Stanford | Internet Observatory
Cyber Policy Center

Analysis of Twitter Takedown of State-Backed Operation Attributed to Saudi Arabian Digital Marketing Firm Smaat

Renée DiResta, Shelby Grossman, K.H., and Carly Miller
Stanford Internet Observatory
December 22, 2019

Contents

1 Introduction **3**

2 Key Takeaways **5**

3 Summary Statistics **7**

4 Behavioral Observations **10**

5 Narrative Observations **13**

6 Conclusion **22**

1 Introduction

On December 20, 2019 Twitter announced the removal of 88,000 accounts managed by Smaat, a digital marketing company based in Saudi Arabia, and attributed thousands of these accounts to involvement in "a significant state-backed information operation". Twitter noted that "Smaat appears to have created, purchased, and/or managed these accounts on behalf of – but not necessarily with the knowledge of – their clients. [...] Smaat managed a range of Twitter accounts for high-profile individuals, as well as many government departments in Saudi Arabia." Smaat had commercial clients as well. In their announcement, Twitter wrote:

> Our internal analysis shows the network was involved in various forms of platform manipulation, targeting discussions related to Saudi Arabia and advancing their geopolitical interests on the world stage. Primarily, accounts were amplifying messages favourable to Saudi authorities, mainly through inauthentic engagement tactics such as aggressive liking, Retweeting and replying. While the majority of the content from this network was in Arabic, a portion of it related to events relevant to Western audiences, including amplification of discussion around sanctions in Iran and appearances by Saudi government officials in Western media.

Smaat was co-founded by Ahmed Almutairi (also known as Ahmed Aljbreen), a Saudi agent of the royal family who recruited the two Twitter employees who spied on the accounts of critics of the Saudi government. Almutairi is now wanted by the FBI. Twitter suspended his handle @aljbreen.

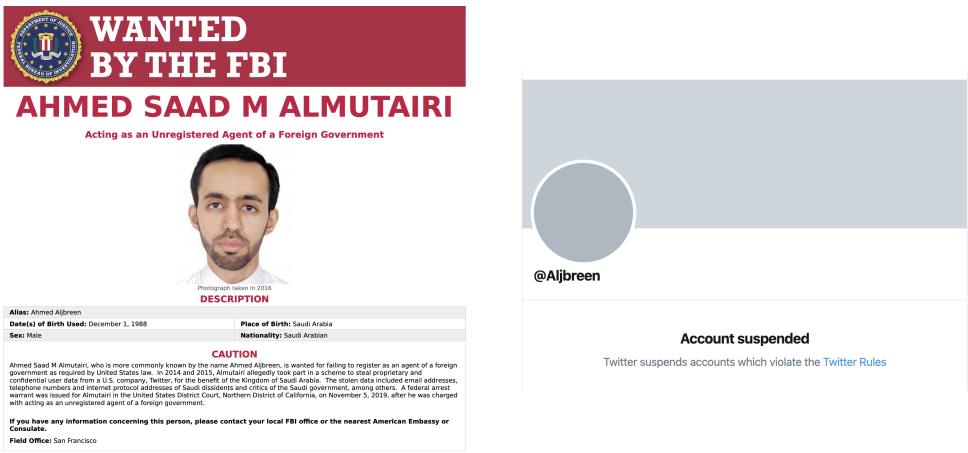

Figure 1: *The FBI's wanted poster for Ahmed Almutairi, and his suspended Twitter handle.*

Smaat had two domains: smaat.co (created in 2013), and smaat.com (created in 2011) - which over the course of the past week have gone down and come back up several times. The website listed high-profile political clients including the 2017 Riyadh summit and the Saudi General Directorate of Civil Defense, along with commercial entities including Dunkin Donuts, Coca Cola, LG, Bentley, Toyota, The Ritz Carlton, and Fanta. Based on the offerings section of its site, Smaat appears to have specialized in advertising on SnapChat.

Figure 2: *Smaat's clients, as shown on its website, and Smaat highlighting its expertise in Snap.*

2 Key Takeaways

Behavioral observations:

- The accounts were high-volume; the average account had 5,406 tweets and was created in 2016, and several accounts tweeted tens of thousands of times. Many bordered on spam.
- These accounts appeared to attempt to obscure their commercial and political activity by tweeting an abundance of largely-automated religious, sports, and poetry content. Approximately 7% of tweets came from client apps that appeared designed to automatically tweet religious messages.
- One amplification strategy we observed in our dataset was the use of قروبات دعم which translates to "Support Groups", for boosting visibility for brands and gaining followers. Other terms for this activity - which involves everyone in the group using the same hashtag, following members in the hashtag, or retweeting the hashtag - are a "retweet ring", follow-back ring, or follow train. Smaat's participation in these support groups appeared to have the goal of expanding the visibility of their accounts.
- The user accounts listed additional social profiles on Snap, WhatsApp, and some regionally-popular social sites such as Telegraph, Sarahah, and CuriousCat.

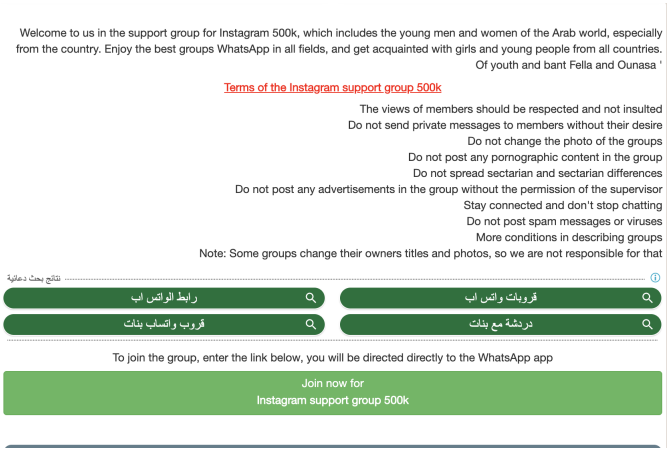

Figure 3: *An image shared by one of the accounts in the data. It described rules for a support group.*

Content observations:

- Much of the content was commercial in nature; this is expected given Smaat's business objectives. According to their website, their clients included Dunkin Donuts, Coca Cola, LG, Bentley, Toyota, The Ritz Carlton, and Fanta. Tweets about Dunkin Donuts, for example, defended the brand against a scandal where they had used a four-finger hand gesture to communicate how cheap their coffee was - a hand gesture which has been used by the Muslim Brotherhood. The tweets were designed to look like the expressions of real people, as opposed to ads. Social media marketing tactics are frequently misused for influence operations and this behavior looks like it was trying to mimic grassroots enthusiasm (sometimes called "astroturfing").
- A large quantity of the content was political. The political narratives the accounts pushed were consistent with the objectives of the Kingdom of Saudi Arabia, such as tweets critical of the governments of Qatar, Iran, and Turkey.
- Another set of of political tweets of note, also aligned with KSA goals, attacked Jamal Khashoggi, the acclaimed Saudi journalist who was killed in the Saudi Consulate in Istanbul in 2018. After his death there were thousands of tweets denying any involvement by the Crown Prince Mohammad bin Salman.
- We observed many tweets critical of Qatar, including tweets from accounts claiming to be Qatari citizens speaking out about abuses against them by the Qatari government. There were 78 hashtags about Qatar, including *Cutting Relations with Qatar*, and *Qatar Hosts Homosexuality* (translated).

We note that there are likely other political narratives in the 32 million tweets that merit additional study.

Figure 4: *An image shared by one of the users in the data. Dunkin Donuts was a Smaat client.*

3 Summary Statistics

The data set released by Twitter consisted of tweets and media, as well as a table of accounts associated with the operation. Summary statistics that describe the data set:

Accounts:

- There were 5,929 accounts, created between 2007-2019.
- Account languages were primarily Arabic and English, with a smattering of Japanese, Russian, Spanish, and a few other languages.
- 3,426 displayed a location and the majority of these claimed to be within Saudi Arabia.
- Many had profile URLs indicating they had presences on other social platforms. These included 118 SnapChat profiles, and some regionally-popular social sites such as Telegraph, Sarahah, and CuriousCat. There were a few WhatsApp profiles.
- The highest follower count was 1,541,863 tweets. There were three accounts with over 1 million followers,[1] nine over 500,000, and 91 over 100,000. The majority (over 4,500) had less than 5,000.
- The broader network included 88,000 accounts associated with the operation, many of which produced spam content.

[1] @DrAliAlrabieei, @sn2fi, and @ALTrendALsauodi.

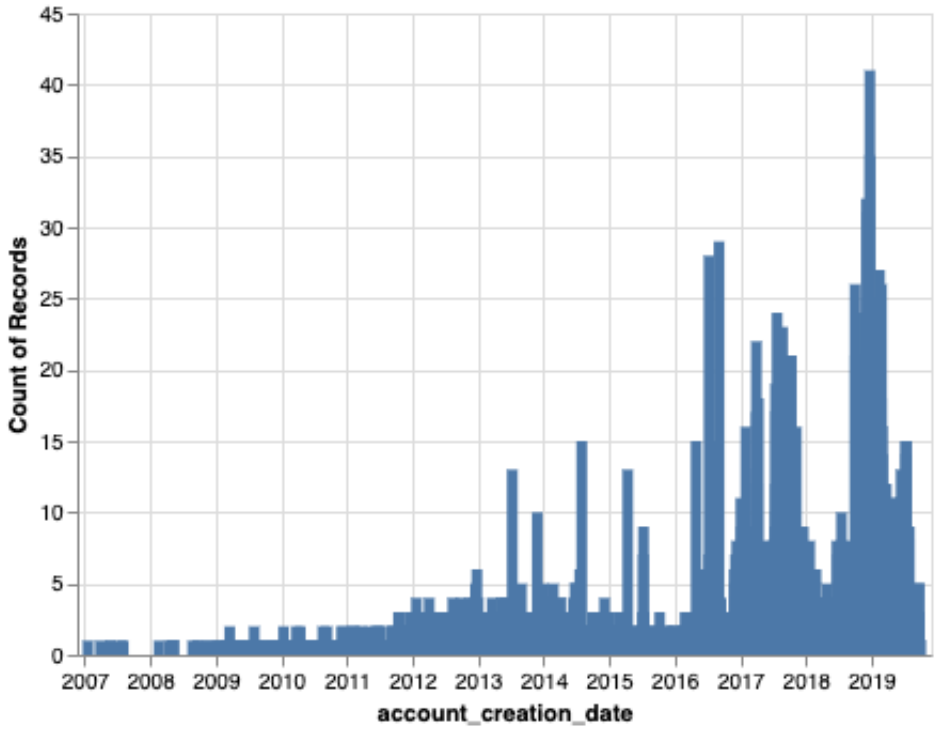

Figure 5: *Account creation dates*

Tweets:

- Twitter released 32,054,257 tweets produced by 5,929 of the accounts involved in the Smaat activity.
- The max engagement on a single tweet was 170,647 likes + comments + retweets.
- The average number of engagements per tweet was 3. Many tweets had no engagements.
- Many tweets were sent via third-party client apps, including dozens that were designed to send out religious or weather-related content.
- There were very few tweets in the data set from prior to 2011, suggesting that accounts with earlier creation dates may have been cleaned out. Since we believe Smaat commenced operations in 2011 (one of its websites was created in that year), it seems unlikely that they created the accounts made prior to this period; however, they may have managed some legitimate client accounts that were created earlier.

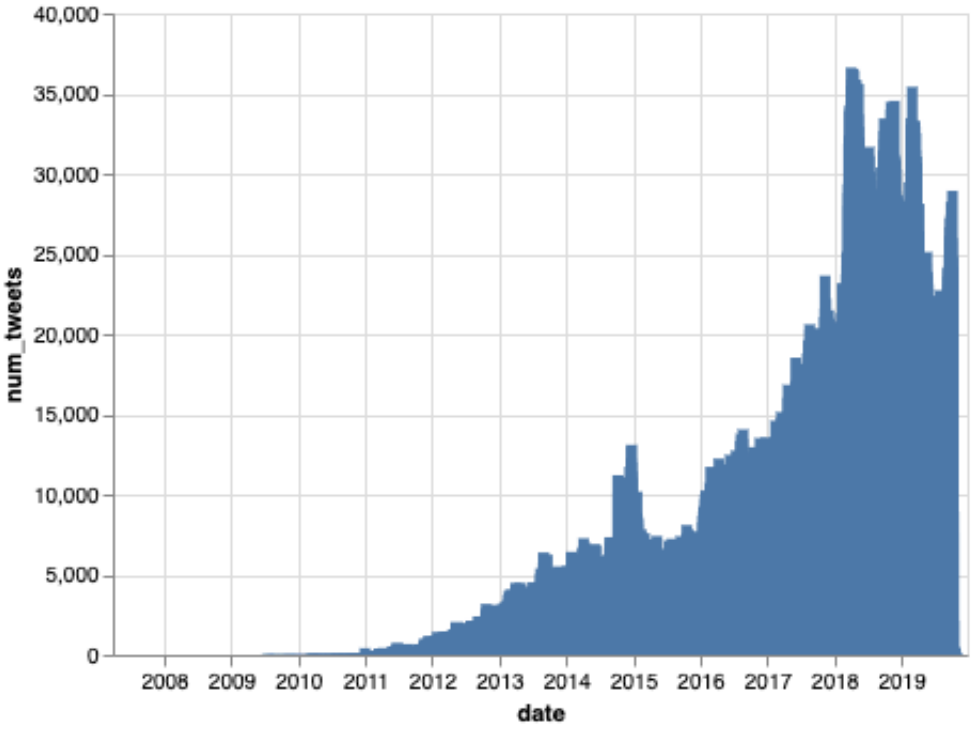

Figure 6: *Number of tweets over time*

Hashtags, Domains, and Mentions:

- The four most popular domains - du3a.org, alathkar.org, athkarapp.online, Quran.to - are religious sites. 3.6 million URLs in the data set came from these four sites.
- Hashtags were extremely common. 78 were about Qatar, 29 were about Jamal Khashoggi, and 1,010 were related to engagement driving groups, which are locally called قروبات دعم, or "support groups". Many hashtags were related to bug exterminator services, such as مكافحة الحشرات, translated as pest control.
- Many of the tweets mentioned other users in the data set. Others attempted to engage with influencers, including government officials, royal family members, famous people, and sports-related accounts. Some appeared to mention small businesses, which may have been clients of Smaat's.

4 Behavioral Observations

These accounts engaged in standard social media marketing tactics to grow their audiences, including influencer outreach and participating in "support groups" to maximize their reach. However, one unique tactic was that they also attempted to conceal their true purpose via extensive automation.

Automation appeared to be leveraged to help mask the true intent of these accounts. Automated tweeting included an abundance of religious, sports, and poetry content. For example, looking at the highest engagement tweets for the three accounts with the biggest follower counts, we only observe filler content. There were tweets about courses to learn the Quran, soccer chatter, tweets warning people against Shia maids, and tweets about morning coffee. This made basic assessments of hashtag or keyword volume largely useless for understanding operational narratives within the 32 million tweets.

Approximately 7% of tweets came from religious clients, which advertise themselves as tools to automatically tweet religious messages. These included clients like تطبيق قرآني (Quran app) and تويت قرآن (Tweet Quran) and كنز المسلم (Muslim Treasure).

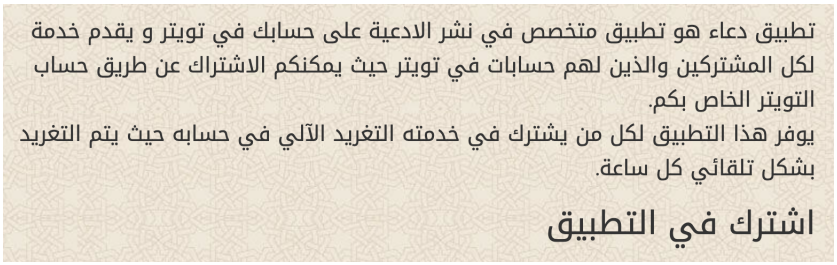

Figure 7: *From du3a.org. Translation: Doaa application is an application that specializes in spreading supplications to your Twitter account and provides a service for all subscribers who have Twitter accounts where you can subscribe through your Twitter account. This application provides everyone who subscribes to the automatic Twitter service in his account, as Twitter is done automatically every hour.*

We analyzed the top 100 domains shared from the whole dataset, which accounted for almost 6 million urls. 56% of the urls shared belonged to religious sites. This number could potentially be higher, as we were unable to ascertain the purpose of 16% of the domains. 83% of the religious domains were sites designed

to help the faithful automatically tweet the Quran. The most popular site was du3a.org.

We observed accounts engaged in influencer marketing behaviors including tweeting at real Saudi citizens, such as Turki Al-Sheikh, a man who used to head a large soccer association and is now the Chairman of General Authority for Entertainment, a state-tied entity that aims to expand Saudi's entertainment sector.

We also observed one of the accounts in the data tweeting spam repeatedly at Adel Ali bin Ali, a famous Qatari businessman. The account, @7644FOFO, tweeted at the businessman the hashtag (translated) *cut relations with Qatar*, along with prayers, religious script titles, and the names or prophets.

4.1 Engagement rings / support groups

One amplification strategy we observed repeatedly in the dataset was the use of, قروبات دعم or *support groups* for generating engagement and boosting visibility for accounts and commercial services. While called different things in various communities, this amplification strategy of setting up purposeful, coordinated networks of accounts is used across social media platforms such as Instagram, WhatsApp, YouTube, and Twitter to boost followers and have real people share messages a brand wants spread. In this Twitter dataset we observed several follow/retweet/like support groups.

Support groups consist of an administrator and a collection of individual accounts who join looking to boost their reach. These accounts must follow the rules set by the administrator, who runs the support group and expels members if they do not follow the rules. Rules vary between groups, but they often include a benchmark for member activity. Members may have to tweet daily, like or retweet a certain number of accounts, and/or use particular hashtags when tweeting.

Some of the accounts in this Smaat takedown used language suggesting that they were running or were tied to a support group; we observed tweets in the data that include the name of the support group tagged (meaning represented in hashtag form), a statement to directly message the administrator, and the requirement that the group only wants "reactive people", as in people who will be active and engaged on Twitter.

Here is an example in the dataset of a member retweeting the membership rules from the group's organizer: each day, members must have five tweets tagged with the hashtag, and are allowed 4 tweets without a hashtag. All memberships renew at midnight if the requirements are met.

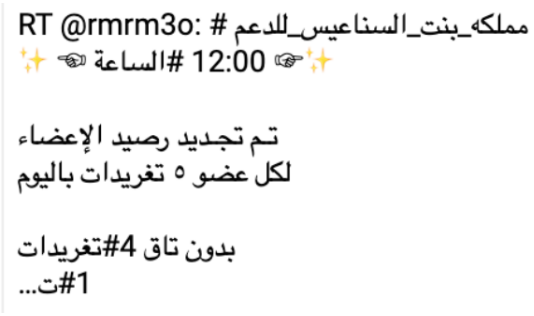

Figure 8: *A retweet from the admin of the group, kingdom of the daughter of al-Sanaais for support (translated).*

Within our dataset, 1,010 hashtags were support group hashtags. Some profiles were explicit in their services, one account wrote in English in its bio, "Let's Gain followers real fast!" Other profiles were more discrete in their connection to support groups. One account with 149,128 followers mentions "Advertising, management, competitions" in its profile. Many of the accounts don't mention anything related to advertising or promising more followers in their bios, however their tweet activity consists of retweets and mentions of other accounts with a support group tagged.

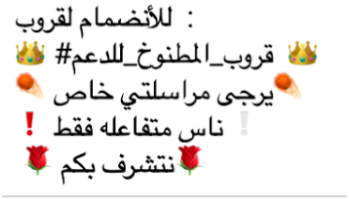

Figure 9: *Tweet translation: To join groups: Support group Please email me private. Only reactive people Nice to meet you.*

Examples of other support groups that we observed accounts in the takedown participating in included (translated): *World Summit Groups*, *Colonel Additions*, and *India Interchange Group*. The most tagged group in our dataset was, قروب سلطان للاضافات, *Group Sultan Additions*, which appeared 32,775 times in the data.

5 Narrative Observations

5.1 Jamal Khashoggi

Jamal Khashoggi has figured prominently in Saudi influence operations on Twitter, and indeed appears in the Smaat data set on numerous occasions. Khashoggi was a US-based Saudi reporter who was critical of the Saudi regime. He was killed inside the Saudi consulate in Istanbul on October 2, 2018; Crown Prince Mohammad bin Salman is believed to have been complicit in the killing, and possibly ordered it.[2] There were 17,467 tweets in the Smaat data that included the word "Khashoggi" in English or Arabic. There were a few hundred tweets mentioning him in the years before he fled Saudi Arabia. These early tweets were relatively positive; sometimes they retweeted him. In 2016 the tweets started to become more aggressive and negative. Accounts began using the hashtag #جمال خاشقجي لايمثل الدولة (Khashoggi does not represent the state); @SaudiNews50 frequently used this hashtag. In November 2016 @meream_moza tweeted (translated), #*Jamal_Khashogg_does_not_represent_the_state sick retarded*.

[2] https://www.nytimes.com/2019/10/02/world/middleeast/khashoggi-killing-mbs-anniversary.html

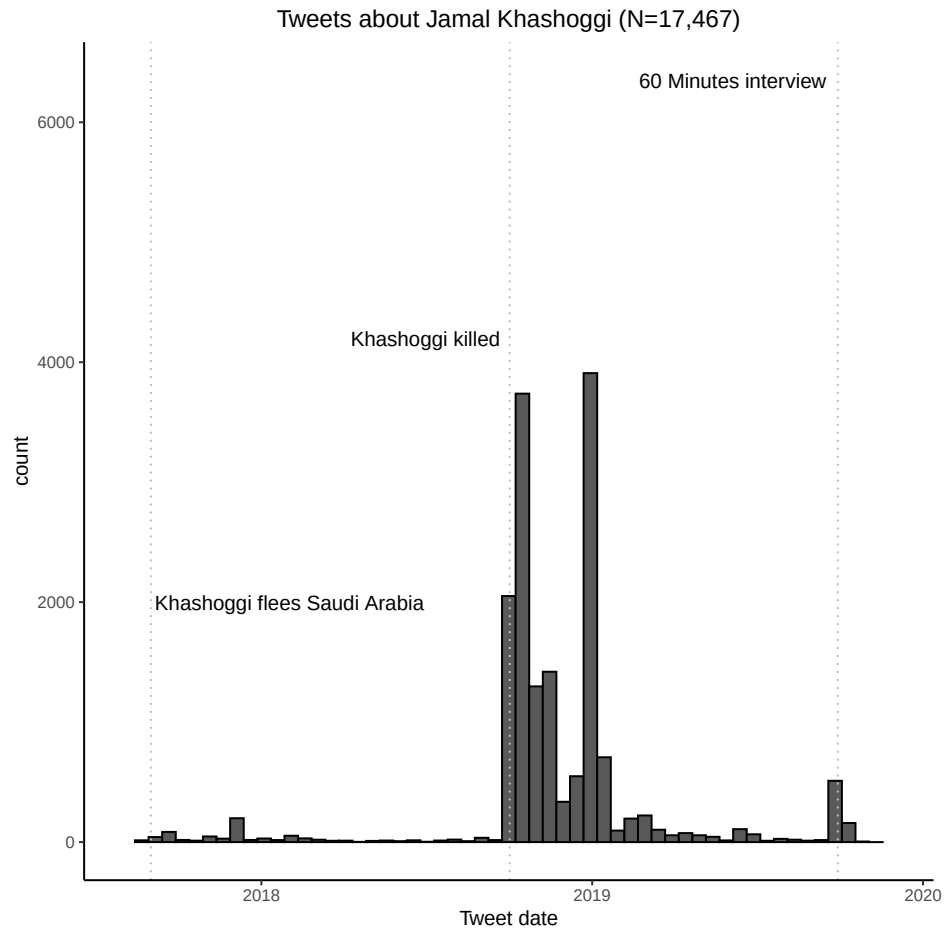

Figure 10: *Timeline of tweets about Jamal Khashoggi*

Around September 2017, when Khashoggi fled Saudi Arabia, the tweets became even more aggressive. On September 2, 2017 the Smaat-linked account @sau9di tweeted at Khashoggi saying that he was a coward for not writing about Saudi Arabia the way he did from abroad (translated). On September 18, 2017 many users retweeted @iKSALi2030 (suspended, Smaat) who tweeted at Khashoggi saying that he couldn't deny that Qatar was financing him. Other tweets suggested he fled because he was a traitor working for Qatar.

hashtag	hashtag translation	count
خاشقجي	Khashoggi	1805
جمال_خاشقجي	Jamal Khashoggi	1697
مسرحية_جمال_خاشقجي	The show (meaning theatrical performance) of Jamal Khashoggi	527
قطر_تكتب_المقالات_لخاشقجي	Qatar writes articles for Khashoggi	444
مقالات_خاشقجي_بايدي_قطريه	Khashoggi articles with Qatari hands	341
مقالات_خاشقجي_تكتبها_قطر	Khashoggi articles written by Qatar	279
مقالات_خاشقجي_بيد_قطر	Khashoggi articles within Qatar's hands	278
السعوديه_يهمها_جمال_خاشقجي	Jamal Khashoggi is important to Saudi Arabia	255
جمال_خاشقجي_لايمثل_الدولة	Jamal Khashoggi doesn't represent the state	235
مقالات_خاشقجي_بيد_قطريه	Jamal Khashoggi is within Qatari hands	185
خاشقجي_عميل_ضد_الوطن	Khashoggi is an agent against the nation	179
خفايا_عمر_عبدالعزيز_وخاشقجي	The hidden mysteries of Omar Abdul Aziz and Khashoggi	168
قطر_تكتب_مقالات_خاشقجي	Qatar writes articles for Khashoggi	157
خاشقجي_وعلاقته_بالاخوان	Khashoggi and his relation to the Muslim Brotherhood	154
حقيقه_عمر_عبدالعزيز_وخاشقجي	The truth behind Omar Abdul Aziz and Khashoggi	146

Figure 11: *Top hashtags about Jamal Khashoggi*

Khashoggi was killed on October 2, 2018. In the months that followed accounts retweeted various Saudi elites denying the Crown Prince's involvement. @SaudiNews50 tweeted (in English): "Russian Foreign Ministry: Politicizing the case of #JamalKhashoggi is unacceptable; #Moscow does not find it reasonable to doubt the ability of Saudi authorities in dealing with the case. #SaudiArabia #Russia." On December 30, 2018 the hashtag *Qatar writes articles for Khashoggi* (translated) was used by many accounts in this dataset. In January 2019 there were tweets in both English and Arabic describing the prosecution of individuals that the Saudi government claims were behind Khashoggi's murder.

Figure 12: *This image, shared by one of the accounts, says that the Saudi Kingdom rejects threats to attack it through economic sanctions or political pressure through unfounded allegations. This may have been related to the response to Khashoggi's killing.*

On September 29, 2019 60 Minutes aired a Norah O'Donnell interview with the Crown Prince. Many of the accounts in the Smaat data set tweeted about this interview extensively in both English and Arabic. The tweets hyped the interview in the days leading up to it, providing links people could use to watch the interview, and using the hashtag مقابله ولي العهد ثـص (*Crown Prince CBS*). During and after the interview, users tweeted excerpts of the interview that 1) highlighted the Crown Prince's denial of involvement, 2) pushed the theme that the murder was carried out by a few bad apples who would be punished, and 3) focused on the recent attack on a Saudi oil facility (tentatively linked to Iran).

mohanadalmosaa	@CBSNews @NorahODonnell @60Minutes الحماس الف في اني اشوف هالمقابله 😍 🇸🇦
RAlzahrrani	@60Minutes هناك من يحلم بجعل الشرق الاوسط والعالم مكان افضل وهناك من بداء بالفعل بالعمل هذا ما يميز "محمد بن سلمان" عن غيره ويجعله استثنائي اينما ظهر 💚 🇸🇦 https://t.co/oKsbkYqoUP
mobinnasser	@CBSNews @NorahODonnell @60Minutes Really I'm so proud of this princes
mazncod	RT @60Minutes: Saudi Arabia's Mohammad bin Salman interviewed by CBS News' Norah O'Donnell for 60 Minutes https://t.co/c2HO9ihHFu https://t…
SBA_36	RT @CBSNews: Saudi Arabia's Mohammad bin Salman interviewed by CBS News' @NorahODonnell for @60Minutes https://t.co/AlaRkb7KFQ https://t.c…
SBA_36	RT @CBSThisMorning: NEW: Saudi Arabia's Crown Prince Mohammad bin Salman spoke to @CBSEveningNews anchor @NorahODonnell for an interview ai…
lamaibrahem12	@CBSNews @NorahODonnell @60Minutes we are so excited to see this interview 😍 🇸🇦 🇸🇦 🇸🇦 🇸🇦
SBA_36	RT @NorahODonnell: Sunday on @60Minutes https://t.co/AMyHkUccma
SaadAlfawzan2	@CBSNews @NorahODonnell @60Minutes Crown Prince is moving towards to achieve our goals he is bold and genius, we are proud of him.
alisalemx22	@CBSNews @NorahODonnell @60Minutes Our future king god bless him ❤

Figure 13: *Tweets hyping the 60 Minutes interview.*

Several accounts shared infographics the day after the interview:

Figure 14: *Infographics defending the Crown Prince.*

In the days and weeks after the interview, accounts tweeted at Western media

and research groups like @EurasiaGroup, @thenation, @CBSNews, and @latimesopinion, pushing Saudi narratives in English. Many tweets suggested that those who were claiming the Saudi government was involved in Khashoggi's death had were doing so for self-serving political purposes.

Interestingly, commercial accounts in the data set aimed to piggyback on the 60 Minutes-related hashtags, including (translated) *Interview of the Crown Prince*; some used it in tweets advertising loan repayment services.

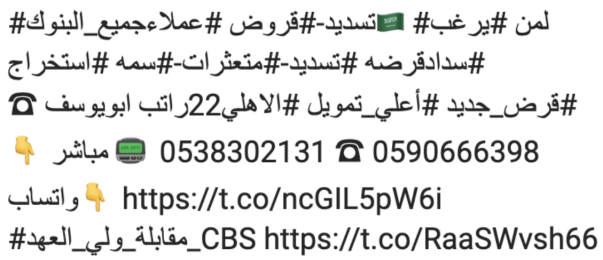

Figure 15: *A tweet about a financial service, piggybacking on a 60 Minutes hashtag.*

The top Smaat-linked accounts in this dataset that tweeted about Khashoggi included @abdullahalorfj (tweeted about Khashoggi 3,540 times, this user had 41,179 followers), @506MBS (942 times, 95,911 followers), and @pobg321 (543 times, 31,105 followers – this user said in their profile description that they provided advertising and marketing support).

The tweets about Khashoggi never went viral. The average tweet had just 6 likes, shares, or replies.

5.2 Qatar

The top 100 tweets mentioning Qatari keywords in the dataset included a range of Qatari hashtags and tried to utilize local issues, soccer, political events, and rights issues to support the Qatar blockade and create divisions between Qataris and Saudis. Some accounts claimed to be Qatari citizens speaking out about abuses at the hands of the Qatari government. Other tweets pushed conspiracy theories to distort facts about political events. Many tweets aimed to spread misinformation on trending issues. For example, tweets seeded accusations that Qatari intelligence coordinated with the Houthis to target the Shaybah oil field earlier this year.

Qatar's image in the Arab world was repeatedly questioned and tweets attempted to link the country to Israeli business and political projects through

hashtags like التطبيع القطري الاسرايبلي (*Qatari Israel normalization*).

The second most-used Qatar-related hashtag in the dataset, حقوق الغفران في قطر (*the rights of Al Ghufran in Qatar*) appeared 11,957 times. This is a reference to the Ghufran clan, a branch of the al-Murrah's, a tribe who live in both Qatar and Saudi Arabia. In the 1990s, Qatar stripped citizenship for many Ghufran clan members, and many remain stateless today. This hashtag is likely an attempt to drag the Ghufran clan case into the current Saudi-Qatar conflict.

Figure 16: *Example tweet about the al-Murrah tribe.*

In 2017, a Smaat-attributed account with the username @BinKohlah, who claimed to be a member of the Al-Murrah tribe, repeatedly tweeted that his brother was kidnapped and held by the Qatari Interior Ministry. Using the الاعتداء على حاج قطري hashtag (*Attack on Qatari Hajj pilgrim*) he stated that his brother had performed Hajj (the Muslim pilgrimage in Mecca) and was arrested on his return after complimenting the Saudi services given to Qatari Hajj pilgrims in a TV interview. (News article about the incident here.) Hajj was mentioned a few times on the hashtag list, highlighting the hospitality of King Salman (الملك سلمان يستضيف حجاج قطر) and the welcoming nature of Saudi Arabia towards the Qatari pilgrims (السعودية ترحب بحجاج قطر).

Figure 17: *Example tweet about the arrest.*

The account continued to tweet in 2018 about his siblings being harassed due to his criticism of the government. Tweets from the same user attempted to push pro-Saudi sentiments discrediting political voices like Azmi Bishara, a Palestinian public intellectual living in Qatar. BinKohlah also mentioned @monther72, Munther al-Sheikh Mubarak, a Saudi businessman with 312,000 followers to confirm the capture of his brother and request prayers and support so that he could be freed.

The Qatar tweets varied and highlighted many controversial figures. Rahaf Al Qunun, a Saudi woman who escaped from Saudi Arabia earlier this year and fled to Canada, was mentioned amongst those figures. In the dataset tweets she was accused of being an agent of foreign embassies and Qatar. She was also linked to Faisal Bin Nasser, a Saudi citizen who was accused of hosting Rahaf in Canada and being sponsored by the Qataris.

Accounts often tried to defend KSA from negative headlines and news stories by deflecting attention to Qatar. Hashtags like قطر تحرض السعوديات عالهروب (translation: *Qatar encourages Saudi women to flee*) pointed the finger at Qatar for the increase in Saudi women fleeing the country. Additionally, tweeted content provided an assortment of arguments for cutting relations between the two countries via hashtags like قطع العلاقات مع قطر (*cutting relations with Qatar*). For example, tried to attack women's rights in Qatar through the حقوق المراه القطريه hashtag (*Women's rights in Qatar*) by asserting that legal restrictions on women in the country had sparked debates.

Soccer was another theme used to attack Qatar, through humour and sarcasm.

Top tweets took aim at the Qatari national soccer team, claiming it didn't allow the participation of Qatar citizens and should be named the United Nations team, and that the internationally-sourced players needed 15 different translators to understand what was going on. Other tweets made fun of another Qatari team (Al-Sadd Sports Club) for losing to the Saudi Al-Nassr FC. The Qatari sports channel BeIN was also targeted and accused of politicizing sports.

Figure 18: *A cartoon shared by one of the accounts. The cow represents Qatar. The man in the Israeli flag is Azmi Bishara.*

6 Conclusion

In conclusion, Smaat had both political and commercial clients. While the accounts' tweets were consistent with the objectives of these clients, the accounts also tweeted uncontroversial content about Islam, the weather, and poetry. This at first made it difficult for our team – and presumably ordinary citizens as well – to assess the nature of these accounts. Upon further investigation into the dataset, we observed tweets criticizing Qatar's government, tweets criticizing Jamal Khashoggi, and tweets defending the Crown Prince against accusations that he was involved in Khashoggi's murder. We also observed Smaat accounts participating in engagement rings to increase their follower and engagement counts. We expect there to be additional themes in the data – particularly related to Iran and Turkey – that merit further study.

Stanford | Internet Observatory
Cyber Policy Center

The Stanford Internet Observatory is a cross-disciplinary program of research, teaching and policy engagement for the study of abuse in current information technologies, with a focus on social media. The Observatory was created to learn about the abuse of the internet in real time, and to translate our research discoveries into training and policy innovations for the public good.