales data, revenue projections convey solid and steady increases in daily revenue over the next 3 months.

∗ However, as indicated both by the scatter plot and the coefficient of determination ($R^2 = .578$), there is a notable degree of variance in daily revenue that is not accounted for in this model. Therefore, these projections should be regarded as providing a more *basic* and *overarching* view which suggests a *generally positive* income trajectory.

Recommendations

✳ From this analysis, it is clear that the management at *TransWorld* should target and prioritize their efforts towards **country 5**, considering that it provides the most robust stream of revenue.

✳ Given their rather limited budget, management should capitalize on the fact that **country 5** also provides the greatest share of subscribers - of which 2 out of 3 ultimately make a purchase from their website.

✳ Specifically, fashioning more content on their newsletter in line with these subscribers, as well as those from other higher revenue countries (**7**, **2** & **4**), would be a sensible targeting of these limited funds.

✳ Also regarding content, *TransWorld* should increase its focus on topics that appear popular *among consumers* (e.g., Asia and North America > 50% of reading sessions), and to recognize that merely increasing reading sessions among all topics cannot be readily linked with increased revenue.

Recommendations (cont'd.)

✳ It is also clear from this analysis that *TransWorld* should rethink its current budgetary outlay of $500 (half of his monthly marketing budget) towards AdWords.

✳ Despite their receiving the lion's share of this budget, only 14% of his total revenue can be attributed to activity generated by AdWords. Meanwhile, *TransWorld's* revenue streams from Reddit and SEO are significantly higher, even though each receive only half of the funds directed at AdWords.

✳ Given the aforementioned importance of *content* on the *TransWorld* travel blog, Reddit's role in its creation makes it even more deserving of a greater budgetary share. Additionally, SEO's role in editing this content similarly justifies more dollars than those being spent for services provided by AdWords.