Facebook Assignment Report

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1 FACEBOOK ASSIGNMENT REPORT

1.1 Social Media Platform

Facebook

1.2 Number of Advertisers

1078

1.3 Categories

- Number of categories identified: 6
- Shopping (e.g. Target, Amazon)
- Media & Publication (e.g. Xfinity, Washington Post)
- Finance & Education (e.g. TBC Bank, Zenith Prep Academy)
- Influencers (e.g. YouTuber, blogger, singer)
- Entertainment (e.g. SHEIN Kids, The Hunger Games)
- Others (Anything not included in the five categories above, e.g. marketing, sports, etc.)

1.4 Data Buckets

- Yes (Relevant data, which I am interested in.)
- No (I am kind of not interested.)
- Never (Irrelevant data, which I am not interested in at all.)

1.5 Sankeymatic.com Script

FB Advertisers [258] Shopping

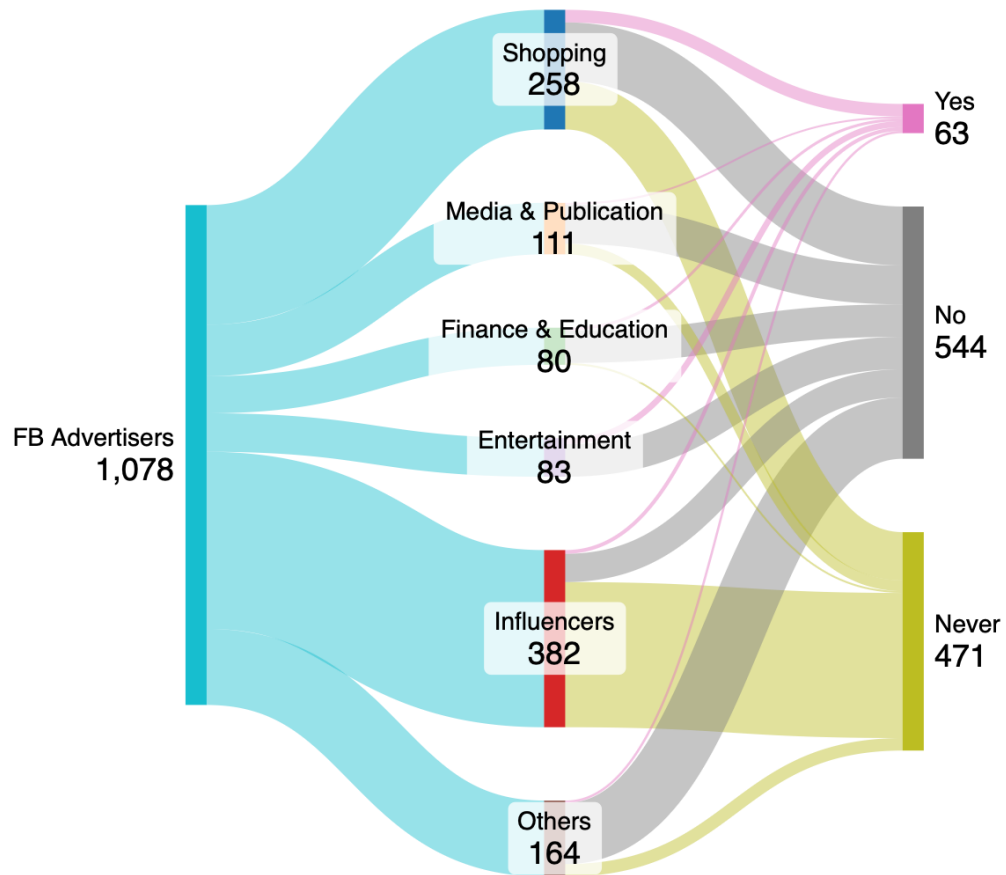FB Advertisers [111] Media & Publication

FB Advertisers [80] Finance & Education

FB Advertisers [382] Influencers

FB Advertisers [83] Entertainment

FB Advertisers [164] Others

Shopping [27] Yes

Shopping [127] No

Shopping [104] Never

Media & Publication [4] Yes

Media & Publication [84] No

Media & Publication [23] Never

Finance & Education [6] Yes

Finance & Education [70] No

Finance & Education [4] Never

Influencers [8] Yes

Influencers [61] No

Influencers [313] Never

Entertainment [13] Yes

Entertainment [70] No

Others [5] Yes

Others [132] No

Others [27] Never

1.6 Dataflow Diagram

Figure 1—Dataflow diagram

1.7 Table: Summary Statistics

Category	Data Bucket	Count	Accuracy	Rubbish
Shopping	Yes	27		
	No	127		
	Never	104		
	Total Count	258	10.47%	40.31%
Media & Publication	Yes	4		
	No	84		
	Never	23		
	Total Count	111	3.6%	20.71%
Finance & Education	Yes	6		
	No	70		
	Never	4		
	Total Count	80	7.5%	5%
Influencers	Yes	8		
	No	61		
	Never	313		
	Total Count	382	2.09%	81.94%
Entertainment	Yes	13		
	No	70		
	Never	0		
	Total Count	83	15.66%	0%
Others	Yes	5		
	No	132		
	Never	27		
	Total Count	164	3.05%	16.46%

1.8 Most and Least Accurate Category

My most accurate category: Entertainment

My least accurate category (i.e., rubbish): Influencers

1.9 Table: Regulated Domain Information

Regulated Domain	Number of Items	Advertiser Sample
Credit	3	TBC Bank SELF.inc – Build Credit
Education	10	Zenith Prep Academy Whiting School of Engineering
Employment	3	LinkedIn Nature Careers
Housing & Public Accommodation	69	Zillow Gaylord Hotels The Bob & Ronna Group

1.10 Reflection

Based on my three-year Facebook advertising data, the accuracy (i.e., relevant content) is between 2% to 16%, and the rubbish (i.e., irrelevant content) ranges from 5% to 82%. **I feel that the low accuracy and the fluctuating inaccuracy of the collected data make sense to me.**

The overall low accuracy can be attributed to the following reasons:

1) I am not actively engaged on social media platforms.
2) I am cautious about sharing my personal information or preferences, such as Likes or Dislikes.
3) I am wary of unsolicited advertisements.

The varying inaccuracy arises from mixed facts about my interests, which will be discussed in the following analyses.

Shopping and Influencers are the top two categories with the most advertisers. However, they also have the highest amount of irrelevant content, indicating a

lack of interest on my part. In addition to the three reasons mentioned earlier, I am vigilant about online shopping or being influenced by others.

The Entertainment category includes games, resorts, and hotels. It has the most relevant advertisers and the least irrelevant content. I appreciate this advertising as it might introduce me to new geographic knowledge, especially when the content relates to touring spots. Thus, it includes no rubbish.

The Finance & Education category demonstrates a low rate of irrelevant content (5%) since the topic is significant to me. It primarily showcases educational and tutoring information, and I believe part of the reason is:

1) I enrolled in the Georgia Tech Facebook group.
2) I engaged with my child's daycare Facebook account by giving it a thumbs-up.

I am comfortable with this type of advertising as it provides me with potentially helpful information about educational opportunities.

The Media & Publication category contains many advertisers of fashion magazines. It shows a moderate rate of irrelevant content (20.71%) as I have no interest in learning about fashion.

Overall, **I am not surprised** by the amount of information collected by the social media platform. **The reason is** that considering the statistics and analyses above, I should not be overly concerned about the data Facebook has obtained about me. For the three-year use of Facebook, the amount of information it collected looks fine to me, especially given the low accuracy.

Nevertheless, upon closer examination of the Others category, which has a 3.05% accuracy and 16.46% irrelevant content, **it raises my privacy concerns**. Notably, nearly all sports advertisers in this category are related to baseball. My son plays baseball, but I have never posted anything about baseball on social media except for gifting some baseball gear in a Facebook neighbor group. I am aware of the digital exposure that can lead to the predictability of private traits and attributes from users' Likes (Kosinski et al., 2013). This is why I am cautious about sharing personal preferences. However, the realization that gifting items to neighbors might also be used to predict private traits makes me uneasy about the data collected about me. I may be hesitant about giving a thumbs-up to the posts I like,

but now I am questioning whether I should stop gifting items to my neighbors on social media. The answer is likely no, but the concern about how the platform collects and uses my personal data lingers.

After conducting this project, **I would be more cautious about my interaction with social media**. I would think thoroughly before taking any action, as anything I do has the potential to be collected and used by the social media platform, whether it is a thumbs-up or a gifting post.

2 REFERENCES

1. M. Kosinski, D. Stillwell, T. Graepel, "Private traits and attributes are predictable from digital records of human behavior," Proceedings of the National Academy of Sciences Apr 2013, 110 (15) 5802-5805; DOI:10.1073/pnas.1218772110, http://www.pnas.org/content/110/15/5802