

Randy 5/25

### **High-level summary**

- Randy knows less about Pathmatics (knows more about the SensorTower use panel), but said he will (i) send over materials / factsheets that they give to customers and (ii) facilitate a call with someone on the data science team who has a better sense for details about collection and content.
- Big picture:
  - There is lots of data that SensorTower has not “productized” but could be used as part of a collaboration subject to approval by senior leadership
  - Seemed very interested in issues related to the impact of Apple ATT on ad spend on Google vs. iOS and app development
- Data collection:
  - Pathmatics is a combination of (i) a user panel that tracks ads serviced as users browse the web / mobile, and (ii) other stuff (redacted because potentially proprietary)
    - The “other stuff” is potentially based on intermediaries between advertisers and publishers (platforms).
  - SensorTower usage panel is a separate user panel. Didn’t know size but it’s the largest out there. Exclusively mobile right now.
- Targeting demographics:
  - A bit vague because he didn’t know details, but said that it’s partly based on the demographics of the user panel.
  - He didn’t know the exact fields that are collected.
- Spend estimates:
  - Also didn’t know details. It’s all first party / done in house, and based on SensorTower price monitoring.
  - Some components might be modeled.
- Other notes
  - SensorTower usage panel cannot track individuals over time and has pretty limited “productized” features.
  - But there’s the technical capacity to do some time series pulls – e.g. should be able to figure out what fraction of FB users yesterday use Snapchat today
    - It was not clear to me how to square these two things.

### **Meeting notes**

#### **Background**

- Project related to platform competition / digital ad industry
- Two issues:

- How advertisers switch / change their ad load / demand when auction prices for a given platform change
- How consumers allocate their time given ad load

## Questions

### Big picture notes

- Productized stuff – and the raw data – possible to query specific stuff
  - Ask gabe
- Set up a call with the data science team
- Unclear whether dynamics in the advertising space has changed – but broadly increased demand for online stuff
- Did some initial analysis on whether decision by Apple pushing advertisers / app makers to google play
  - Eric Seufert – some of this was occurring – but other factors, e.g. historically volumes are much higher (but lower margins)
    - Advertisers go to Google for the moment
    - Something of interest for SensorTower

### Pathmatics

- How are data collected?
  - In particular – how are mobile data collected?
  - How to determine which sites besides FB / Insta / Twitter / Youtube?
  - Answers:
    - Mobile – Usage panel, collect impressions and creatives themselves
      - Distinction – two advertising products –
        - pathmatics – mostly not mobile
          - Creatives get captured, spend is estimated based on data collected there
          - Taxonomy is robust
          - Opt-in user panel
        - Sensortower – share of voice across platforms
        - Only looking at what ads are being serviced
          - Attribution networks are potentially people to get in touch with
      - Over time – started to draw from multiple sources – advertising spend on Hulu, other streaming services, etc (SVOD, AVOD) – capturing this through a different technology via desktop and mobile
- Keep track of targeting information?
  - Gender?
  - Geography?
  - Age?
  - How is this tracked?

- Answers:
  - Based on the user panel
  - Get other data that helps determine app demographics
- How is spend estimated?
  - Disclaimer on docs says that it might be modeled?
  - Trends over time – accurate at estimating individual advertiser market share allocation across platforms? What about market share across advertisers on a platform?
  - If we were to combine this with price information from other sources – would that make sense?
  - Answers:
    - Need to check with data team
    - Data that SensorTower collects (first party)
    - Spend information for various platforms – some of the spend data for some platforms
      - Have signals from other networks to model spend
- How are number of impressions estimated?
  - Can estimate number of impressions by demographic group?
  - Answers:
    - Punt to the data science team
- Information on “ad intermediation” -- purchase channel, the provider from whom advertiser purchased impressions (e.g. The Trade Desk) and sales channel, the provider from which a publisher sold impressions (e.g. Rubicon). Distinction between direct buy vs programmatic buys
  - What does the pipeline look like?
  - How might this institutional feature impact how ad load responds to prices?
  - Answers:
    - Most buys go through intermediation
    - Too much detail
- Ask about whether our ideas for “advertiser pressure” resonate
  - OR: what drives high frequency variation in ad prices?
  - Answers:
    - Loosely makes sense – the combined scope of the data can help with this

#### SensorTower usage intelligence

- Where do the data come from?
  - Representative panel?
  - Within user over time?
  - Answers:
    - Do not track individual users – no PII

- But – time spent, session count, session duration – don't know the individual user, aggregated into buckets
  - Per-app – average # of sessions, session count, session duration, average total time spent
  - Do not have the means within the product to find “how long are 18-24 year old bucket”
    - But can do a custom pull – could also talk about potential API access
    - Could \*probably\* track aggregates over time (e.g. of those who used FB yesterday, who uses Insta today)
  - Other new products –
    - % of FB users who use data every day
    - Uninstalls / reinstalls of apps – see re-engagement, churn, etc. Q3, Q4 2022 time frame
- Info about data
  - How high frequency?
  - User demographics?
    - Age
    - Gender
    - Geography
  - How big sample?
  - Just apps or desktop too?
  - Answers:
    - Largest 1<sup>st</sup> party panel
    - Pathmatics -- Apps / desktop split depends on platform / network
    - User data – mobile
    - Will follow-up with size