9th International Conference on Computational Social Science IC^{2}S^2
July 17-20, 2023, Copenhagen, Denmark

Performative Capitalism in Silicon Valley: Examining Performative and Substantive Political Behaviors of U.S. Technology Companies

Keywords: Woke capitalism, Corporate behavior, Advertising, Computer vision, Social media

Extended Abstract

Do technology companies that identify as liberal and progressive are what they claim to be? The mismatch between the expressive and substantive political behavior of technology corporations (for example, supporting #BlackLivesMatter on social media accounts but not engaging in substantial actions to tackle racism within the corporation) has been denounced as "woke (or performative) capitalism", as it creates a false impression that companies are working for or are in support of virtuous causes when they are not in reality (e.g., Bruenig, 2021; Douthat, 2018; Lewis, 2020; Woellert, Bordreau and Kahn, 2022). Contrary to prevalent public criticisms companies have faced for performative behaviors, this phenomenon, to our knowledge, has not been investigated empirically.

Given the increasing economic and political role of the US tech industry worldwide, a widely held belief that technology companies support diversity and liberal views (e.g., Pew Research Center, 2018), and critical implications for marginalized communities, this study focuses on tech companies in the United States as a starting case study. First, we test the (a) potential discrepancy between expressive and substantive political actions of 13 major tech companies in the United States. To do this, we merge several novel data sources, namely advertising and social media data, to capture expressive claims, with political donation data, to capture political actions. Next, we compare (b) the degree of discrepancy between expressive and substantive political actions among tech companies, relative to a reference group of US-based oil companies using a difference-in-difference approach, to allow for causal claims. We explore whether (RQ1) technology companies' liberal actions in their advertisements and social media accounts correlate with Democratic or pro-minority donation patterns and (RQ2) these patterns are actually causal.

To measure the expressive claims, we quantified pro-minority representation across advertisement videos (tech companies N = 860; oil companies N = 33) and social media posts (tech companies: Linkedin posts N = 14,119, Twitter posts N = 575,668; oil companies: Linkedin posts N = 3,876, Twitter posts N = 33,931) released between 2011 and 2021 (see Table 1). We also used automated facial recognition algorithms that classify the race and gender of individuals appearing in advertisements and a BERT-based model that predicts support for anti-racism in social media posts. To analyze political actions, we followed conventional literature priors (Bonica, 2016; Hansen and Mitchell, 2000), and examined donation patterns from company elites and employees directed to the Democratic Party and pro-minority organizations (e.g., #BLM support groups, pro-women organizations) from 2011 to 2021.

We found that, contrary to the growing pro-minority representations in advertisements (Figure 1) and pro-minority posts on social media (Figure 2), the donation patterns of technology companies remained evenly split across partisan aisles and ideological lines (Figure 3) (**RQ1**). This mismatch remained consistent, even when accounting for firm types and individuals' employment status (see Tables 2 and 3). Our data suggest that women and people of color have

increasingly appeared in tech company ads in recent years, but such pro-diversity efforts in advertising campaigns have not translated into increased donations to minority groups.

As to **RQ2**, we exploit an exogenous political event to causally test the mismatch between expressive and substantial political behaviors from technology companies: George Floyd's death in May 2020, which led to popular #BLM movements across the country. Difference-in-difference estimates suggest that tech companies' advertising videos featured more black individuals than in oil companies, after George Floyd's death, but there was no substantial change in the direction of political donations for both industries (Table 4).

Using both observational and causal estimations, our analysis demonstrates that the political actions of US-based major tech firms across expressive and substantive dimensions may diverge from each other. Consistent with folk claims of "woke (or performative) capitalism," these findings highlight a possible problem of business behaviors creating a false perception of promoting virtuous causes when they are not, which may provoke backlashes from customers and fail to create substantial changes for minority groups. Our findings provide important implications for understanding corporate communication and political behaviors in an age of growing culture wars (e.g., The Economist, 2019). Also, the pipeline we have built here, provides a valuable infrastructure to expand these analyses across corporate contexts, beyond the tech sector, as well as across different geographical settings, beyond the US landscape.

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Table 1: Data

		Expressive		**Substantive**
	Advertisement Videos (2011-2021)	Posts on Linkedin Pages (2016-2022)	Posts on Twitter Pages (2011-2021)	FEC Political Donation (2011-2021)
Tech	Verizon: 80	Verizon: 1077	Verizon: 34744	Verizon: 10915
	Qualcomm: 11	Qualcomm: 1135	Qualcomm: 8779	Qualcomm: 2701
	Paypal: 8	Paypal: 239	Paypal: 9245	Paypal: 1303
	Microsoft: 74	Microsoft: 1513	Microsoft: 17500	Microsoft: 21909
	Meta (Facebook): 49	Meta (Facebook): 901	Meta (Facebook): 14418	Meta (Facebook): 7884
	Intel: 33	Intel: 797	Intel: 14123	Intel: 4508
	HP: 45	HP: 770	HP: 40433	HP: 3602
	Comcast: 11	Comcast: 340	Comcast: 65174	Comcast: 7285
	Cisco: 11	Cisco: 3114	Cisco: 14804	Cisco: 8166
	AT&T: 119	AT&T: 1622	AT&T: 179629	AT&T: 15090
	Apple: 165	Apple: 165	Apple: 0	Apple: 8315
	Amazon: 33	Amazon: 1810	Amazon: 36716	Amazon: 15783
	Alphabet (Google): 137	Alphabet (Google): 596	Alphabet (Google): 140103	Alphabet (Google): 34243
Oil	Valero: 4	Valero: 165	Valero: 834	Valero: 1089
	Phillips 66: 4	Phillips 66: 267	Phillips 66: 1292	Phillips 66: 1207
	Exxon Mobil: 14	Exxon Mobil: 412	Exxon Mobil: 5460	Exxon Mobil: 7210
	Conoco Phillips: 10	Conoco Phillips: 521	Conoco Phillips: 4448	Conoco Phillips: 818
	Chevron: 1	Chevron: 488	Chevron: 14402	Chevron: 7522
	Exelon: 0	Exelon: 628	Exelon: 4046	Exelon: 2606
	Enterprise Products: 0	Enterprise Products: 449	Enterprise Products: 239	Enterprise Products: 601
	Energy Transfer: 0	Energy Transfer: 478	Energy Transfer: 1428	Energy Transfer: 905
	Marathon Petroleum: 0	Marathon Petroleum: 468	Marathon Petroleum: 1782	Marathon Petroleum: 6691

Note. Plains GP Holdings, which ranked #88 in the Fortune 500 company list, was excluded from the dataset because they neither had any advertisement videos on AdForum nor had official social media accounts on Linkedin or Twitter.

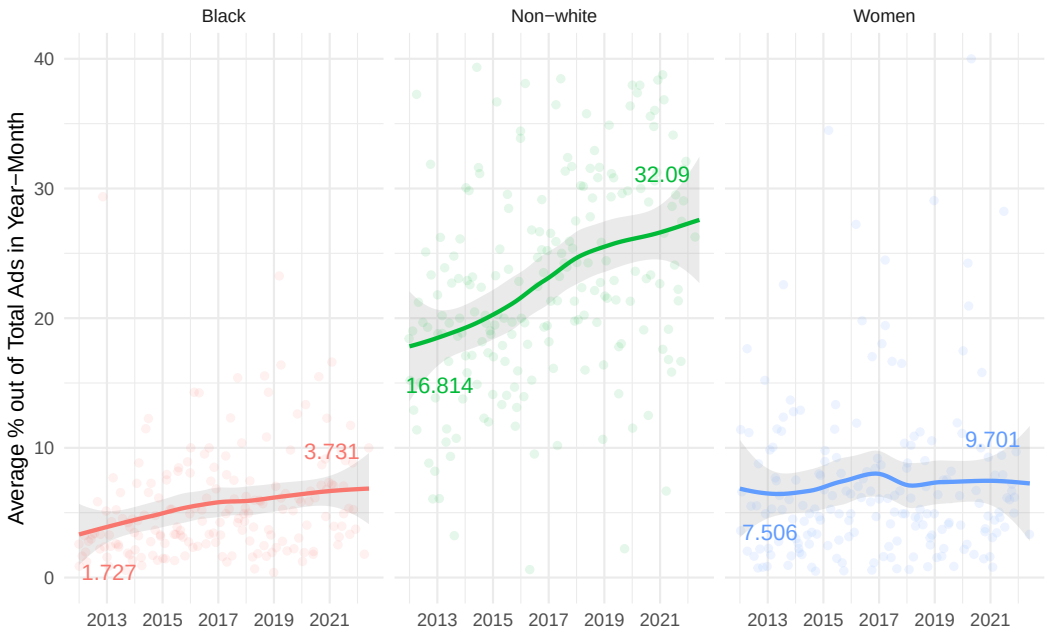

Figure 1: Increasing diversity in advertisement videos of technology companies

Note. Based on race/ethnicity and gender predictions from *DeepFace* algorithms of TV and digital advertisement videos available in AdForum (2011-2021). The patterns of minority representations look largely similar when using different algorithms, such as *RetinaFace* and *FairFace*. The *DeepFace* predictions were also consistent with manual annotations by two of the researchers: Reliability α for each variable exceeded 0.65 for all variables (Digital: *Black* = .84, *Non-white* = .78, *Women* = .68; TV: *Black* = .89, *Non-white* = .83, *Women* = .70).

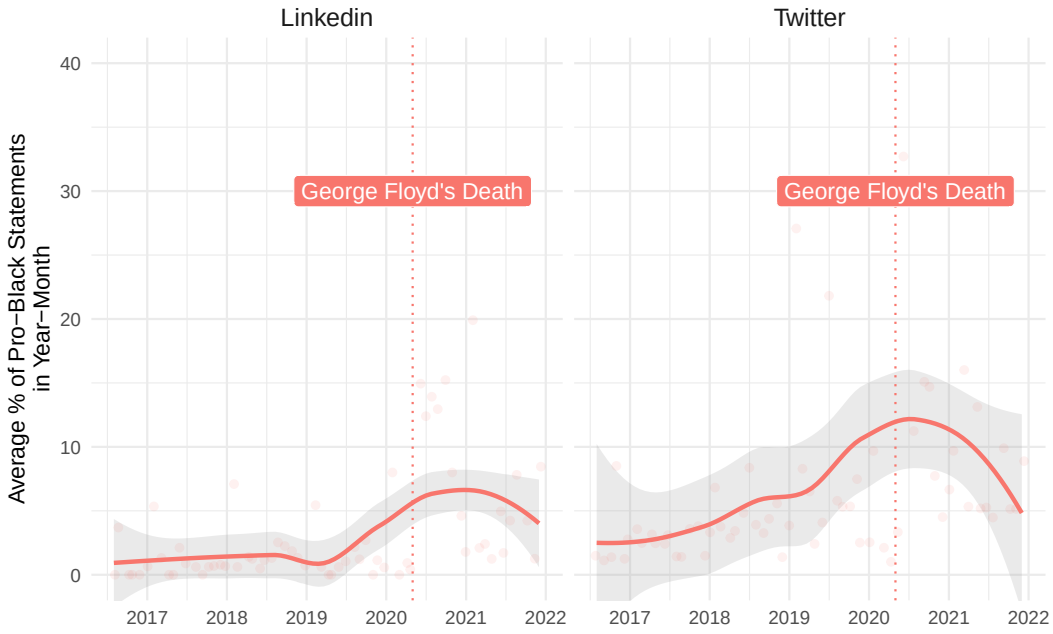

Figure 2: Increasing pro-Black statements in social media posts from technology companies

Note. Based on Linkedin and Twitter data (August 2016 - December 2021). *Pro-Black* statements include support for #BlackLivesMatter, Black people's rights, policies that demand racial equality and inclusion of Black people, and opposition to police brutality. BERT models separately trained with hand-coded annotation of randomly-sampled 10% of available Linkedin and Twitter data from one of the researchers. All predictions based on the best-performing model (final *F1* score = 0.87).

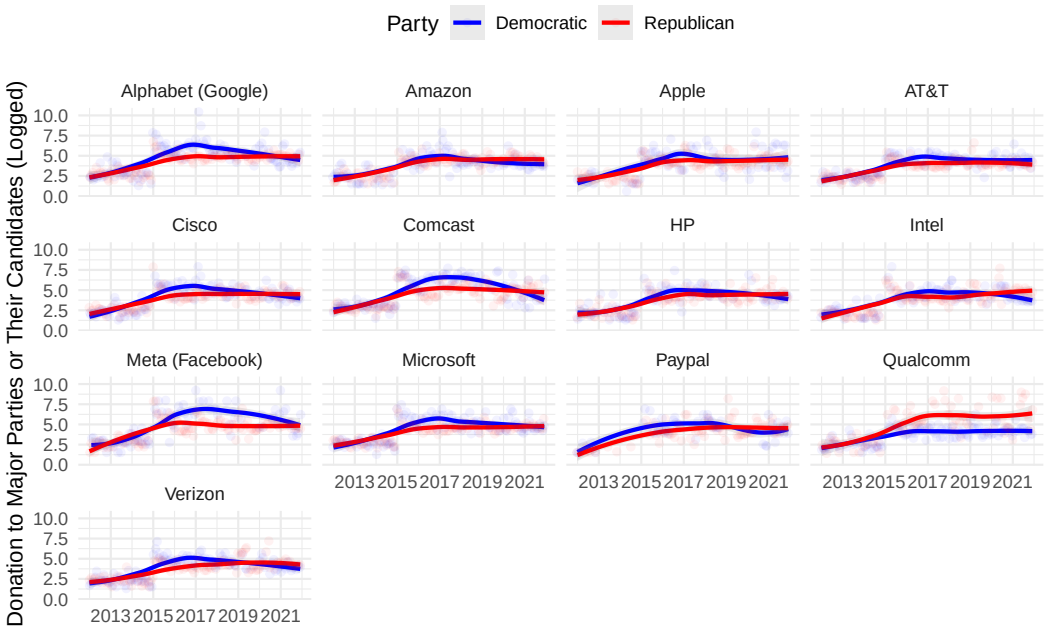

Figure 3: The bipartisan donation patterns of technology companies

Note. Based on FEC political donation data (2011-2021). The patterns largely look similar when comparing liberal-leaning (pro-minority) versus conservative-leaning (anti-minority) donation (e.g., donation to Black Lives Matter PAC versus the National Rifle Association).

Table 2: Fixed effects logistic regression: Correlation between expressive and substantive political behavior of technology companies (2011-2021)

	(1)	(2)
Non-white	0.028	0.023
	(0.048)	(0.042)
Black	0.065	0.054
	(0.040)	(0.047)
Women	-0.048	-0.007
	(0.105)	(0.098)
Company FE	✓	✓
Year FE	✓	✓
Elite position FE		✓
Incumbent party FE		✓
Ad type		✓
Number of Observations	141,704	141,704

Note. Fixed effects logistic regression estimates with clustered SEs (company-year/month) in parentheses. The dependent variable is whether an individual working in major technology companies donated to the Democratic Party (or its candidates) in a given year-month. Company types, years, whether an individual is in an elite position (e.g., CEO, CFO, President, Founder, Executive Director), whether the incumbent president is a Democratic candidate, and whether a given ad was aired on TV or Internet were controlled for in the second model. No significant correlation between expressive and substantive political behavior of technology companies.

Table 3: Fixed effects OLS: Correlation between expressive and substantive political behavior of technology companies (2011-2021)

	(1)	(2)
Non-white	0.098	0.060
	(0.048)	(0.040)
Black	0.175	0.131
	(0.066)	(0.086)
Women	-0.065	0.101
	(0.640)	(0.606)
Company FE	✓	✓
Year FE	✓	✓
Elite position FE		✓
Incumbent status FE		✓
Ad type		✓
Number of Observations	141,704	141,704

Note. Fixed effects logistic regression estimates with clustered SEs (company-year/month) in parentheses. The dependent variable is the average logged amount of money that individuals working in major technology companies donated to the Democratic Party (or its candidates) in a given year-month. Company types, years, whether an individual is in an elite position (e.g., CEO, CFO, President, Founder, Executive Director), whether the incumbent president is a Democratic candidate, and whether a given ad was aired on TV or Internet were controlled for in the second model. No significant correlation between expressive and substantive political behavior of technology companies.

Table 4: Difference-in-Differences: The pre-post change in expressive and substantive political behavior of technology versus oil companies (February - August 2020)

	Black People's Appearance in Advertisements	*Democratic Donation (Logged $)*
Tech Companies	0.061***	5.556***
(Base = Oil Companies)	(0.002)	(0.042)
After George Floyd Death	0.008***	-0.219
(Base = Before George Floyd Death)	(0.001)	(1.382)
Tech X George Floyd	0.075***	0.111
	(0.001)	(0.294)
Company FE	✓	✓
Year FE	✓	✓
Elite position FE	✓	✓
Incumbent status FE	✓	✓
Ad type	✓	✓
Number of Observations	100,353	100,353

Note. Fixed effects OLS regression estimates with clustered SEs (company-month) in parentheses.
*** $p < 0.001$