Industry marketing of tobacco products on social media: case study of Philip Morris International’s IQOS

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ABSTRACT

Significance Newer tobacco products might be particularly likely to use social media as they emerge in the global market. Little is known about the official use of social media in marketing heated tobacco products (HTPs). This study examined Philip Morris International’s (PMI) social media marketing globally of its leading HTP, IQOS.

Methods PMI IQOS country-specific official websites were accessed (N=59) in May to September 2022 and social media accounts listed were recorded. Accounts were then coded for their number of posts in the past month and year and for their number of subscribers. Posts on online accounts with at least one past-month post were categorised to describe the post’s function: instructional, general advertising, price promotions or event promotions.

Results Of the 59 country websites, 45 (76.3%) listed at least one social media account; of these, an average of 2.5 accounts (SD=0.8) were listed. Across websites, 111 accounts were identified: 42 Facebook, 23 YouTube, 21 Twitter, 19 Instagram, 2 Telegram, 1 LinkedIn, 1 KakaoTalk, 1 VK and 1 LINE. Across YouTube, Twitter and Instagram, accounts made 2550 past-year posts and had ~490,961 subscribers. Of the 165 past-month posts, 101 (60.1%) functioned as general advertising, 30 (17.9%) instructional, 29 (17.3%) event promotions and 8 (4.8%) price promotions.

Conclusion Social media posts were used to engage consumers with advertising, event promotions, product use instructions and price promotions. The study provides evidence of the company-sponsored official marketing of an HTP via social media globally, underscoring the need for monitoring and tobacco control regulatory efforts in the digital arena.

INTRODUCTION

Heated tobacco products (HTPs) represent a growing segment of the global tobacco market. The largest market share of HTPs is held by Philip Morris International’s (PMI) product, IQOS, which is sold in 68 countries and has over 17 million users, based on PMI’s claims.

Newer products, including HTPs, might be particularly likely to use social media as they emerge in the global market to gain market share. Social media platforms offer products global marketing reach to potential and current customers that can be tailored to country-specific priorities. Companies such as PMI may use multiple social media platforms simultaneously in marketing a product to consumers.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Tobacco companies use social media in their marketing of e-cigarettes, hookah and cigars. Little is known about how social media are used in official marketing efforts of heated tobacco products. Additionally, while for large tobacco companies, social media marketing occurs on a global scale, no studies to date have investigated social media marketing globally for a given tobacco product.

WHAT THIS STUDY ADDS

⇒ This is the first study to document that social media are a key component of the official marketing of a leading heated tobacco product across the world. Additionally, it provides a method for cataloguing and studying all official product-sponsored social media accounts across the world for a given tobacco product.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The study provides evidence for global marketing of a heated tobacco product via social media, underscoring the need for monitoring and tobacco control regulatory efforts in the digital arena.

A growing body of the literature has documented that social media marketing of novel tobacco products including e-cigarettes, hookah and cigars exists and is effective. Many e-cigarettes, hookah and cigar products have official social media product pages and accounts. In addition to official accounts, these products may use influencer marketing strategies on social media whereby social media users with many followers (ie, influencers) are paid to promote tobacco products (eg, show themselves using the product). Exposure to tobacco on social media, including e-cigarettes, has been associated with product uptake.

For HTP marketing, prior research has documented the use of social media influencer marketing, including by leading tobacco companies. While tobacco companies have claimed to stop using social media influencer marketing for their novel tobacco products including IQOS and many social media platforms explicitly prohibit tobacco advertising on their platforms, it is unclear whether tobacco companies use social media in official marketing capacities for HTPs and, if so, in what manner.
To gain a full understanding of the marketing of a novel product, such as of HTPs, a cross-platform and global perspective is needed of official social media marketing. While a prior study investigated user-generated content about HTPs on one platform and influencer marketing of HTPs, no studies to date have investigated official social media marketing of HTPs. Furthermore, while previous studies have examined social media marketing of tobacco products, these have used a national or regional perspective rather than a global perspective that reflects the global marketing of these products.

The current study set out to investigate PMI’s official social media marketing of IQOS globally. Specific questions of interest include whether PMI uses social media for its official marketing of IQOS; and if so, which social media platforms are used in each country (eg, Facebook, Instagram, etc), the popularity of those accounts (eg, number of subscribers), the activity level of those accounts (eg, frequency of posting) and, finally, the function of posts (eg, advertising). In doing so, we provide insight into regulatory efforts that may be needed to address global tobacco product marketing in the digital arena.

METHODS
A list of the 68 countries where IQOS is marketed was taken from the PMI website on 31 March 2022. The PMI IQOS country-specific website for each of these countries was identified via Google Search using these search terms: ‘IQOS’, the country name in the native language and country name in English. For two countries (Iceland, Norway), no IQOS website could be identified from the Google Search. Research assistants visited the identified country-specific IQOS website for 66 countries (see online supplemental appendix 1). In most cases, the website access was limited by country-specific geofencing, a feature which allows only users with IP addresses from that country to enter the website. Because the study team was based in the USA, a virtual private network (VPN) such as CyberGhost VPN and/or Express VPN was used to present a country-specific IP address and gain access to its IQOS website.

In several cases (n=7), the IQOS website was located, but the country-specific website could not be accessed. In five countries (Dominican Republic, Jordan, Kuwait, The Maldives and Tunisia), this was because no VPN was available for that country using the two VPNs we used (CyberGhost VPN, Express VPN). In two countries (Kazakhstan, Morocco), there were technical issues associated with the VPNs being used. In these cases, we repeatedly received an error message that read ‘too many redirects’. These seven countries were removed from the sample. Thus, the final sample of IQOS country-specific websites reviewed for analysis was 59 (ie, 86.8% of the 68 IQOS countries listed on the PMI website).

For each country in the sample (N=59), research assistants visited the IQOS website homepage, scrolled to the footer of the page and recorded whether social media accounts were listed in the footer, and if so, which ones (see figure 1 for an example of the website footer). In most cases, the research assistant had to declare that they were 18 years of age or older (which they were) and provide their month and year of birth to enter the website. From visiting IQOS homepages, social media accounts and their associated URLs were recorded for further coding.

Research assistants attempted to visit each social media account identified for further coding between 20 May 2022 and 12 September 2022. All Twitter, YouTube and LinkedIn accounts were accessed and did not require VPN. Instagram accounts were accessed with VPN, except for three accounts which were inaccessible because of VPN technical issues (New Zealand, Guatemala and Montenegro). None of the Facebook accounts identified were accessible, even with VPN. In these cases, clicking on links to the accounts led to a message that read, ‘This content isn’t available right now. When this happens, it’s usually because the owner only shared it with a small group of people, changed who can see it or it’s been deleted’. As a result, Facebook accounts were not further coded.

Instagram (n=16), Twitter (n=21), YouTube (n=23) and LinkedIn (n=1) accounts with online access were further analysed for activity levels and types of posts. See figure 2 for an example of Instagram account. Each account was coded for its frequency of posting: number of posts in the past 30 days (20 May 2022 to 20 June 2022), number of posts in the past year (20 June 2021 to 20 June 2022) and the date of the most recent post. The number of followers or subscribers to the account was also recorded as a measure of the account’s popularity and reach. For Instagram and YouTube, exact numbers of subscribers were not given by the platform for subscribers greater than a certain threshold, but rather a rounded estimate. Therefore, for Instagram and YouTube, high subscriber numbers provided

![Image](http://tobaccocontrol.bmj.com/content/2023/1/15102080/330260776754359296548782097686.png)

**Figure 1** IQOS Israel web page footer showing the social media accounts listed.
Figure 2  Example of IQOS Instagram account for Canada.
by the platform are noted by ‘~’ to indicate that the number is an estimate and not an exact number. These estimates were included in the totals. An analysis was conducted to determine the frequency of posting and total number of subscribers across countries by platform and across platforms. LinkedIn (n=1) was removed from this analysis as it was found to not be associated with IQOS, but instead a PMI jobs account that promoted open positions with PMI Israel. Finally, Telegram (n=2), VK (n=1), KakaoTalk (n=1) and LINE (n=1) were not further coded as they are messaging apps, and as such were not available on the web using a URL. These were considered outside of scope of this analysis.

Additionally, in order to understand the types and purposes of the online social media posts, posts on accounts with at least one past 30-day post (n=168) were coded to describe the post’s function. Posts that were not in English were translated with Google Translate. Posts were categorised as: ‘Instructional’ for posts that primarily showed how to use the IQOS device or offered technical support on correct use; ‘General Advertising’ for posts that resembled IQOS advertisements from print or online based on the team’s prior analysis of print and online ads17; ‘Price Promotions’ for posts that offered a discount or rebate associated with buying the IQOS device; or ‘Event Promotions’ for posts that were promoting in-person events, often as part of the IQOS Club, a loyalty programme,18 19 or tied to larger events where IQOS has a presence (eg, Design Week in Italy). Each post was assigned to a single category. A subsample of posts (n=55; 32.7%) were independently dual coded by two reviewers (CW, ST); a third coder (LCA) reviewed two discrepancies in their categorisation (3.6%) and determined their category. The kappa score was 0.89, indicating high agreement.

RESULTS

Of the 59 country-specific websites reviewed, 45 (76.3%) listed at least one social media account on the homepage (see figure 3). Countries with at least one social media account listed 2.5 social media accounts on average (SD=0.8) with some countries having as many as four social media accounts. Across country websites, 111 IQOS accounts were listed on the websites: 42 accounts on Facebook, 23 on YouTube, 21 on Twitter, 19 on Instagram, 2 on Telegram, 1 on LinkedIn, 1 on KakaoTalk, 1 on VK and 1 on LINE (see table 1).

YouTube, Twitter and Instagram were further coded for the activity levels of their accounts (see table 2). Across YouTube, Twitter and Instagram (n=60), these accounts collectively made 2550 posts in the past year and 168 posts in the past 30 days. Instagram was the most active platform; it had 2090 posts in the past year (90.0% of all IQOS posts) and 153 posts in the past 30 days (91.1%) (see online supplemental appendix 2). All Instagram accounts examined (n=16) were active in the past 30 days except for one (Israel). Twitter accounts examined (n=21) were not active over the past year except for one account, Japan, which had six posts in the past year and three posts in the past 30 days. YouTube accounts examined (n=23) were all active over the past year except for one account, Albania, and six YouTube accounts had posted in the past 30 days.

Countries with the highest number of posts over the past year were Ukraine (314 posts, Instagram and YouTube), Serbia (271 posts, Instagram and YouTube) and Romania (237 posts, Instagram). Countries with the highest number of posts over the past month were Romania (23 posts, Instagram), Japan (17 posts, Instagram and Twitter) and Ukraine and Columbia (15 posts each, YouTube and Instagram) (see online supplemental appendix 2).

![Map of official social media IQOS accounts.](http://tobaccocontrol.bmj.com)

Figure 3  Map of official social media IQOS accounts.
Collectively, across countries and platforms, IQOS accounts had ~490,961 subscribers. Instagram had the most subscribers with ~420,738 subscribers (85.7%) of subscribers, followed by Twitter with 42,745 (8.7%) and YouTube with 27,478 (5.6%). Japan’s Instagram account with ~207,000 subscribers had the most subscribers of all country accounts and all platforms. Of the 168 past-month IQOS posts on YouTube, Twitter and Instagram, 60.1% functioned as general advertising, 17.9% as instructional, 17.3% as event promotions and 4.8% as price promotions (see table 3). Twitter posts were exclusively instructional while YouTube posts were split primarily between instructional (41.7%) and general advertising (41.7%). Finally, Instagram posts, which represented the majority of posts, were primarily general advertising (62.7%), followed by event promotions (17.6%), instructional (14.4%) and price promotions (5.2%).

### DISCUSSION

This study documents that social media are a key component of PMI’s official global marketing of IQOS, a market leader among HTPs. It represents the first study to attempt to catalogue all official product-sponsored social media accounts for an HTP. This study shows that 45 IQOS countries (76.2%) listed one or more social media accounts on their websites. Across countries and platforms, IQOS was found to have 111 social media accounts with Facebook, YouTube, Twitter and Instagram most commonly used. Across Instagram, Twitter and YouTube accounts, PMI made 2550 IQOS posts in the past year and reached almost 500,000 subscribers. Posts in the past year functioned most often as advertising (60.1%), though posts also served to give instructions and support for use of the product (17.9%), promote IQOS-associated events (17.3%) and provide price promotions (4.8%).

While Twitter, YouTube and Instagram accounts were all active over the past 30 days and the past year, Instagram accounted for over 90% of the activity. Some accounts, like Japan and Romania’s Instagram accounts, had new posts approximately every other day. This implies that followers of these accounts who numbered over 200,000 individuals were frequently and regularly exposed to IQOS marketing materials, a practice which in prior social media studies of tobacco has been associated with uptake. While IQOS Instagram accounts restricted access to account content by country, Twitter and YouTube offered no restrictions in access to their content. As youth may be especially vulnerable to the effects of such repeated exposures over time, future studies should investigate whether this content is available to youth, whether youth are exposed and, if so, the effects of youth exposure on product uptake and use.

The majority of IQOS social media posts reviewed were classified as general advertising. In many cases, these posts appeared to be actual print or online advertisements, resized for social media posts (eg, exact phrasing, imagery, colours, warnings,
This is noteworthy because about half of IQOS countries are signatories of WHO’s Framework Convention on Tobacco Control (FCTC) and have banned advertising online and, in some cases specifically advertising on social media, of all tobacco products. (See online supplemental appendix 1 for a list of IQOS countries that have banned online advertising.)

While PMI placed these ads as posts on their IQOS social media accounts rather than as paid ads in the social media platform’s advertising system, these tobacco posts functioned as public online ads. Posting ads on product accounts may intentionally skirt leading social media platform bans on tobacco advertising, which are limited to their advertising systems. In addition, this practice is in violation of country bans on online advertising for signatories of the FCTC which include ‘any form of commercial communication […] with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly’. This practice of posting tobacco ads and other marketing materials as posts on social media accounts should be reviewed by country ministries of health responsible for violations of FCTC.

This study represents the first study to our knowledge of company-sponsored official social media marketing globally of an HT. Prior social media studies have looked at influencer marketing of HTPs and user-generated content of HTPs. For example, one prior study of IQOS on Instagram found that there were over 4000 accounts that used #IQOS in their account description and that 27 of these accounts had over 50,000 followers. As the current study identified three PMI IQOS Instagram accounts with over 50,000 followers, the current study expands prior work by identifying PMI-sponsored official accounts and by showing that at least for Instagram, PMI accounts are a small but significant part of the total Instagram IQOS ecosystem.

Additionally, as prior social media analyses of tobacco products have been limited to single platforms (eg, Facebook) or within a single country or region, this is the first study to provide an examination of social media marketing across countries and platforms for a leading tobacco product. This global perspective is difficult to obtain on social media because accounts are set up with geographic restrictions, making cross-country comparisons difficult. Yet, a global perspective is important given that large tobacco companies plan and execute their marketing strategies globally and that regulatory frameworks such as the FCTC exist on a global scale.

**STRENGTHS AND LIMITATIONS**

This study provides insight into the company-sponsored official social media marketing of IQOS globally and demonstrates the need to monitor tobacco in a way that is both global and across platforms. By relying on official product websites, the study provides a novel method for surveillance of official social media marketing on a global scale. Specifically, it provides a method for identifying official social media accounts globally and across platforms using VPN to gain access to these accounts and analysing account activities. This goal contrasts in its purpose with the surveillance of user-generated social media marketing of tobacco and influencer social media marketing. To our knowledge, this is the first study to use this method to catalogue and access the official social media accounts of a leading tobacco product or other type of product.

Current findings should be viewed alongside some limitations. First, these analyses included only those social media accounts linked to PMI websites, and thus may miss other official IQOS social media accounts not listed on their websites. Further, only 86.8% of PMI country websites were successfully reviewed; thus, these results likely underestimate the presence of IQOS’ official social media accounts. Second, there were technical limitations with the VPNs used, making a handful of Instagram country accounts and all Facebook accounts unavailable. Third, content analysed was limited to a retrospective review of account posts. In the case of Instagram, this meant that while posts were analysed, ‘stories’—another type of content which is temporary—were not accounted for in our retrospective analysis. Fourth, the analysis of the primary function of posts (eg, advertising vs instructional) relied on Google Translate for posts not in English, which may be less reliable than other translation methods. Finally, we did not examine the activity level and content of social media messaging apps (n=5), as these app-based platforms were deemed outside the scope of our online review. Future studies should seek to code the content of tobacco product messaging app accounts.

In conclusion, this study documented PMI’s systematic use of social media to promote IQOS across countries. Further research and monitoring measures are warranted to assess marketing of IQOS and other tobacco products on social media. International and national tobacco control efforts and policies should be updated to meet the challenges of monitoring and regulating global social media marketing.

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**Competing interests** HL had received fees for lectures from Pfizer Israel (distributor of a smoking cessation pharmacotherapy in Israel) in 2017. YBZ had received fees for lectures from Pfizer, Novartis NCH and GSK Consumer Health (distributors of pharmacotherapy in Israel) in the past (2012 to July 2019). LCA receives royalties for the sale of Text2Quit.

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1. Philip Morris International. In how many countries do you sell your cigarette brands, [Accessed 5 Sep 2022].